

Addressing the nursing shortage in Oregon:

removing barriers in nursing education

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Summary of Findings
and Recommendations
from the Oregon Healthcare
Education Shortage Study

<https://www.oregon.gov/highered/research/Pages/OLDC.aspx>

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- Higher Education Coordinating Commission
- Oregon State Board of Nursing
- Oregon Alliance of Independent Colleges & Universities
- Oregon Community Colleges
- Oregon Consortium for Nursing Education
- Oregon Employment Department
- Oregon Health and Science University
- Oregon Health Authority

Summary



Significance of the Study

The purpose of this study is to examine how Oregon's postsecondary institutions could help to alleviate the shortage of healthcare professionals, particularly nurses. This report examines the causes of the bottleneck that is limiting institutions of higher education from providing enough capacity to meet student and job market demand for healthcare workers. This study focuses on institutional barriers and does not explore barriers individual students experience.

Recommendations in this study are aimed at reducing barriers to expansion of our public, postsecondary healthcare programs for the purpose of: 1. increasing opportunities for students; 2. increasing the supply of workers in Oregon to meet the needs of the healthcare workforce market; and 3. to improve regional equity and access of care across the state.

Scope and Methods of Study

This study examines how well Oregon's postsecondary system is meeting the needs of the state for healthcare workers, and used data from a variety of sources. Demand for healthcare workers is measured by comparisons to other states in terms of production of healthcare degrees utilizing data from Integrated Postsecondary Education Data System (IPEDS) and Oregon Employment Department (OED) survey data on current job vacancies, and OED projections for future demand for Oregon's healthcare workforce. The supply of degrees being produced was measured by evaluating degree data from IPEDS, the Oregon Higher Education Coordinating Commission, and the National Student Clearinghouse as well as detailed data on graduates and connections to workforce from the Oregon Health Authority, and the Statewide Longitudinal Data System (SLDS). Wage data was collected from the U.S. Bureau of Labor Statistics.

Survey responses from Oregon community college healthcare programs were used to discover the barriers that our programs are facing in expansion of their programs to meet both student and workforce demand. Annual reports on nursing education by the Oregon State Board of Nursing, which includes survey data from Oregon's public and private healthcare education programs, were used to evaluate the supply of nursing students. Longitudinal data housed within the SLDS was used to track the supply of high school students into our postsecondary healthcare programs, and data from OHA on nursing licensure was used to track the employment locations of nursing graduates.

There is a gap between nurses in the workforce and nursing students graduating from nursing programs.

What are the barriers to closing this gap and what can be done to address them?



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Findings and
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The full report can be found on our website:
<https://www.oregon.gov/highered/research/pages/OLDLC-Reports.aspx>

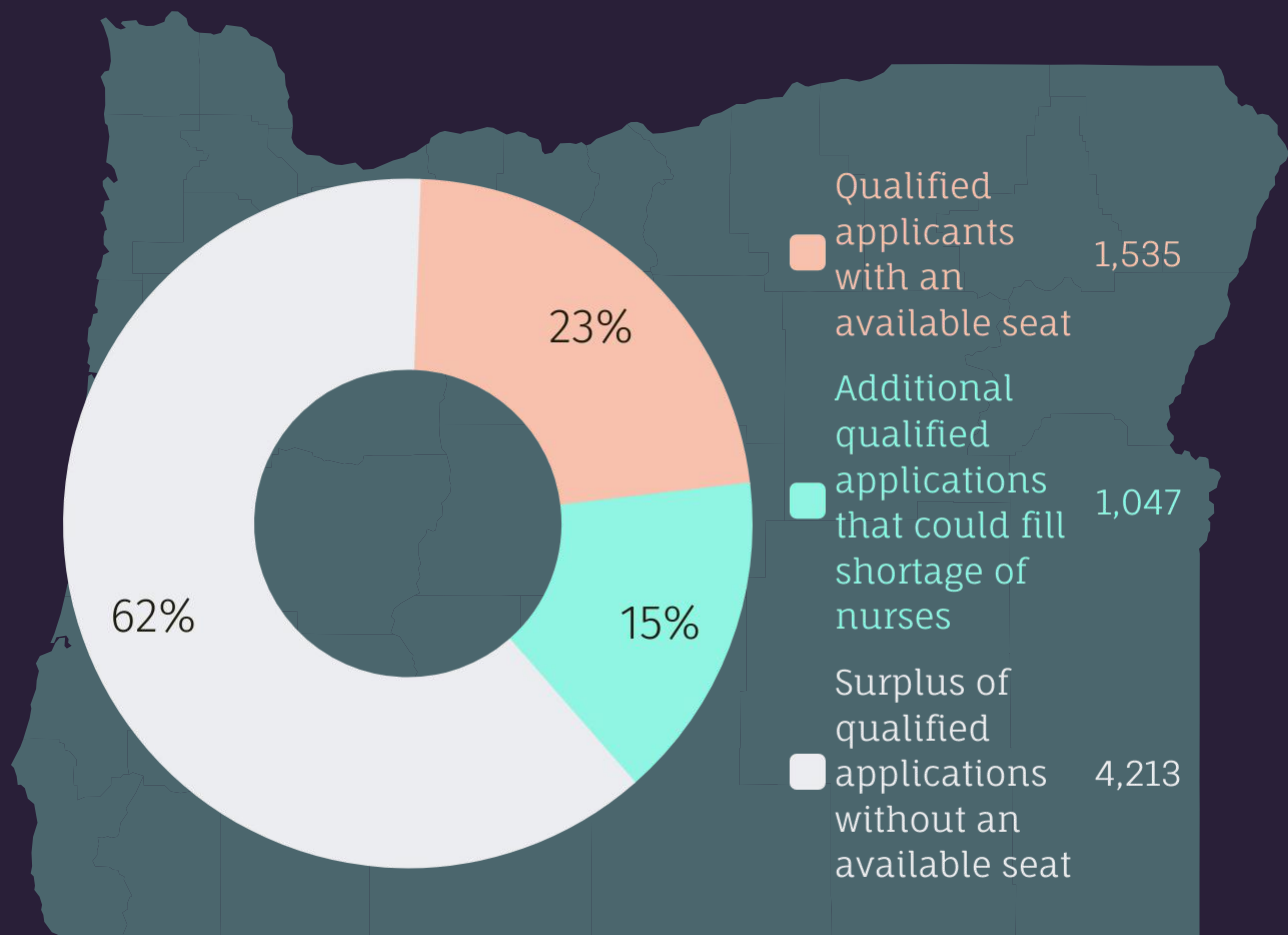
Introduction

In Oregon, roughly 6,800 qualified student applications were submitted to a nursing program in 2020, yet only 23% were accepted.

Expanding these programs could be a step to addressing the nursing shortage.

Even before the COVID-19 pandemic, there were reports of shortages of nurses in Oregon and across the nation. The pandemic has made these issues more pronounced. For the year 2020, the OLDC estimates that Oregon **needed to graduate another 1,065 nursing students** to meet workforce demand. This study establishes that the shortage of registered nursing graduates is a principal cause of Oregon's registered nursing employment shortage.

Closing the gap with workforce demand is a complicated issue, but this study offers some concrete actions for Oregon policy makers to take the first steps to expand registered nursing programs as a step to addressing the nursing shortage.



Sources: Oregon State Board of Nursing (OSBN) Survey 2020, Integrated Postsecondary Education Data System (IPEDS) 2020, Oregon Employment Department (OED) Occupational Profiles for Registered Nurses 2022

Findings

The findings for this study identify the root of the problem which informs the actionable recommendations that follow this section.

Finding #1

Oregon ranks low in national trends

Oregon graduates half the number per healthcare employment

How Oregon's Nursing Graduation Rates Rank Per Healthcare Employment	
National Median	Oregon Median
1 graduate per 100 total healthcare employment	1 graduate per 200 total healthcare employment

Sources: IPEDS 2020, U.S. Bureau of Labor Statistics (BLS) 2021

Oregon performs low compared to other states for healthcare education degrees

How Oregon Ranks Per Capita	
Degrees awarded from public and private institutions in 2020	
All Healthcare Programs	3rd Fewest Graduates
Non-Nursing Healthcare Programs	8th Fewest Graduates
Nursing Programs	3rd Fewest Graduates
Degrees awarded from public institutions only in 2020	
Non-Nursing Healthcare Programs	23rd Fewest Graduates
Nursing Programs	Last in Graduates

Sources: IPEDS 2020, U.S. Bureau of Labor Statistics (BLS) 2021

Oregon could improve its national ranking and reduce the nursing shortage with more graduates, but does Oregon have enough qualified student applications to meet the demand?

Most nursing programs do not have capacity to meet their regional demand

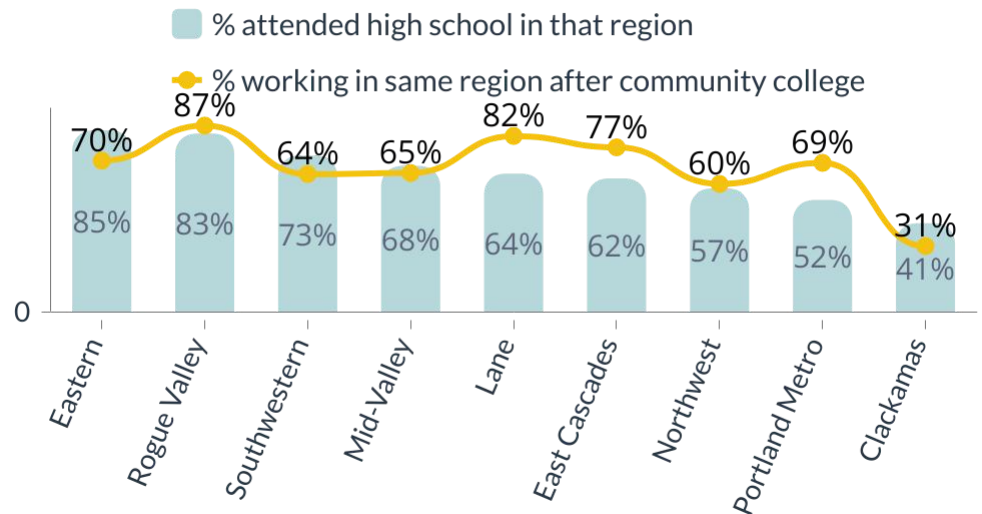
Nursing students typically attend college and work in their community

For most regions, many graduates stay in the community after graduation. If graduates want to stay in their community, are there jobs available?

The unmet demand for nurses reaches every region in Oregon

If community college nursing graduates go to school and work in the same area, which regional colleges could accept more students that would meet the local demand?

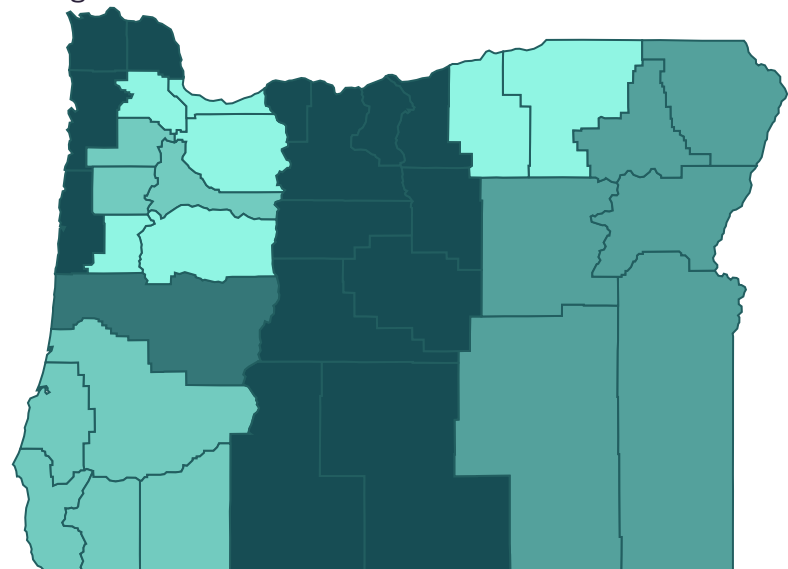
Community College Nursing Graduates by Region



Sources: SLDS 2009 - 2020, Oregon Health Authority 2022

Every region in Oregon is experiencing a shortage of nurses according to Oregon Employment Department projections of new and replacement job opening. Further analysis shows that not one region produces enough graduates to meet this unmet demand.

The map below represents the percent of demand met by the current nursing graduation rates. The **darker** the region, the **larger** the shortage.



Percentage of graduates to job openings



Sources: OED Occupational Profiles 2022, OSBN 2020 Survey, IPEDS 2020

Full Report: <https://www.oregon.gov/highered/research/pages/OLDC-Reports.aspx>

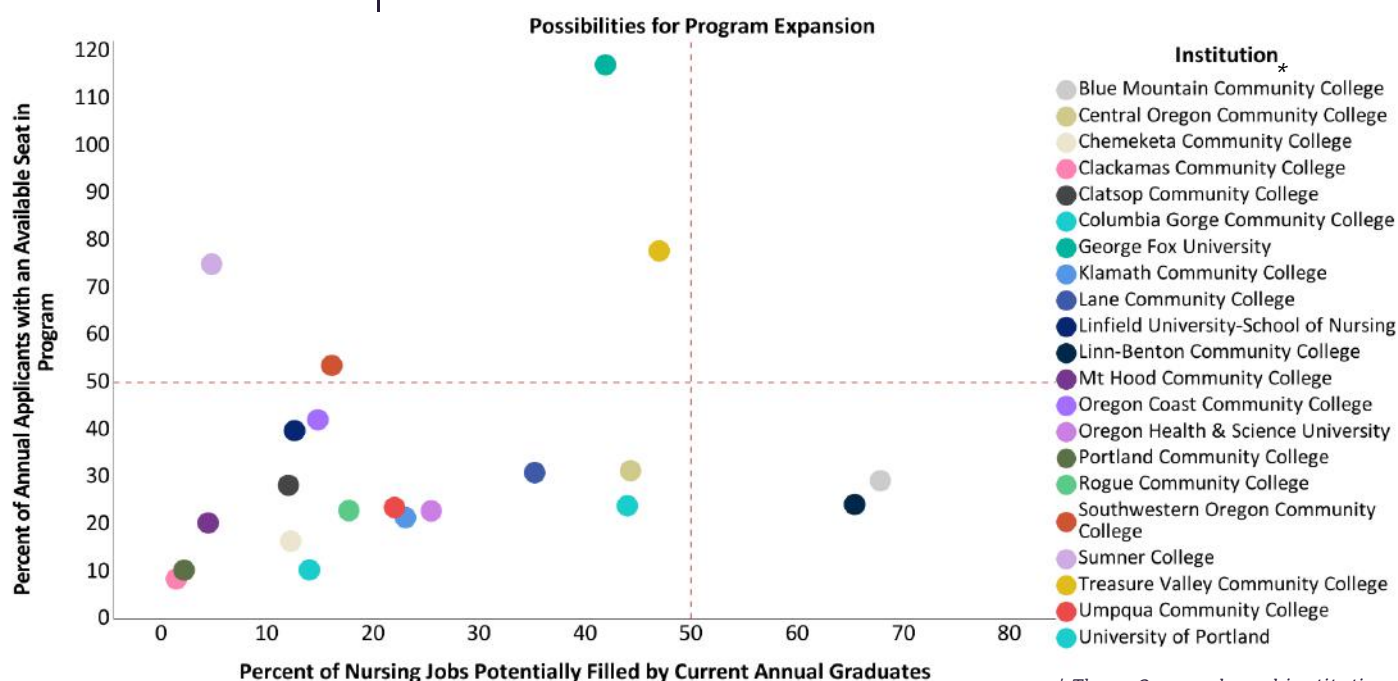
Findings

Finding #2 (continued)

Most registered nursing programs have enough qualified applicants and regional jobs to double enrollment

The registered nursing programs in the **bottom left quadrant** accept fewer than 50% of qualified applicants and meet less than 50% of regional nursing job demand.

Only four Oregon registered nursing programs accept more than 50% of qualified applicants, yet only two programs graduate enough students to fill more than 50% of their regional job vacancies.



Sources: IPEDS 2020, OED Occupational Profiles 2022, OSBN 2020 Survey

* These Oregon-based institutions reported graduates from their registered nursing program in 2020. The complete list of approved programs can be found on [OSBN's website](#).

Oregon has enough qualified student applications to meet demand, but what prevents the nursing programs from accepting more students? Find out on Page 9.

~ Other important trends identified ~

While the study focused on healthcare education, there are other important trends that were identified and additional research will be needed.

- **Additional barriers to completion for nursing students may exist including the need for childcare.** Additional research is needed to identify all of the barriers and recommendations to address them.
- **25% of registered nursing graduates leave healthcare employment in Oregon after three years and 50% leave after 10 years. The exit rate is faster for Black, Native American, and Pacific Islander nurses.** Additional research is needed to identify the issues in workforce retention and recommendations to address them.

Major barriers prevent nursing programs from expanding

Community Colleges report major barriers to expanding healthcare programs

In examining the faculty hiring/retention issue, we saw a wage gap between nursing faculty and nurses in the field.

When surveying the healthcare programs, ten Oregon community colleges covering 35 healthcare programs told us about their top concerns:



30 programs reported difficulties finding and retaining faculty:

"I have positions open for a year with ZERO applicants. The pay is not competitive to what they could make in the hospitals or outside the college environment."

"The college has supported and improved [the] salary scale, but we cannot match "industry standards".

"Huge wage discrepancy between workforce and academia pay."



24 programs reported difficulties placing students for clinicals:

"Clinical placements are difficult to locate and are very limited. The process to obtain clinical placements is cumbersome and sometimes restrictive."

"Staff in community partners are burned out."

"[Placing students for clinical practice] is very difficult in almost all of our programs but in particular in Nursing..."



12 programs reported that lab facilities are limited and are costly to update:

"We have a need to expand our lab and specialize areas to maintain ratios and allow for an increase in enrollment. We lack equipment and/or resources in this area"

"Incoming class cohort numbers are depending on number of nursing faculty and other resources such as appropriate clinical site to meet courses' objectives, lab and simulation space, etc."

Source: OLDC Community College Survey 2022

Findings

Low nursing faculty salary is the principle cause for recruitment and hiring challenges

States with a higher nursing faculty salary gap graduate fewer students per capita

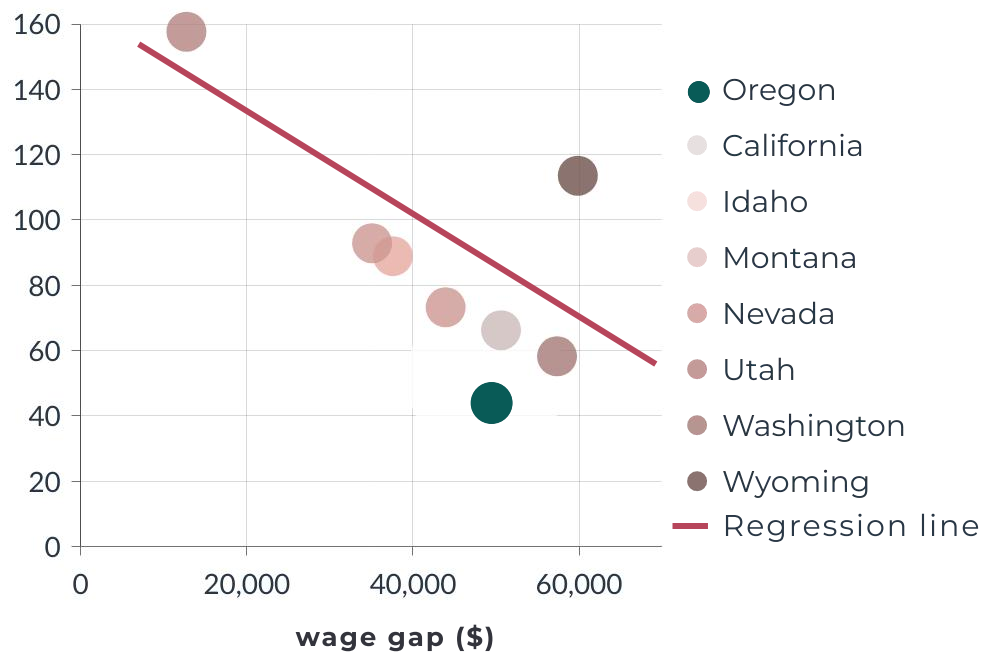
No state pays nursing faculty the same wages as clinical staff, nor is it expected. However there is a link between the size of the gap and number of graduates

Nearly all programs were denied some clinical placements for their students

Finding #3 (continued)

Oregon has one of the largest gaps in salary between nursing faculty and registered nurses in Oregon. Data analysis shows that increasing wages for nursing faculty can help meet employment demand:

\$6,139 estimated raise for a 9-month faculty salary to expand capacity to meet employment demand



Sources: BLS 2021, IPEDS 2020

Each nursing program is required to build a relationship and agreement with healthcare facilities for clinical placement sites.

95%

of nursing programs experienced an individual or cohort clinical placement denial from 2016 to 2020

Even with the individual agreements, nursing students encounter denials in their clinical placement. These denials lead to a delay in nursing students earning their degree.

This individual-level system causes competition between programs, rather than cooperation and limits the possibilities of expansion even for programs that have enough current clinical placement capacity within their community healthcare partners.

Recommendations

Based on the findings in this study, the Oregon Longitudinal Data Collaborative supports the following *four* recommendations:

Recommendation #1



Establish workgroup to address nurse faculty salary

in order to attract enough nursing faculty to meet student and employment market demand.

Workgroup Coordination and Membership

This workgroup should be led by the *Higher Education Coordinating Commission* to facilitate discussion among the interested parties.

The following interested parties should include, but not limited to:

- Community College Nursing Programs
- Oregon Health and Science University
- Oregon Alliance of Independent Colleges and Universities
- Faculty unions
- Oregon Legislature
- Healthcare industry leaders

Why Statewide Coordination Is Important

If individual institutions increase nursing faculty pay and other institutions do not, this would likely lead to competition between programs for faculty rather than lead to expanding the statewide nursing program capacity and market share.

Additionally, relying on individual institutions to remedy the nursing faculty pay would require faculty representatives to agree to an exception to institution-wide faculty contracts and the institution to come up with the funds needed to increase the pay. Increasing funding for nursing faculty is particularly difficult due to mandated faculty-student ratios for clinical placements and credit hour costs.



Recommendation #2



Establish a statewide centralized clinical placement system

to reduce competition between programs and hospitals for clinical placements, increase cooperation and coordination between programs and hospitals for clinical placements, increase clinical placement options and opportunities for students, and expand overall clinical placement capacity.

Workgroup Coordination and Membership

This workgroup should be lead by the Oregon State Board of Nursing to facilitate discussion among the interested parties.

The following interested parties should include, but not limited to:

- Higher Education Coordinating Commission
- Community College Nursing Programs
- Oregon Health and Science University
- Oregon Alliance of Independent Colleges and University
- Faculty unions
- Oregon Legislature
- Healthcare industry leaders

Why Statewide Coordination Is Important

Other states that established centralized clinical placement systems have increased clinical placement capacity through this coordination and cooperation.

Currently, clinical placements are coordinated institution-by-institution through personal relationships between programs and hospitals, causing competition between programs in the same region. Programs in regions without competition often lack the capacity to expand within regional hospitals

Students are unable to attend clinical placements outside of these individual arrangements, limiting students' options and their ability to relocate to areas with higher need.

Recommendations

Recommendation #3



Address additional needs and limits to program expansion

which include funding to expand lab and specialized facilities and options for expanding more regional access to bachelor's level nursing degrees.

Expanding lab/specialized facilities

The Higher Education Coordinating Commission should consider funding options to support programs expanding their lab and specialized facilities as 12 of the 35 community college healthcare programs replied to the OLDC Survey stated that a lack of lab/specialized facilities limited their capacity to expand.

Expanding access to bachelor's degree programs

The Higher Education Coordinating Commission and postsecondary institutions should explore options for expanding more regional access to bachelor's level nursing degrees.

Recommendation #4



Conduct additional research with recommendations

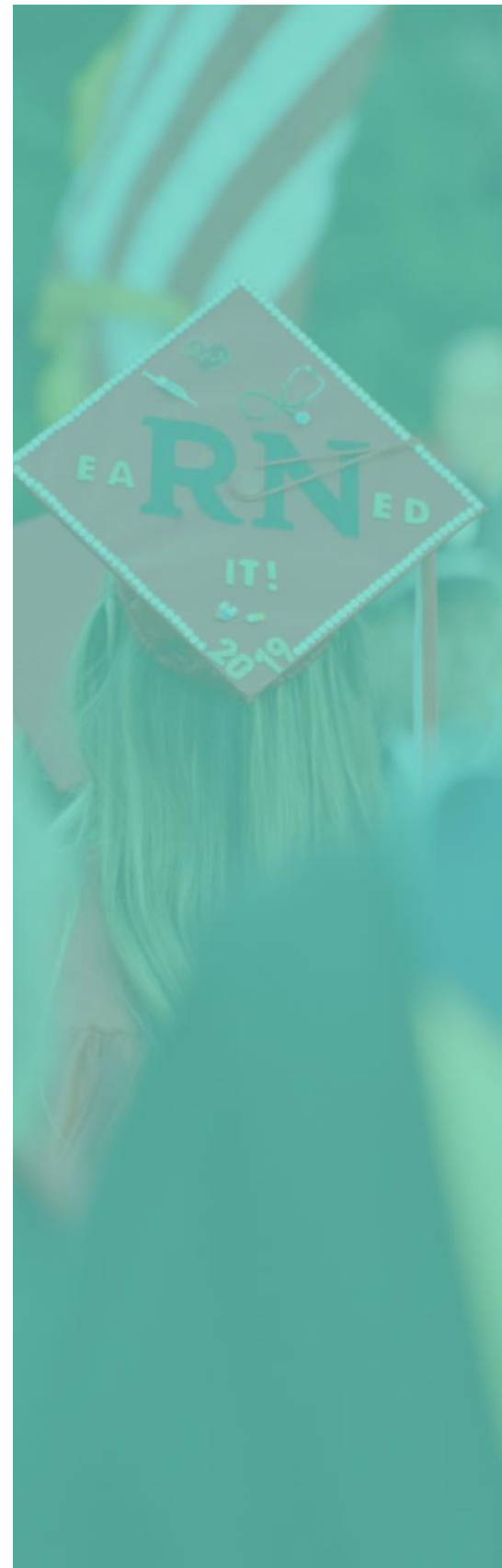
that identify additional support needed for students to complete their degree, as well as addressing the low retention rate of nurses.

Providing support for students

The Higher Education Coordinating Commission should conduct additional research and provide recommendations to identify what barriers students face in order to enter and complete a nursing program.

Addressing the low retention rate of nurses

While the focus of the study is on limits of institutional capacity, other workforce needs were identified. The Oregon Health Authority should conduct additional research and provide recommendations to reduce the low retention rates of nurses.





About the OLDC

The Oregon Longitudinal Data Collaborative (OLDC) is an inter-agency program located in the Higher Education Coordinating Commission.

The program conducts cross-sector research examining the impact of education programs, policies, and investments to help individuals and communities in Oregon thrive.

We look at the intersections of K-12, postsecondary education, workforce training, and employment to examine how these sectors influence and impact each other.

Interested in learning more?

Check out the latest on our website for more studies:

<https://www.oregon.gov/highered/research/Pages/OLDC.aspx>

