WHERE ARE THEY NOW?
A retrospective analysis of churn among registered nurses in Oregon

Beth A. Morris, MPH

Background

Labor market churn refers to the movement of workers from one job to another. This movement may take a worker to a different position, department, organization, and/or geographic location. Higher levels of churn are generally seen as an indicator of ample employment opportunity and, thus, a healthy economy and job market.[1] But churn also comes at a cost. Left unfettered, it can drain resources and degrade the quality of goods and services produced.

Churn occurs across all sectors of the labor market and can be expensive for employers needing to recruit and train replacement workers. Within the health care sector, the time and resources required to educate and train health professionals makes churn particularly burdensome. In the nurse workforce, churn may lead to decreased morale among remaining staff, disrupt continuity of care, and have a negative impact on patient satisfaction and patient safety.[2]

Registered nurses comprise the largest of the health professions with 2.8 million active in the field nationwide.[3] Recent estimates put the number of registered nurses (RNs) (including those in advanced practice) working in the state at nearly 41,800.[4] As the largest of the health professions, the downstream effects of churn within the nursing profession undoubtedly reverberate throughout all of health care.

So what is an ideal level of churn within the nurse workforce, where markets, workers, and communities thrive? Health care sector experts, employers, workers, and patients would likely disagree on the answer. Economists and employees could be expected to err on the side of more churn. Employers and patients would probably lean toward less. Differing perspectives notwithstanding, any attempt to answer the question requires an examination of the current state as an essential first step. That is the focus of this study.

To date, workforce data collected as part of the licensure process administered by the Oregon State Board of Nursing has been used to describe Oregon's nurse workforce in a discrete fashion.[4, 5, 6] Unfortunately, insights gained from this type of analysis are limited, because the characteristics of the workforce are largely inflexible from year to year. What we know about the RN workforce has held true for some time: nurses are getting older, are predominantly female, mostly work as staff RNs, and primarily work in the hospital setting (so by extension tend to work in urban areas where large hospitals are located).

By linking existing datasets collected at different points in time, this study was able to illuminate meaningful changes in the workforce that previously went undetected. This was accomplished by following a cohort of nurses over time to examine their movement through the workforce. The analysis was not entered into with a priori hypotheses or a goal of generating evidence to support a pre-defined policy position. The intent was to take greater advantage of the existing data to develop an understanding of the extent and complexion of churn within Oregon's nurse workforce. What was discovered may encourage employers, employees, and other stakeholders to enter into discussions about where churn is an indicator of innovation and positive growth and where it can and should be mitigated.

Terminology

Churn: The standard definition of labor market churn refers to the movement of workers from one job to another. This movement may take a worker to a different position, department, organization, and/or geographic location. Typically, workers who leave the workforce are considered separately. Since it was not possible to determine if nurses no longer practicing in Oregon moved to a nursing position outside of the state (i.e., churn) or left the nursing profession altogether (i.e., workforce separation), churn encompasses both phenomena for purposes of this study.

Registered nurse (RN): This is the group of nurses that makes up the cohort of 2011 Oregon nurses examined here. Advanced practice RNs (nurses with an RN license plus a nurse practitioner and/or certified nurse specialist and/or certified registered nurse anesthetist license) were not included in the analysis.

Nurses practicing in Oregon / Oregon nurses: RNs licensed by the Oregon State Board of Nursing who reported they practice in Oregon.

Current status: Status of 2011 Oregon nurses as of 12/31/2014 based on the most recent Oregon State Board of Nursing licensee data and self-reported employment status provided at license renewal.

Analysis

Data collected as part of the nurse licensing process administered by the Oregon State Board of Nursing were used to look at a cohort of registered nurses practicing in Oregon as of 12/31/2011 to assess their current status as of 12/31/2014. Demographic data were collected as part of the initial licensure process. Workforce data, including employment status, practice setting, position, practice location, and intention to leave nursing, were collected at time of license renewal using a bi-annual rolling renewal cycle according to the licensee's date of birth. These data were self-reported. Licensees for whom status as a nurse in Oregon was unknown in either 2011 or 2014 were excluded from the cohort.

Data for nurses practicing in Oregon as of 2011 were collected during calendar years 2010 and 2011 and is assumed to represent their status as of 12/31/2011. Data regarding current status were collected during calendar years 2013 and 2014 and is assumed to represent their status as of 12/31/2014.

Churn was examined:

  Within the 2011 Oregon RN cohort overall as well as stratified by age, gender, and year licensed in Oregon
  By Position (staff nurse, lead nurse, nurse manager/supervisor, health care/nurse administrator, or nurse educator)
  By Practice setting (hospital, SNF/long term care, home health/hospice, public/community health, or education/research institution)
  By Geographic region
  By Intention to leave the profession

Churn was assessed by assigning one of the following classifications to each RN in the 2011 cohort based on his/her status as of 12/31/2014:

  License lapsed
  Licensed but not practicing in Oregon
  Continuing to practice in Oregon

Churn within the last group, those continuing to practice in Oregon, was further classified as follows according to whether the individual changed position, practice setting, or geographic region:

  Now work in a different position/practice setting/geographic region
  Continue to work in this position/practice setting/geographic region

A related variable, intention to leave the profession, was also examined.

Descriptive statistics are reported. No tests of statistical significance were performed.

Discoveries

The diagram below illustrates what was discovered about churn within Oregon's registered nurse workforce. Churn within selected positions and settings, all geographic regions, and highly impacted demographic strata are divided into quadrants indicating the relative degree of churn (less to more) and the number of nurses in the sample (more to fewer).

CHURN

Less → More

REGISTERED NURSES

More ↓ Fewer

	Less churn	More churn
More nurses	Staff nurse Hospital Portland Metro South Willamette Valley Southwest Home health/Hospice Licensed prior to 1990*	55-64 years of age Nurse manager/Supervisor Mid Willamette Valley
Fewer nurses	Central Nurse educator	Lead nurse SNF/Long term care Public/Community health Licensed in 2010 or 2011* Administrator Education/Research 65+ years of age Eastern North Coast Gorge Southern/Central

*Licensed as a registered nurse in Oregon

Churn Among Registered Nurses Practicing in Oregon as of 12/31/2011

Current Status (2014) – Overall

In 2011, there were 44,481 registered nurses (RNs) licensed to practice in Oregon. An estimated 87 percent of these nurses were practicing in the state.[5] As of 2014, 76 percent continued to practice nursing in Oregon. The remaining 24 percent indicated they were no longer practicing as an Oregon RN. The proportions licensed but not practicing in the state or allowing their license to lapse were evenly split.

Nearly all Oregon RNs who were continuing to work in Oregon as of the end of 2014 were doing so within the same scope of practice (e.g., as an RN). Just one of 100 had gone on to advanced practice.

Oregon RNs - 2011
N=32,492

| Current status | 12% | 12% | 76% |

■ License lapsed ■ Licensed but not practicing in Oregon ■ Continuing to practice in Oregon

Current Status (2014) by Demographic variables

Within the cohort of RNs practicing in Oregon as of the end of 2011, there are some notable differences related to age and year of Oregon licensure. With regard to age, it is not surprising that higher proportions of nurses in the 55-64 and 65+ age groups exited Oregon's workforce compared to the younger age groups. Perhaps more interesting is the consistency of proportions across the three younger tiers who chose to exit.
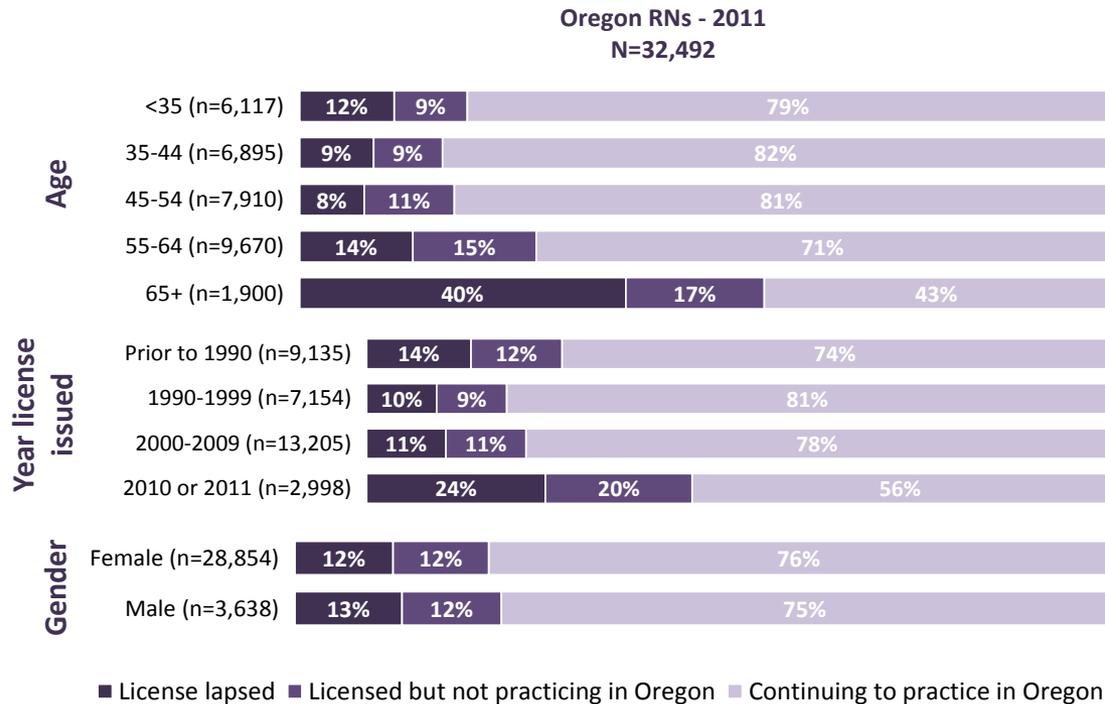
Newly licensed nurses were most likely to allow their license to lapse or no longer practice in Oregon. This is due in part to traveling nurses who obtain Oregon licensure for temporary assignments and give up their Oregon license when they move on to a position out of state. Of greater concern are recent nursing graduates who were newly licensed in the state but have left Oregon's workforce. One of 5 RNs in this group were no longer in the workforce at follow up.

There were no differences in current status related to gender.

Oregon RNs - 2011
N=32,492

	License lapsed	Licensed but not practicing in Oregon	Continuing to practice in Oregon
Age			
<35 (n=6,117)	12%	9%	79%
35-44 (n=6,895)	9%	9%	82%
45-54 (n=7,910)	8%	11%	81%
55-64 (n=9,670)	14%	15%	71%
65+ (n=1,900)	40%	17%	43%
Year license issued			
Prior to 1990 (n=9,135)	14%	12%	74%
1990-1999 (n=7,154)	10%	9%	81%
2000-2009 (n=13,205)	11%	11%	78%
2010 or 2011 (n=2,998)	24%	20%	56%
Gender			
Female (n=28,854)	12%	12%	76%
Male (n=3,638)	13%	12%	75%

■ License lapsed ■ Licensed but not practicing in Oregon ■ Continuing to practice in Oregon
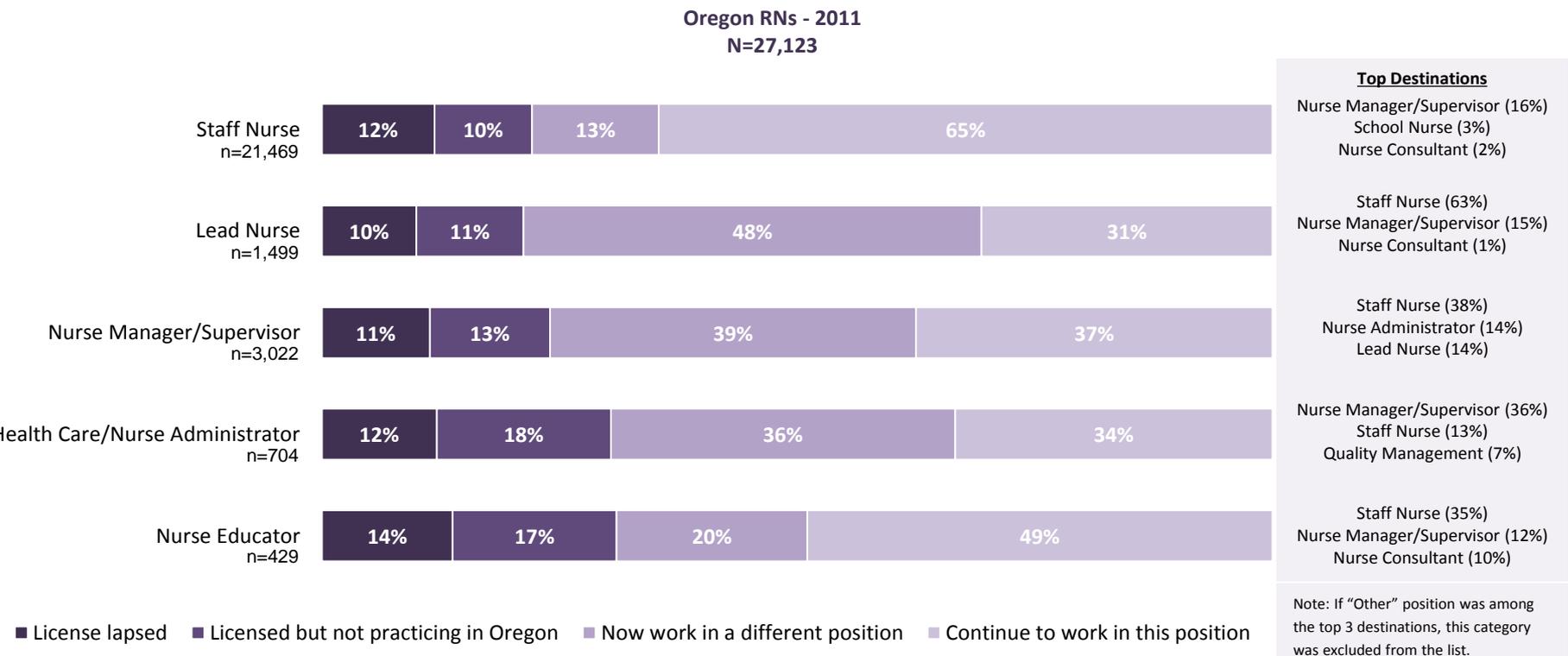
Current Status (2014) by Position

Churn among registered nurses was examined within select positions. Overall, churn was least prominent among staff nurses (who comprise two-thirds of Oregon's RN workforce[4]). High levels of churn, specifically RNs exiting the Oregon workforce altogether, were seen among health care/nurse administrators and nurse educators, nearly one-third of whom allowed their licenses to lapse or are no longer practicing in the state.

Among nurses continuing to practice in Oregon, about one-half of RNs working as lead nurses migrated to a different position. Proportions among nurse managers/supervisors and health care/nurse administrators were roughly equivalent. The greatest stability was exhibited by staff nurses and nurse educators with nearly 7 of 10 and 5 of 10 RNs, respectively, remaining in those positions.

Churn within select positions is depicted below. The top 3 destinations of RNs who changed positions, and the proportion of those RNs making a switch who migrated to that position, are shown on the right. The position of staff nurse is the top destination for three of the four other positions examined.

Oregon RNs - 2011
N=27,123

Top Destinations

Position	License lapsed	Licensed but not practicing in Oregon	Now work in a different position	Continue to work in this position	Top Destinations
Staff Nurse n=21,469	12%	10%	13%	65%	Nurse Manager/Supervisor (16%), School Nurse (3%), Nurse Consultant (2%)
Lead Nurse n=1,499	10%	11%	48%	31%	Staff Nurse (63%), Nurse Manager/Supervisor (15%), Nurse Consultant (1%)
Nurse Manager/Supervisor n=3,022	11%	13%	39%	37%	Staff Nurse (38%), Nurse Administrator (14%), Lead Nurse (14%)
Health Care/Nurse Administrator n=704	12%	18%	36%	34%	Nurse Manager/Supervisor (36%), Staff Nurse (13%), Quality Management (7%)
Nurse Educator n=429	14%	17%	20%	49%	Staff Nurse (35%), Nurse Manager/Supervisor (12%), Nurse Consultant (10%)

- License lapsed
- Licensed but not practicing in Oregon
- Now work in a different position
- Continue to work in this position

Note: If "Other" position was among the top 3 destinations, this category was excluded from the list.
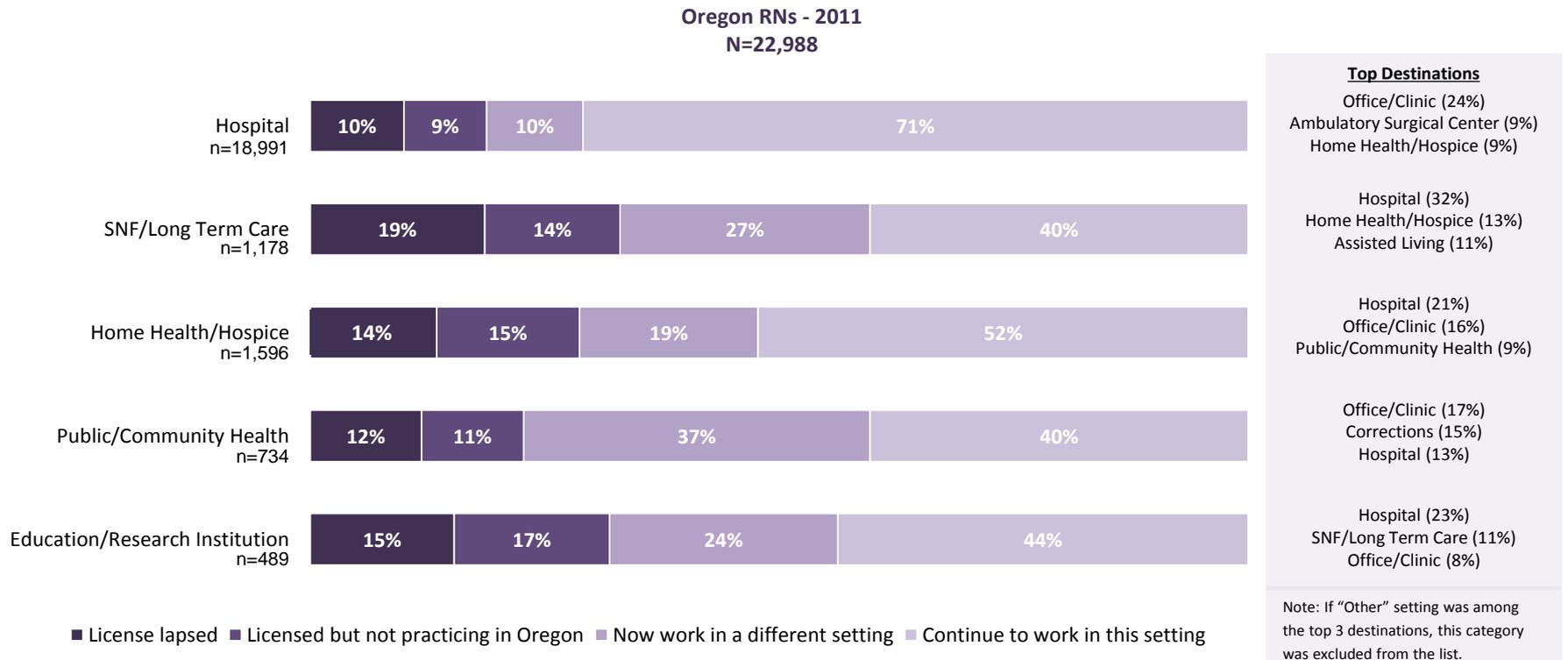
Current Status (2014) by Practice Settings

Churn among registered nurses was examined within select practice settings. Overall, churn was least prominent in hospital settings (where 60 percent of Oregon RNs are employed[4]). High levels of churn, specifically RNs exiting the Oregon workforce altogether, were seen in skilled nursing/long term care facilities and educational/research institutions where one-third of RNs allowed their licenses to lapse or are no longer practicing in the state.

Among nurses continuing to practice in Oregon, migration to other practice settings was highest in public/community health settings (37 percent), followed by those in skilled nursing/long term care facilities (27 percent) and educational/research institutions (24 percent). Hospitals and home health/hospice settings experienced the most stability where 7 of 10 and 5 of 10 RNs, respectively, remained in those settings.

Churn within select settings is depicted below. The top 3 destinations of RNs who changed practice settings, and the proportion of those RNs making a switch who migrated to that setting, are shown on the right. Hospitals are the top destination for three of the four non-hospital settings examined.

Oregon RNs - 2011
N=22,988

Setting	License lapsed	Licensed but not practicing in Oregon	Now work in a different setting	Continue to work in this setting
Hospital n=18,991	10%	9%	10%	71%
SNF/Long Term Care n=1,178	19%	14%	27%	40%
Home Health/Hospice n=1,596	14%	15%	19%	52%
Public/Community Health n=734	12%	11%	37%	40%
Education/Research Institution n=489	15%	17%	24%	44%

■ License lapsed ■ Licensed but not practicing in Oregon ■ Now work in a different setting ■ Continue to work in this setting

Top Destinations

Office/Clinic (24%)
Ambulatory Surgical Center (9%)
Home Health/Hospice (9%)

Hospital (32%)
Home Health/Hospice (13%)
Assisted Living (11%)

Hospital (21%)
Office/Clinic (16%)
Public/Community Health (9%)

Office/Clinic (17%)
Corrections (15%)
Hospital (13%)

Hospital (23%)
SNF/Long Term Care (11%)
Office/Clinic (8%)

Note: If "Other" setting was among the top 3 destinations, this category was excluded from the list.
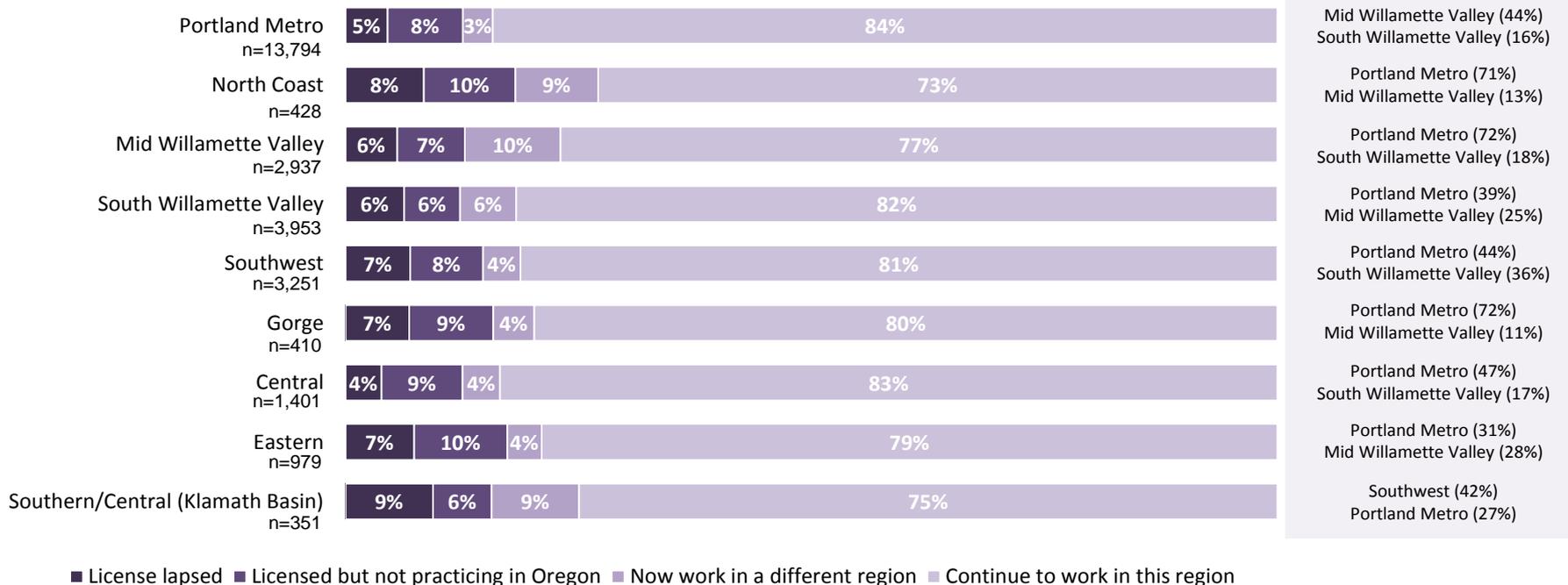
Current Status (2014) by Geographic Region

Churn among registered nurses was examined within geographic regions. Overall, churn is more pervasive in rural regions. The proportion of nurses lost to lapsed licenses and licensees leaving Oregon practice was highest in the North Coast, Gorge, and Eastern regions. Among those nurses who continue to practice in Oregon, those working in the North Coast and Southern/Central regions were most likely to move to another geographic location. The Mid Willamette Valley was the only region with an urban component that experienced churn comparable to that seen in rural regions.

Churn across Oregon regions is depicted below. The top 2 destinations of RNs who changed regions, and the proportion of those RNs making a switch who migrated to that region, are shown on the right. The Portland Metro region was the top destination for nurses from all other regions with the exception of those previously working in the Southern/Central region who were most likely to move to the Southwest region. The South Willamette Valley and Mid Willamette Valley regions were also popular destinations.

Oregon RNs - 2011
N=27,504

Region	License lapsed	Licensed but not practicing in Oregon	Now work in a different region	Continue to work in this region	Top Destinations
Portland Metro (n=13,794)	5%	8%	3%	84%	Mid Willamette Valley (44%) / South Willamette Valley (16%)
North Coast (n=428)	8%	10%	9%	73%	Portland Metro (71%) / Mid Willamette Valley (13%)
Mid Willamette Valley (n=2,937)	6%	7%	10%	77%	Portland Metro (72%) / South Willamette Valley (18%)
South Willamette Valley (n=3,953)	6%	6%	6%	82%	Portland Metro (39%) / Mid Willamette Valley (25%)
Southwest (n=3,251)	7%	8%	4%	81%	Portland Metro (44%) / South Willamette Valley (36%)
Gorge (n=410)	7%	9%	4%	80%	Portland Metro (72%) / Mid Willamette Valley (11%)
Central (n=1,401)	4%	9%	4%	83%	Portland Metro (47%) / South Willamette Valley (17%)
Eastern (n=979)	7%	10%	4%	79%	Portland Metro (31%) / Mid Willamette Valley (28%)
Southern/Central (Klamath Basin) (n=351)	9%	6%	9%	75%	Southwest (42%) / Portland Metro (27%)

■ License lapsed ■ Licensed but not practicing in Oregon ■ Now work in a different region ■ Continue to work in this region

REGIONS:
Central: Crook, Deschutes, Jefferson
Eastern: Baker, Grant, Harney, Malheur, Morrow, Umatilla, Union, Wallowa
Gorge: Gilliam, Hood River, Sherman, Wasco, Wheeler

Mid Willamette Valley: Marion, Polk, Yamhill
North Coast: Clatsop, Columbia, Tillamook
Portland Metro: Clackamas, Washington, Multnomah

South Willamette Valley: Benton, Lane, Lincoln, Linn
Southern/Central (Klamath Basin): Klamath, Lake
Southwest: Coos, Curry, Douglas, Jackson, Josephine

Current Status (2014) by Intention to Stop Practicing in the State

Nurses' intentions to leave Oregon and/or the profession altogether can provide insight into the degree of churn attributable to workforce separations that can be expected in the future. Among Oregon RNs in 2011 who reported they planned to make such a change within two years, one-third continued to practice in the state at follow up. Both those whose license lapsed and who maintained Oregon licensure but reported they no longer practice in the state were considered to have left Oregon practice.

Oregon RNs - 2011
N=1,196

	Left Oregon practice	Continuing to practice in Oregon
Move to practice outside of Oregon n=676	66%	34%
Leave the practice of nursing n=62	56%	44%
Retire n=458	72%	28%

■ Left Oregon practice ■ Continuing to practice in Oregon

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About the author: Beth A. Morris, MPH, is a health services research consultant with a primary focus on survey methodology, data management, and statistical analysis. Her principal areas of interest are health workforce research and health care quality improvement. Contact Beth at morrisbetha@gmail.com.

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