



Demand for Nurses in Utah

The 2015 Survey of Utah's Nurse Employers

Utah Medical Education Council



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The Utah Medical Education Council

State of Utah

www.utahmec.org

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Prepared by:
Jaron Halford, MPP, MPH

Demand for Nurses in Utah: The 2015 Survey of Utah's Nurse Employers

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THE UTAH MEDICAL EDUCATION COUNCIL

The Utah Medical Education Council (UMEC) was created in 1997 out of a need to secure and stabilize the state's supply of healthcare clinicians. This legislation authorized the UMEC to conduct ongoing healthcare workforce analyses and to assess Utah's training capacity and graduate medical education (GME) financing policies. The UMEC is presided over by an eight-member board appointed by the Governor to bridge the gap between public/private healthcare workforce and education interests.

Core Responsibilities – Healthcare Workforce

- Assess supply and demand.
- Advise and develop policy.
- Seek and disburse Graduate Medical Education (GME) funds.
- Facilitate training in rural locations.

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ACKNOWLEDGEMENTS

The Utah Medical Education Council (UMEC) is proud to present the first comprehensive statewide nursing report focused on capturing the demand for different nursing occupations across various work-settings in Utah. This study on the demand for nurses is based on a survey disseminated in 2015 by UMEC. The report below is a product of collaboration with administrators across hundreds of nursing facilities throughout the state. The UMEC would like to extend a special thanks to several individuals for their considerable contribution to this report:

Linda Hofmann, MSN, RN, NEA-BC, NE-BC

Assistant Vice President of Nursing
Intermountain Healthcare

Margaret Pearce, PhD, MBA, MSN

Chief Nursing Officer
University of Utah Hospitals and Clinics

Aimee Wilson, MA, CCP, PHR

Director, Compensation, HR Operations &
Analytics
University of Utah Hospitals and Clinics

Jill Vicory

Director, Member and Community Affairs
Utah Hospital Association

Sherry Varley, RN, CIC

Manager, Healthcare Associated Infections
Program
Utah Department of Health

Marta Hall

Clinical Operations & Clinical Risk Management
IASIS Healthcare

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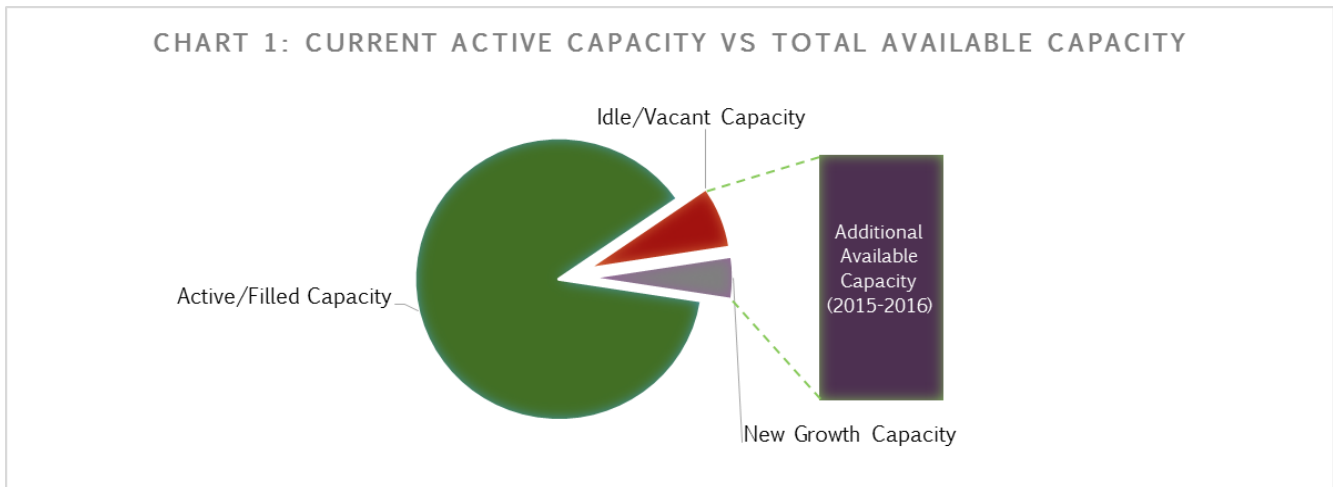
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INTRODUCTION

In 2013, the Utah Medical Education Council (UMEC) was designated as the Nursing Workforce Information Center for Utah. With this designation the UMEC began undertaking measures to understand the different facets of the nursing workforce within the state. Specifically, the UMEC expanded its efforts to cover three major factors impacting the current and future nursing workforce: 1) supply of nurses, 2) demand for nurses, and 3) education of nurses. The report below is UMEC's efforts to understand the second major factor impacting nurses within the state.

In early 2015 the UMEC, with the help of various individuals and organizations, mailed out the first round of surveys to nursing employers throughout the state. These facilities include hospitals, skilled nursing facilities, long-term care, assisted living centers, ambulatory care settings, public health departments, and various other settings. A high response rate within each facility type provided suitable data to allow for a conditional imputation of non-respondent facilities. Comprehensive information, particularly facility size and location (urban/rural), also allowed for the creation of ideal profiles by which to impute non-respondent data from the averages of comparable respondent facilities. Unless specified, the information below will be presented as the sum of respondent data and the imputed data for non-respondents.

This report identifies demand as it is related to the total capacity of a workforce. For instance, each nursing occupation has a certain active workforce within each facility type. This workforce is referred to as the "current active workforce" as it is a representation of the actual FTEs filled by a workforce within a certain facility type. This active workforce, however, is rarely the "total potential workforce" because of vacancies and new positions – meaning that there are typically budgeted positions that are not filled (i.e. additional available capacity). As such, this report identifies demand for nurses as a function of additional FTEs (either vacant or new positions) that are budgeted for but are not filled. This method represents the most accurate depiction of demand as it reflects FTEs that are budgeted for but are not currently filled.



METHODOLOGY

The UMEC constructed its Nursing Demand Survey instrument to conform to national minimum data set requirements¹. In doing so, the UMEC utilized techniques employed by various other state nursing workforce centers^{2,3,4} to ensure that the survey was appropriate for Utah's respondent population. The final survey instrument was then vetted by a small counsel of nurses and researchers prior to going live in the field.

In January (2015), the UMEC obtained a list of organizations from the Utah Division of Occupational and Professional Licensing (DOPL) that potentially hired nurses. DOPL provided organizations in Utah by their respective North American Industry Classification System code (NAISC)⁵. This list of businesses fell within the following NAISC codes: General Medical and Surgical Hospitals (622110), Psychiatric and Substance Abuse Hospitals (62210), Specialty Hospitals (622310), Skilled Nursing Facilities (623110), Home Health Care Services (621610), Ambulatory Care (621999), Office of Miscellaneous Health Practitioners (621399), Office of Physicians (621111), and Outpatient Care (6214). This list was then cross-referenced with industry specific lists from the Utah Hospital Association⁶ and the Utah Department of Health⁷.

The final survey population consisted of the following facilities: General Short-Term Hospitals (35), Psychiatric Hospitals (10), Critical Access Hospitals (11), Military Hospital (2), Children's Hospital (2), Federally Qualified Health Centers (25), Long-Term Care Hospitals (3), Long-term Care and Skilled Nursing Facilities (113), Public Health Districts (12), Home Health and Hospices (225), and Assisted Living Facilities (188). In addition to this list, the UMEC also sent out surveys to "Other" facilities that include specialty clinics (Family Medicine, Pediatrics, Urology, ect), urgent care, drug rehabilitation centers, behavioral health centers, physician offices, and ambulatory care settings (including ambulatory surgical care facilities).

In February (2015), a list of potential contacts (Directors of Nursing, Chief Nursing Officers, and Directors of Human Resources) was compiled for most of the hospitals and a vast majority of the long-term care facilities, skilled nursing facilities, assisted living facilities, and public health departments. An initial mailing was then sent out to facilities as well as a random list of several hundred private offices, outpatient care, and ambulatory care facilities. Over the next two months, a second survey mailed to non-respondents and emails were sent to individuals within hospitals (standard mail was not an appropriate method for many of these individuals). The final response rates per industry are outlined in Table 1 (page 5) below.

DATA ANALYSIS

Data was analyzed using the Statistical Package for the Social Sciences (version 22) and Microsoft Excel. Each facility type was analyzed in terms of individual nursing occupations respectively. Accordingly, percentages and numbers presented are representative of the individual nursing occupation as it relates to a specific facility type.

In addition, statistical assumptions and techniques were employed to help make the responses more valid and representative. For instance, some respondents either a) filled out the number of full-time and part-time employees and left the FTE (full-time equivalent) box blank; or b) they filled out the number of full-time and part-time positions currently filled and miscalculated the number of FTEs that these positions translate to (miscalculations tended to be readily identified given that the formula for calculating FTEs entails a certain distinct range of FTEs as it relates to full-time and part-time positions). **Accordingly, when such cases arose the misrepresented FTEs were recalculated using a straight forward 1.0 FTE per full-time employee and 0.5 FTE per part-time employee.**

Lastly, the analyses below are calculated using respondent data and corresponding **conditional imputation** data for non-respondents. Specifically, the response rates for each facility type are sufficient enough to allow for conditional imputation of non-respondents within the category. **For non-respondents, facility profiles were created from respondent data to help predict and provide appropriate direction for these missing data points. The geographic area (using Rural Urban Commuting Area Codes) and bed size were the two primary characteristics in creating appropriate profiles to help predict non-respondent data from respondent data. Once these profiles were constructed, the average of the cohort was imputed to non-respondents that matched the profile type.**

TERMINOLOGY/FORMULAS

Separation: Is a term used to describe how many individuals left an organization (voluntarily or involuntarily) during a certain time frame. The survey asked the total number of individuals that left from January 31st, 2014 – January 2015. **Separation data was summed by facility type and weighted by a profile ratio of full-time to part-time workers by nursing occupation.** Specifically, facilities are broken down into urban vs rural and bed size profiles (ex: large urban, small rural). Within these facility type profiles is a specific full-time to part-time ratio of nurses. **The separation data was weighted according to the make-up of these profiles to help better identify the total number of FTEs lost by facilities over the last year.**[†]

Turnover Rates: Are calculated by using **the sum of the separation FTEs divided by the sum of the total budgeted FTEs** (this is identified as currently occupied positions plus vacant/idle positions). Including vacant and filled FTEs into “Total Budgeted FTEs” provides a more accurate and conservative percentage (in terms of current budgeted capacity) for the following analyses.

$$\text{Turnover Rates} = \frac{\sum \text{Separations (FTEs)}}{\sum \text{Total Budgeted FTEs}}$$

Vacancy Rates: Full-time and part-time vacancies are identified as positions that are both budgeted for and actively being recruited for. Like the currently employed full-time and part-time employees, **vacancies were transformed into FTEs by transforming each full-time employee into 1.0 FTE and each part-time employee into 0.5 FTE.** The number of vacancies was imputed for non-responses where applicable and appropriate.

$$\text{Vacancy Rate} = \frac{\sum \text{Vacant FTEs}}{\sum \text{Total Budgeted FTEs}}$$

Change in Current Active Capacity: Facilities were asked to indicate the number of new full-time and part-time positions they intend to create in the following year. These positions were adjusted to represent new positions in terms of FTEs. **New FTE positions were added with Vacant FTEs to describe potential capacity that will be available and that is currently not active (i.e. filled).** The purpose of adding these two variables together is to illuminate the true potential capacity (i.e. unfilled budgeted positions for nurses) within nursing occupations and settings. This variable describes the true demand for nurses as these are budgeted positions that are not filled.

$$\text{Change in Current Active Capacity} = \frac{\sum \text{New FTEs} + \sum \text{Vacant FTEs}}{\sum \text{Total Budgeted FTEs for 2016 (including new FTEs)}}$$

[†] For example, if there was a sum of 100 RN separations within large urban skilled nursing facilities, and these facilities have a make-up of 2 full-time RNs to every 1 PT RN, then these separations are weighted as 67 full-time employees and 33 part-time employees (83.5 total FTEs). By doing this the separation data becomes representative of the workforce of each nursing occupation within each facility type. The weighted number also allows for more accurate analysis of workforce FTEs. The number of separations was imputed for non-respondents using the method explained above.

SURVEY RESULTS: OVERVIEW

Table 1 – Facility Response Rates

	Hospitals/ Health Systems	Skilled Nursing Facility/Long- Term Care	Assisted Living Center	Public Health	Home Health/ Hospice
Surveys Returned	47	37	94	9	79
Response Rate	77%	35%	50%	75%	35%
Beds Covered*	81%	32%	55%	---	---
* This percentage represents the number of beds covered by the surveys received from respondent facilities. The percentage is thus the number of beds within respondent facilities divided by the total number of beds within the facility type in the state					

Table 1 indicates the response rates across different facility types. The highest response rates came from settings where an active advocate was found who helped disseminate the survey and organize the internal collection of the data. The UMEC was fortunate to receive direct help from the state’s largest hospital systems and public health departments, which resulted in high response rates for these settings.

The UMEC also utilized data on bed sizes to help determine if the survey data was representative to allow for conditional imputation of non-respondent data. Bed sizes were very helpful in providing appropriate profiles types for several of the surveyed nurse settings. The conditional imputation process was enriched by this additional data.

Table 2 – Estimated FTEs by Nursing Occupation and Facility Type

FACILITY TYPE	Total Estimated Full-Time Equivalent (FTE) Positions*			
	Certified Nursing Assistant (CNA)	Licensed Practical Nurse (LPN)	Registered Nurse (RN)	Advanced Practical Nurse (APRN)
Hospitals/Health Systems (ALL HOSPITAL TYPES)	2,722	245	10,435	361
<i>Psychiatric Hospital</i>	<i>(138)</i>	<i>(62)</i>	<i>(607)</i>	<i>(59)</i>
<i>Federally Qualified Health Center</i>	<i>(42)</i>	<i>(38)</i>	<i>(50)</i>	<i>(31)</i>
Skilled Nursing Facility/Long-Term Care	2,981	589	1,072	25
Assisted Living Center	2,126	33	100	< 10
Public Health	0	< 10	291	12
Home Health/Hospice	2,007	557	3,370	33
Setting Type - Other**	954	135	684	210
<i>Ambulatory Care Setting</i>	<i>(847)</i>	<i>(72)</i>	<i>(591)</i>	<i>(174)</i>
<i>Specialty Clinic</i>	<i>(68)</i>	<i>(34)</i>	<i>(82)</i>	<i>(33)</i>
<i>Treatment Facilities (Drug, Behavioral)</i>	<i>(< 10)</i>	<i>(< 10)</i>	<i>(11)</i>	<i>(< 10)</i>

* Estimated FTEs represent positions that are budgeted and filled. These estimates do NOT represent the total capacity of each facility type (i.e. all budgeted positions), but rather only those positions that are currently filled (i.e. Total Budgeted Positions - Vacancies = Active FTEs).

** These settings do NOT include imputed estimates like the other facility types. There is currently not an accurate and complete list of these facility types available, so a conditional imputation analysis was not conducted for these specific facility types. Therefore, these values are a total from the surveys received in these areas and are likely less than the true FTE value for these facilities in Utah.

Table 2 represents the estimated FTEs by nursing occupation and facility type. The data provides insights into the different nursing workforce compositions throughout each facility type. For instance, hospitals rely almost exclusively (97%) on registered nurses and certified nursing assistants. Whereas, public health relies solely on registered nurses and assisted living facilities rely solely on certified nursing assistants.

This report attempted to also capture the use of nurses outside of the traditional large employers. In doing so the survey was sent to “other” facility types to capture additional demand trends that many be applicable to certain nursing occupations. The major setting types that emerged within this category include Ambulatory Care Settings, Specialty Clinics, and Treatment Facilities. The difficulty with estimating the total demand for these facilities across the state is that there is currently no robust list of these employers. Thus, no conditional imputation could be completed due to not knowing the true population size of each facility type. Accordingly, the data presented in the “Setting Type – Other” section is exact reporting numbers, and does not include estimates for the entire setting type.

Table 3 –Use of Contract Labor by Facility Type

	Hospitals/ Health Systems	Skilled Nursing Facility/Long- Term Care	Assisted Living Center	Public Health	Home Health/ Hospice
<i>CNA</i>	6%	0%	2%	0%	7%
<i>LPN</i>	0%	4%	0%	0%	5%
<i>RN</i>	11%	4%	11%	22%	7%
<i>APRN</i>	4%	4%	1%	11%	2%

Reported data indicates that every facility type uses some form of contract labor. RNs are reported as being either the highest, or tied for the highest, utilized contract labor workforce across all the major employer settings.

Table 4 – Top Three Most Difficult to Fill Positions

Hospitals/ Health Systems	Skilled Nursing Facility/Long- Term Care	Assisted Living Center	Public Health	Home Health/ Hospice
- Case Managers/ Discharge Planners - Critical Care - Labor and Delivery/ Postpartum Care	- Rehabilitation - Primary Care - Case Managers/ Discharge Planners	- Nurse Administrators - Primary Care - Hospice	- Public Health - Immunization - Nurse Administrator	- Hospice - Case Managers/ Discharge Planners - Nurse Administrator

The survey also asked employers what the top three most difficult to fill nursing positions were at the moment. Each setting type has their own unique set of three specialties; however, some nursing positions emerged across several settings. For instance, Case Managers/Discharge Planners, Nurse Administrators, and Primary Care positions are found as being difficult to fill positions in more than one setting.

SURVEY RESULTS: DETAILED

Table 5 – Results from 2015 UMEC Survey of Nurse Employers

	Nurse Profession	Hospitals/ Health Systems (ALL)	Skilled Nursing Facility/Long-Term Care	Assisted Living Center	Public Health	Home Health/ Hospice	Other (ALL)
(%) Workforce in Setting Type	<i>CNA</i>	25%	28%	20%	0%	19%	9%
	<i>LPN</i>	16%	38%	2%	1%	36%	9%
	<i>RN</i>	68%	7%	1%	2%	22%	1%
	<i>APRN</i>	56%	4%	0%	2%	5%	33%
Idle Capacity	<i>CNA</i>	4%	13%	9%	---	9%	7%
	<i>LPN</i>	1%	11%	24%	0%	11%	2%
	<i>RN</i>	6%	12%	6%	5%	10%	7%
	<i>APRN</i>	4%	27%	0%	0%	32%	8%
Turnover Rate	<i>CNA</i>	17%	73%	56%	---	40%	18%
	<i>LPN</i>	21%	36%	29%	15%	67%	19%
	<i>RN</i>	14%	56%	48%	14%	30%	14%
	<i>APRN</i>	8%	5%	0%	0%	22%	11%
New Positions	<i>CNA</i>	2%	5%	19%	---	20%	2%
	<i>LPN</i>	3%	8%	12%	0%	25%	7%
	<i>RN</i>	2%	6%	9%	9%	14%	10%
	<i>APRN</i>	7%	0%	0%	0%	54%	12%
Change in Current Active Capacity	<i>CNA</i>	+8%	+18%	+23%	0%	+24%	+9%
	<i>LPN</i>	+5%	+18%	+32%	0%	+29%	+8%
	<i>RN</i>	+8%	+17%	+14%	+13%	+21%	+16%
	<i>APRN</i>	+10%	+27%	0%	0%	+56%	+18%

Table 5 is a summary of the major survey components for each facility and nursing occupation.

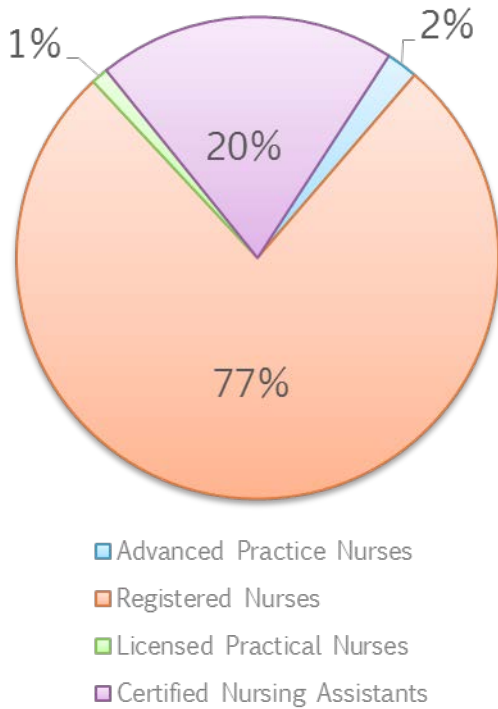
- “Workforce in Setting Type” indicates the percentage of each nursing workforce that is currently employed in each setting. For instance, 68% of RN FTEs are estimated to be in hospital/health system settings.
- “Idle Capacity” indicates the percentage of each nursing occupation by facility type that is currently vacant (i.e. budgeted for but not filled). For example, 6% of the total budgeted FTE positions for RNs in hospitals/health systems is currently vacant.

- “Turnover Rate” is the percentage of separations (FTEs in a nursing occupation that left a setting from January 2014-Januray 2015). RNs have a reported 14% turnover rate in hospital/health system settings – meaning 14% of all budgeted RN FTEs in this setting left at some point from January 2014 – January 2015.
- “New Positions” is an estimated percentage of new position FTE growth (i.e. new FTEs as a percentage of current budgeted FTEs). Here is it estimated that there will be an increase of 2% in the total budgeted FTEs for RNs in hospital/health systems setting over the coming year.
- “Change in Current Active Capacity” represents the additional available capacity that each workforce will have budgeted for by next year, but that it not currently active/filled. For instance, RNs have a +8% in the hospital/health systems setting which means that the RN workforce in this setting can increase its current active FTE capacity by 8% over the coming year if the current vacant positions and new budgeted positions are all filled within this setting.

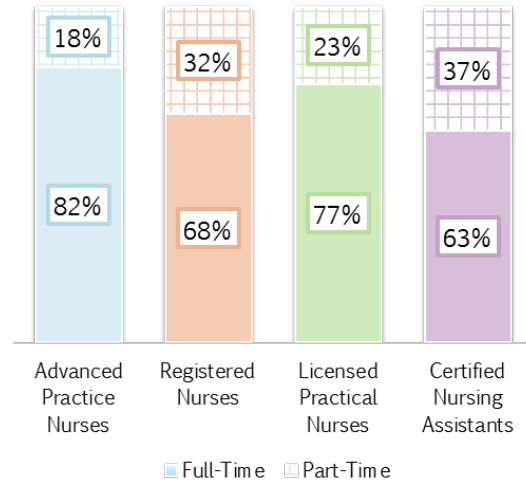
**Detailed Look at Demand for Nursing Occupations
by Facility Type**

HOSPITALS AND HEALTH SYSTEMS

Workforce Composition (FTEs)



Full-Time vs Part-Time



Hospitals and Health Systems* in Utah includes 35 Acute/Short-term facilities, 11 Critical Access Hospitals, 2 Children’s Hospitals, 10 Psychiatric Hospitals, 25 Federally Qualified Health Centers, and 2 military affiliated hospitals. It is estimated that these facilities employ the largest segment of Certified Nursing Assistants (2,722 FTEs), Registered Nurses (10,435 FTEs), and Advanced Practical Nurses (361 FTEs) in the state. These facilities are estimated to employ 25% of the CNA workforce, 16% of the LPN workforce, 68% of the RN workforce, and 56% of the APRN workforce in Utah.

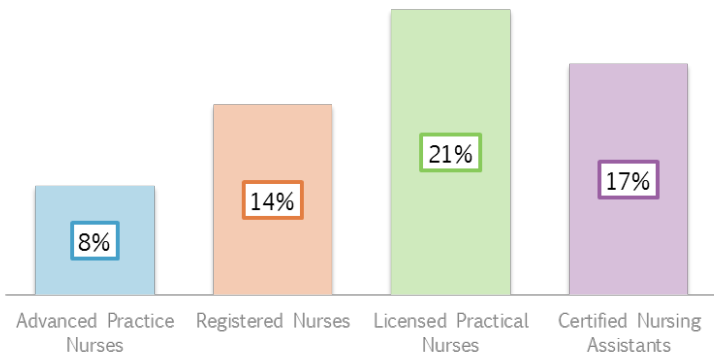
These facilities have an average workforce composition of 77% RNs, 20% CNAs, 2% APRNs, and 1% LPNs. These facilities rely heavily on RNs and CNAs. These two nursing types make up 97% of the total nursing workforce within these facilities.

Hospitals and Health Systems fill full-time positions more often than part-time positions for each of the nursing occupations. For instance, 68% of all filled registered nursing positions are full-time employees, with 32% of all filled registered nursing positions being part-time.

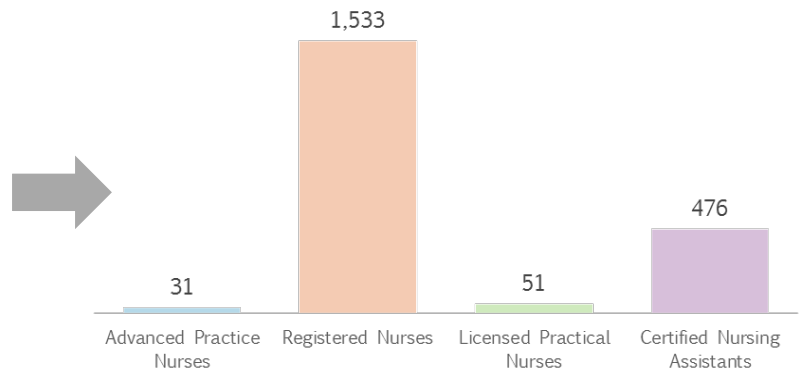
* Two Health Systems responded to the survey with data that included additional settings outside of hospitals. These additional settings were not able to be detached from the information that pertained strictly to their hospital settings. As such, the data for all of their facilities is reported within this section.

HOSPITALS/HEALTH SYSTEMS

Turnover Rate

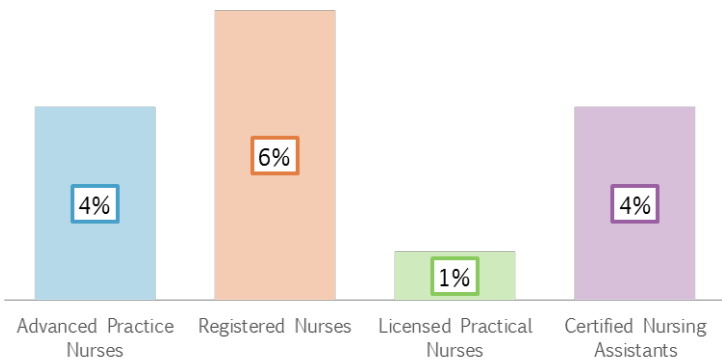


Number of Separations (FTEs)

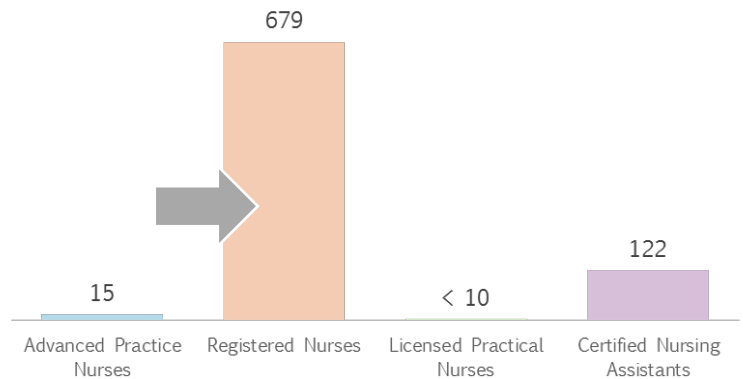


Hospital and Health Systems reported separations for each nursing occupation from January 2014 - January 2015. RNs had the most separations during this period with an estimated 1,533 (FTEs), followed by CNAs with an estimated 476. Given these reported separations, these facilities experienced turnover rates for all nursing types. LPNs had the highest turnover rate (21%), followed by CNAs (17%), RNs (14%), and APRNs (8%).

Vacancy Rate



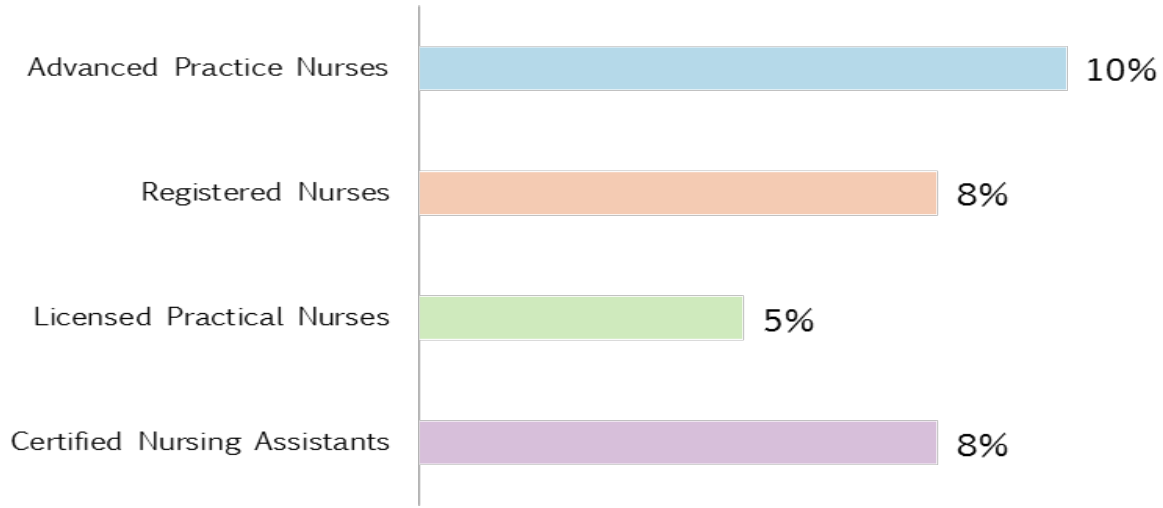
Number of Vacancies (FTEs)



These facilities also had vacancies (unfilled budgeted positions) during the early months of 2015. Most vacant positions were for RNs (679 FTEs), followed by CNAs (122 FTEs). During this time RNs had the highest vacancy rate (6%), with LPNs having the lowest (1%).

HOSPITALS/HEALTH SYSTEMS

Potential Change in Current Active Capacity

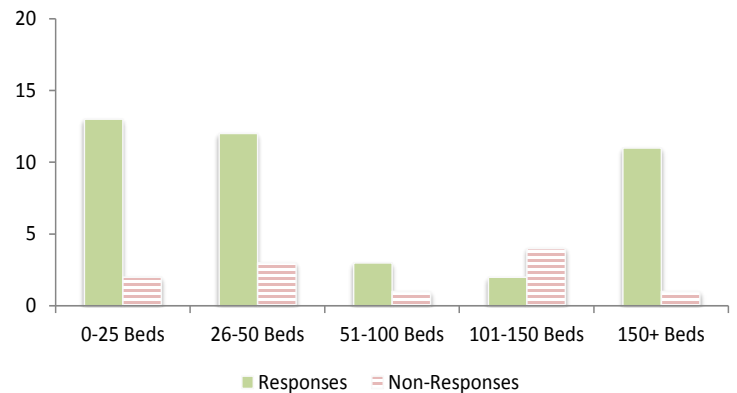


Hospital and Health Systems have an estimated total active nursing capacity (i.e. filled budgeted positions) of 14,790 FTEs. RNs account for the majority of this having filled 10,435 FTEs, followed by CNAs (2,722 FTEs), APRNs (361 FTEs), and LPNs (245 FTEs). The total potential capacity (i.e. filled FTEs + vacant FTEs + new FTEs) for each of these nursing occupations is greater than the current active capacity due to 1) vacant positions that are actively being sought, and 2) new positions that are expected to be created over the coming year.

Accordingly, all nursing types within these facilities have the potential to increase their current active capacity over the coming year. Specifically, the potential change in active capacity is the additional capacity that each workforce has budgeted for, but is currently not active/filled. For example, APRNs can expand their current active capacity by 10% over the next year due to additional unfilled capacity (vacancies and new positions).

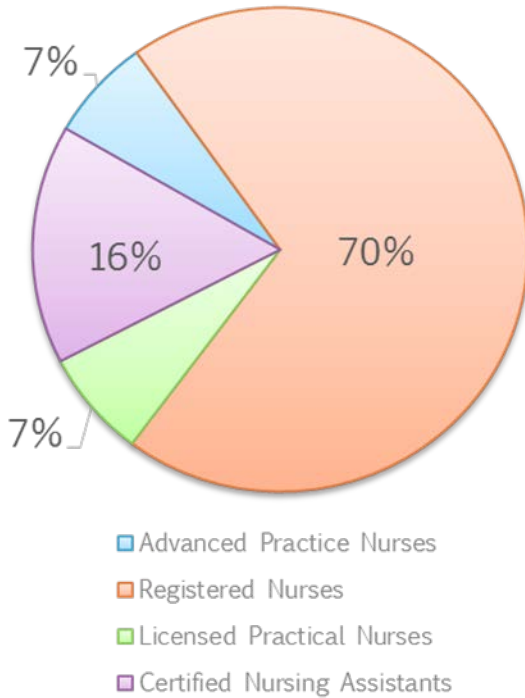
Respondents vs. Non-Respondents

	N	MEAN # BEDS
RESPONSES	41	117
% Large (> 100 Beds)	33%	Min 11
% Small (< 100 Beds)	67%	Max 592
% Urban	49%	Median: 42
NON-RESPONSES	12	89
% Large (> 100 Beds)	45%	Min 12
% Small (< 100 Beds)	55%	Max 238
% Urban	91%	Median: 84

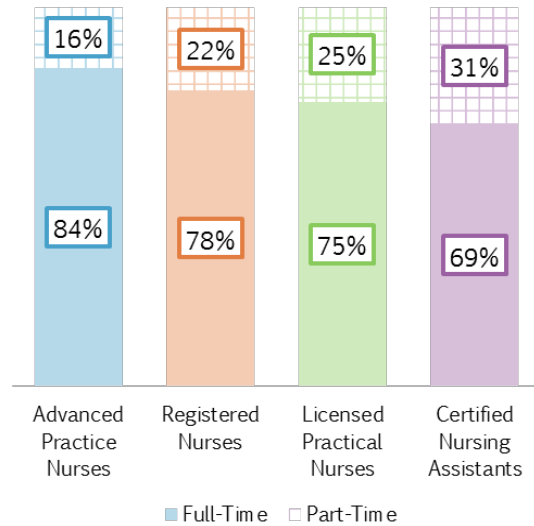


PSYCHIATRIC HOSPITALS

Workforce Composition (FTEs)



Full-Time vs Part-Time



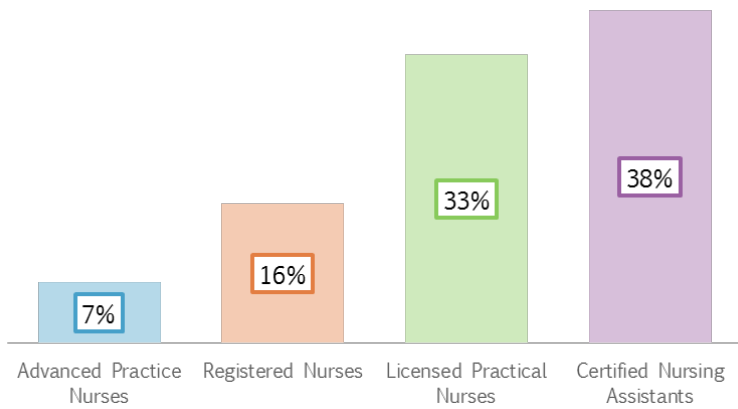
Psychiatric hospitals differ from general hospitals in that Psychiatric hospitals focus on diagnostic, treatment and monitoring of patients who suffer from mental illness. While these facilities provide unique services to a distinct patient population, the nursing workforce composition is very similar to general hospitals – with the vast majority of its nursing workforce consisting of RNs followed by CNAs.

There are currently 10 licensed Psychiatric hospitals within the state. It is estimated that the nursing workforce within these facilities is roughly 866 FTEs. These facilities are estimated to hire 9% of the active APRN workforce (59 FTEs), 4% of the active RN and LPN workforces (607 FTEs, 62 FTEs), and 1% of the active CNA workforce (138 FTEs).

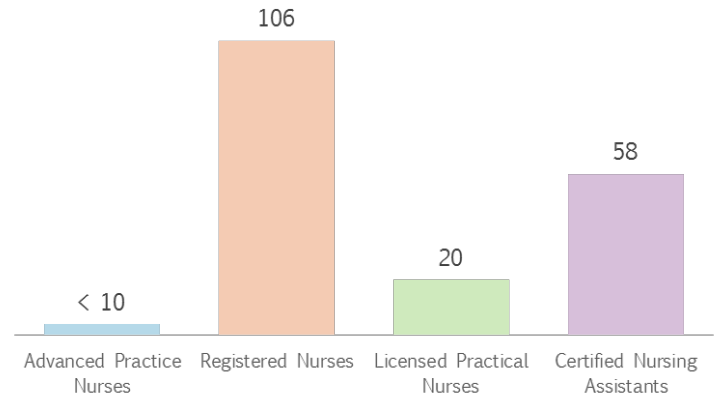
Psychiatric hospitals rely mostly on full-time work from all of their nursing workforces. Specifically, 84% of all filled APRN positions are full-time, with 78% of filled RN, 75% of filled LPN, and 69% of

PSYCHIATRIC HOSPITALS

Turnover Rate

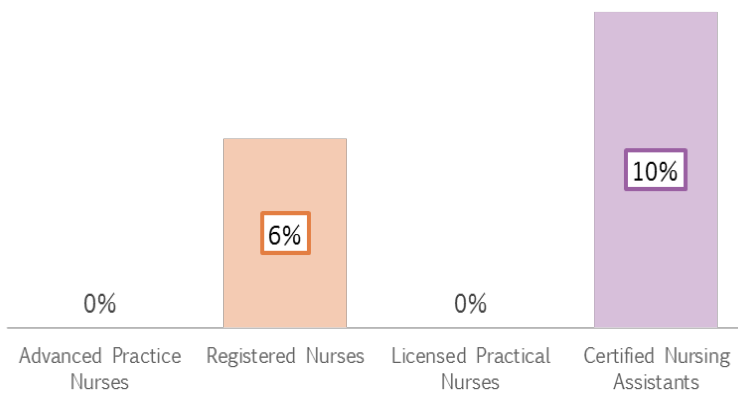


Number of Separations (FTEs)

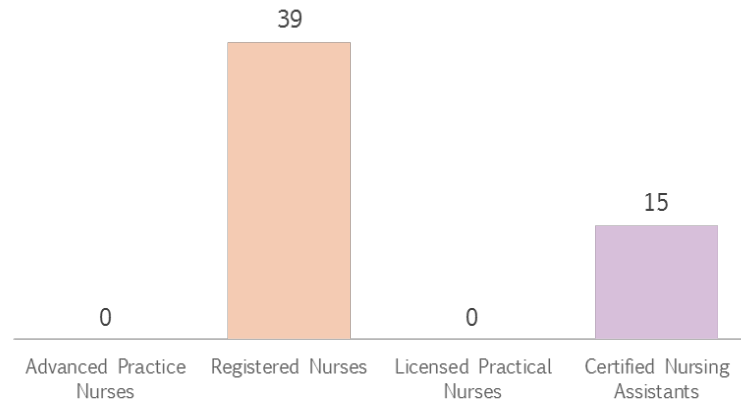


Psychiatric hospitals reported separations for each nursing type between January 2014 – January 2015. Like general hospitals, psychiatric hospitals saw the most separations with their RN workforce (106 FTEs), followed by their CNA workforce (58 FTEs), LPN workforce (20 FTEs), and APRN (< 10 FTEs). These separations entail higher turnover rates for CNAs (38%), LPNs (33%), and RNs (16%) within these facilities.

Vacancy Rate



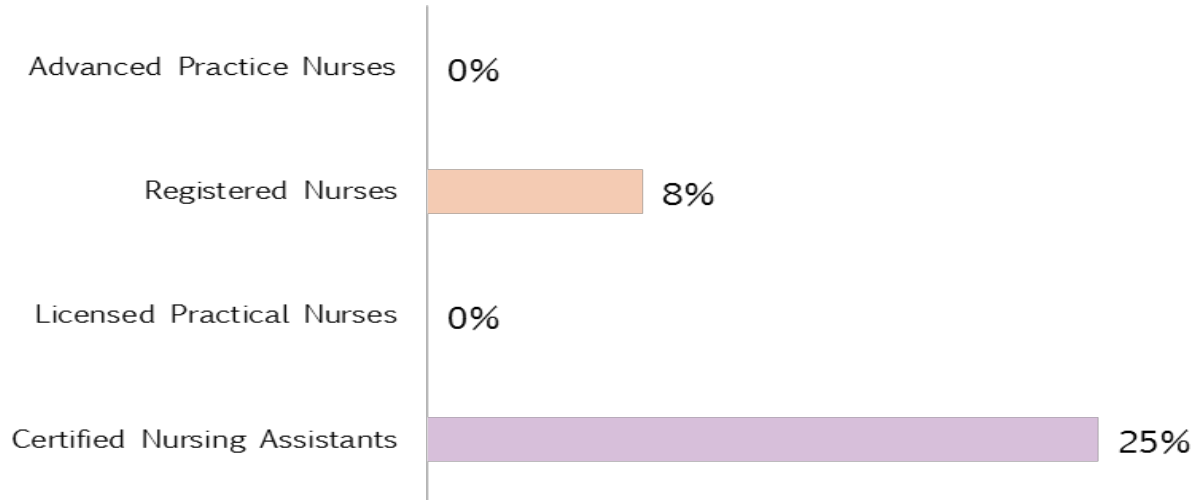
Number of Vacancies (FTEs)



Psychiatric hospitals did not report any vacancies with their APRN or LPN workforces. APRN and LPN workforces are thus currently operating at 100% capacity within these facilities. These facilities reported vacancies for only the RN (39 FTEs) and CNA (15 FTEs) workforces. These vacancies translate into a 10% vacancy rate for CNA and a 6% vacancy rate for RNs.

PSYCHIATRIC HOSPITALS

Potential Change in Current Active Capacity



Psychiatric hospitals have an estimated total active nursing capacity of 866 FTEs. Given that these facilities 1) did not report any vacancies for APRNs or LPNs, and 2) did not report the intention to create any new positions for APRNs or LPNs, means that these two workforces are currently operating at 100% capacity. However, vacancies and new positions for CNAs and RNs entail an increase in the current active workforce for both of these nursing occupations.

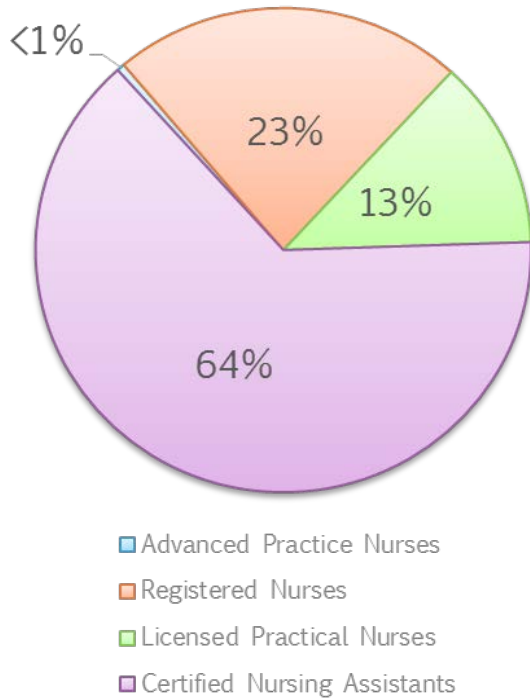
APRNs and LPNs do not have the potential to increase their current active capacity because they have no vacancies and no new positions to fill. On the other hand, CNAs and RNs both have unfilled capacity due to both vacancies and the creation of new positions. The active/filled capacity of RNs can increase by 8% if budgeted vacant and new positions are filled over the coming year. CNAs can increase their current active capacity by 25% by doing the same.

Respondents vs. Non-Respondents

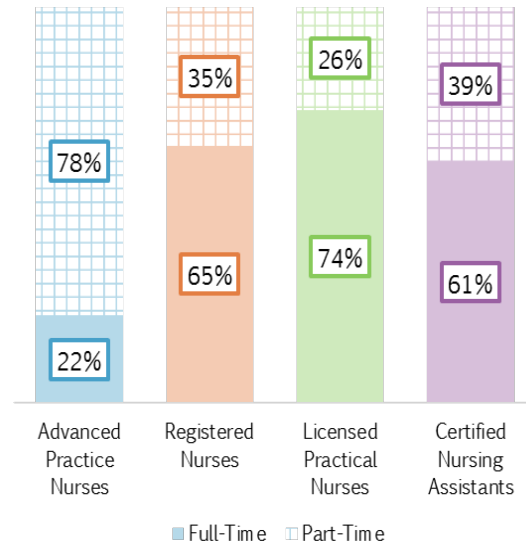
	N	MEAN # BEDS
RESPONSES	6	139
% Large (> 100 Beds)	50%	Min 14
% Small (< 100 Beds)	50%	Max 384
% Urban	100%	Median: 100
NON-RESPONSES	4	81
% Large (> 100 Beds)	25%	Min 26
% Small (< 100 Beds)	75%	Max 136
% Urban	100%	Median: 82

SKILLED NURSING FACILITY/LONG-TERM CARE

Workforce Composition (FTEs)



Full-Time vs Part-Time



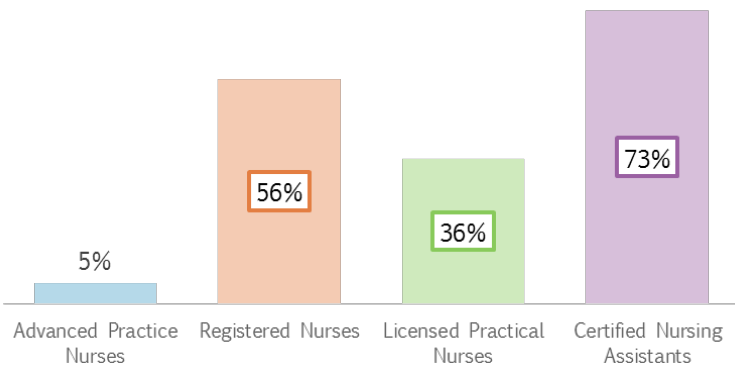
Skilled Nursing and Long-Term Care facilities are grouped together because of the similar services that they provide. Specifically, care provided throughout these facilities includes a broad range of health, personal care, and supportive services to elderly individuals whose capacity for self-care is limited.⁸ These facilities also tend to have a higher RN to CNA ratio, relative to assisted living settings, because of higher health maintenance tasks.

There are currently 113 licensed SNF/ Long-Term Care facilities in Utah. Over three-fourths (78%) of these facilities are in urban areas with the average facility size of 84 beds. These facilities have a current active nursing workforce of 4,667 FTEs – with 2,981 CNA FTEs, 1,072 RN FTEs, 589 LPN FTEs, and 25 APRN FTEs. These facilities hire the largest proportion of LPNs within the state; although the LPN workforce is only the 3rd largest nursing workforce within these facilities. These facilities rely heavily on CNAs and RNs, which currently make up 87% of the total nursing workforce within these facilities.

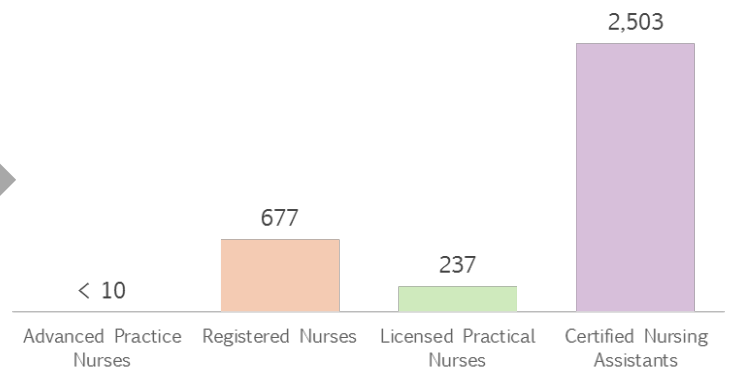
Skilled Nursing and Long-Term Care Facilities rely on full-time nurses for their RN, LPN, and CNA workforces. LPNs have the highest proportion of full-time work, with 74% of filled LPN positions being full-time.

SKILLED NURSING FACILITY/LONG-TERM CARE

Turnover Rate

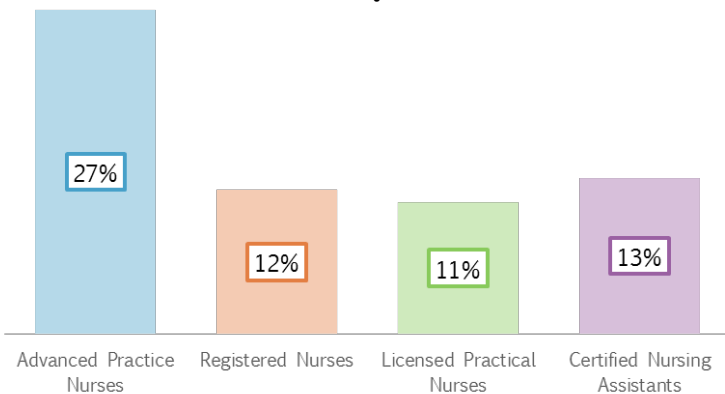


Number of Separations (FTEs)

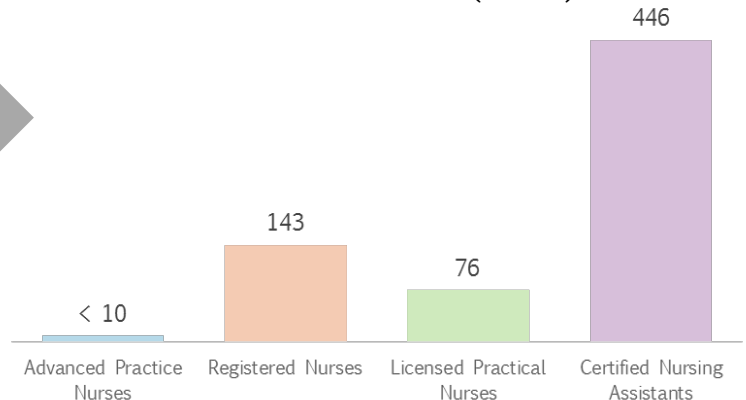


Skilled Nursing and Long-Term Care facilities reported separations for each nursing type between January 2014 – January 2015. CNAs, the biggest workforce in these facilities, had the most separations with a reported 2,503 FTEs. RNs, the second largest nursing workforce, had the second most separations with a reported 677 FTEs. LPNs had the third largest reported separations (237 FTEs), and APRNs with less than 10 reported FTE separations. These separations resulted in a turnover rate of 73% for CNAs, 56% for RNs, 36% for LPNs, and 5% for APRNs.

Vacancy Rate



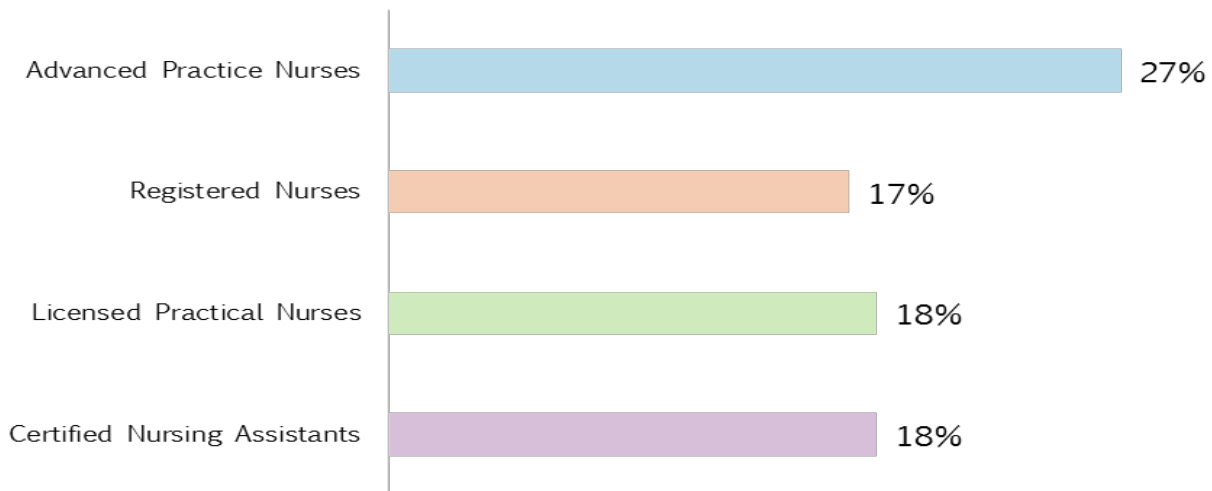
Number of Vacancies (FTEs)



These facilities also reported vacancies for each of the nursing occupations. The reported vacancies mirrored the size of each workforce. Specifically, CNAs had the most vacancies with 446 vacant FTEs, followed by RNs with 143 vacant FTEs, LPNs with 76 vacant FTEs, and APRNs with fewer than 10 vacant FTEs.

SKILLED NURSING FACILITY/LONG-TERM CARE

Potential Change in Current Active Capacity

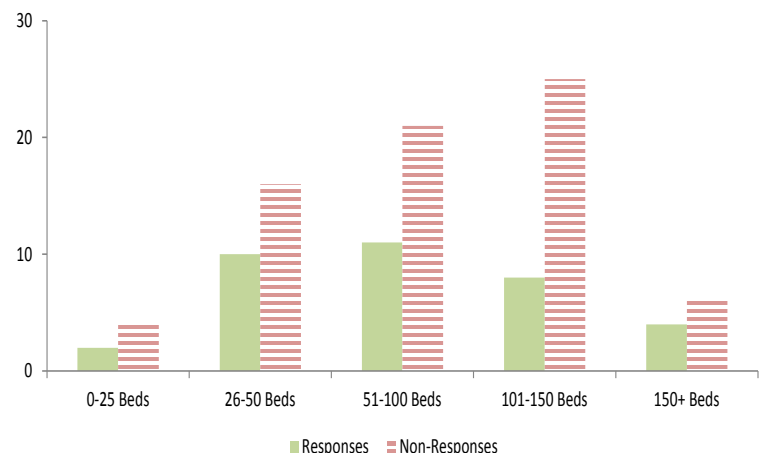


Skilled Nursing and Long-Term Care facilities are expected to have an increase in the potential active capacity of each of their nursing workforces. Specifically, each nursing workforce within these facilities can achieve a larger active capacity because each profession has unfilled and/or new expected capacity. For example, RNs currently have 143 vacant FTEs and are expected to have 76 new FTE positions – leading to 219 unfilled budgeted FTEs. RNs currently have an active capacity of 1,072 FTEs, and their total capacity in 2016 will be 1,291 FTEs (all budgeted positions). As such, over the coming year RNs in these facilities have the potential to increase their current active capacity by 17% (from 1,072 to 1,291 FTEs).

The current active capacity of each nursing occupation can increase between 2015-2016 due to current and new unfilled budgeted positions. The two biggest nursing types (CNAs, RNs) can increase their current active capacity by 18% and 17% respectively. APRNs can achieve the highest increase in their current active capacity over the next year - this is a result of high vacancies and small number of current filled positions.

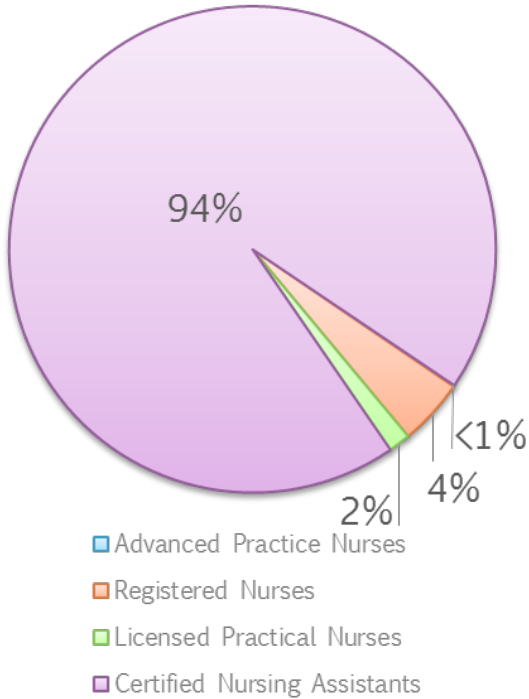
Respondents vs. Non-Respondents

	N	MEAN # BEDS
RESPONSES	41	81
% Large (> 100 Beds)	34%	Min 11
% Medium (26-100 Beds)	60%	Max 221
% Small (< 25 Beds)	6%	Median: 63
% Urban	67%	
NON-RESPONSES	72	86
% Large (> 100 Beds)	44%	Min 14
% Medium (26-100 Beds)	51%	Max 220
% Small (< 25 Beds)	5%	Median: 81
% Urban	91%	

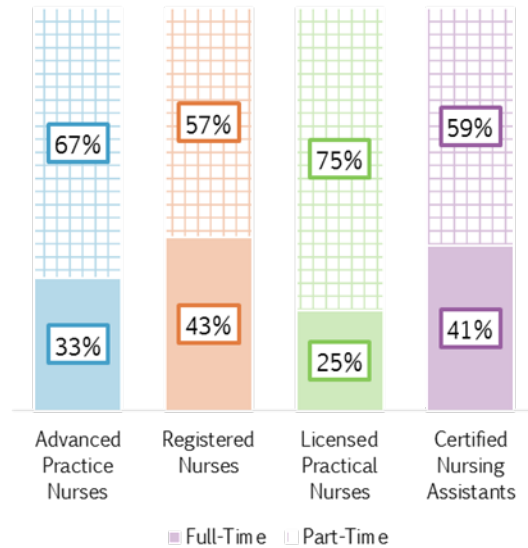


ASSISTED LIVING CENTERS

Workforce Composition (FTEs)



Full-Time vs Part-Time



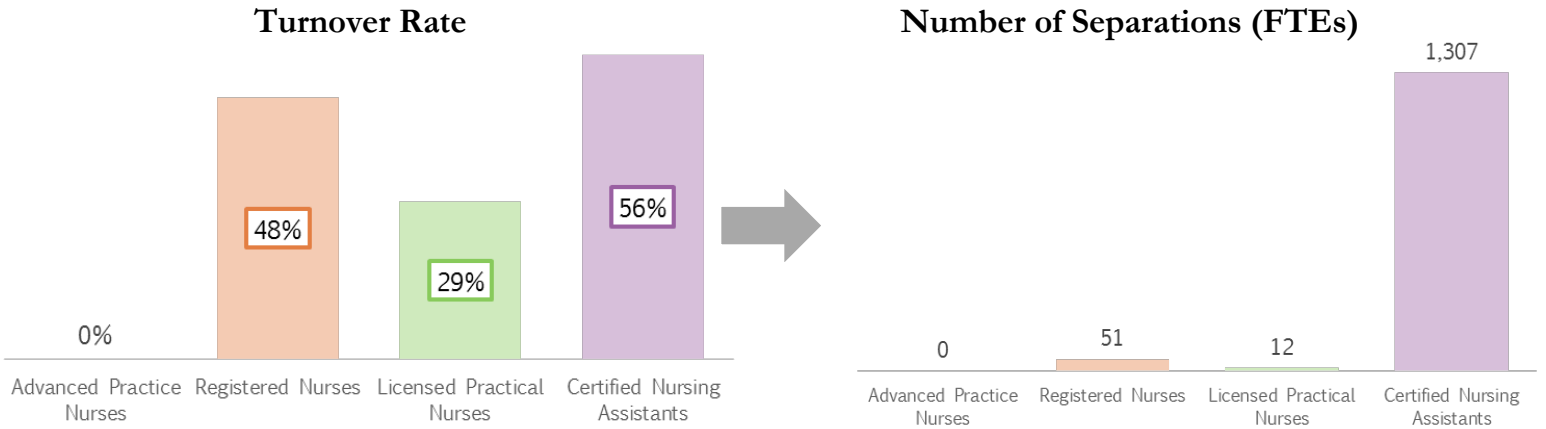
Assisted living centers are structured to help seniors with their daily self-care activities*, although some also provide intermittent nursing care as well. As such, staffing for these facilities is a function of the services provided to the patient. While CNAs are the main nurse occupation in this facility type around the state, larger facilities tend to utilize RNs more relative to smaller facilities.

It is estimated that CNAs currently constitute 94% of the nursing workforce in assisted living centers in Utah. While CNAs provide the vast majority of FTEs within assisted living centers, this facility type is the third largest employer of CNAs behind Skilled Nursing Facilities/Long-Term Care and Hospitals. RNs are the next biggest nursing profession in these facilities followed by LPNs and APRNs. It is estimated that CNAs currently provide 2,216 FTEs within these facilities, followed by 100 FTEs from RNs, 33 FTEs from LPNs, and less than ten FTEs from APRNs.

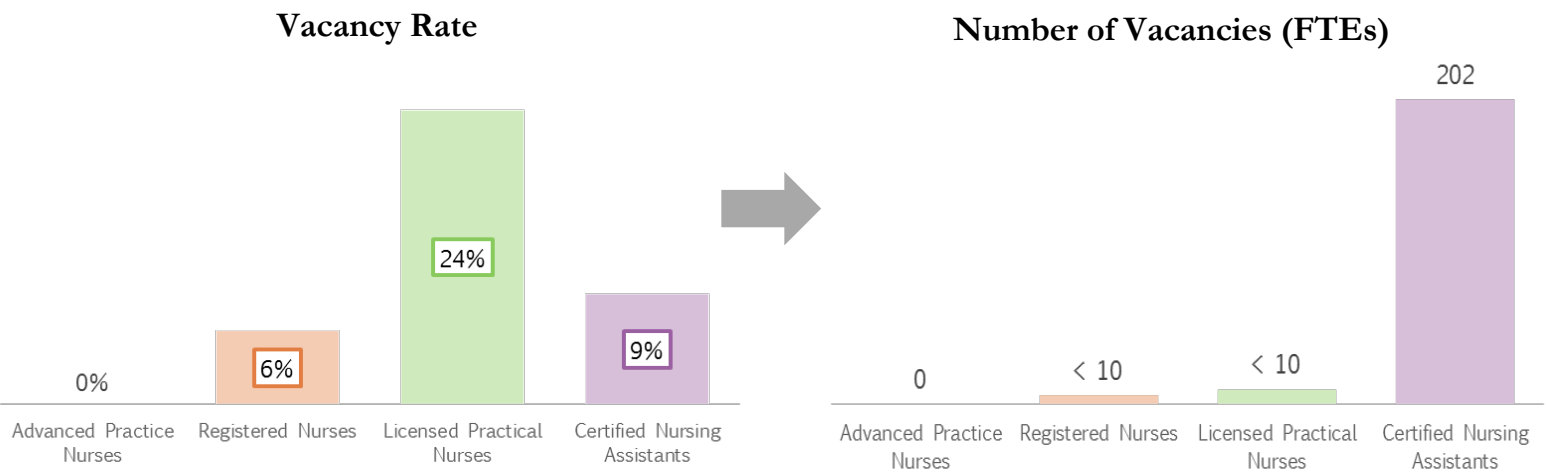
The largest workforce, CNAs, have the highest percentage of their workforce in full-time work in these facilities. LPNs have the largest percentage of their workforce in part-time employment with 75% of filled LPN positions being part-time.

* These activities range from personal care to housekeeping, laundry, assistance with medication administration, and the management of other items that contribute to helping seniors live as independently as possible.

ASSISTED LIVING CENTERS



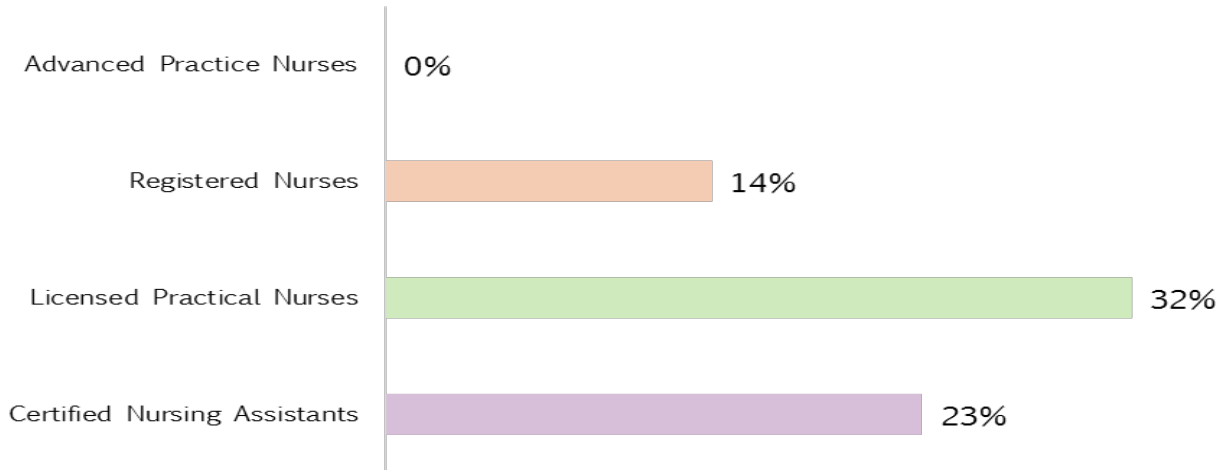
Of 1,370 estimated FTE separations within these facilities, 1,307 are attributable to CNAs. The RN workforce had the second most estimated separations with 51 FTEs, and LPNs had an estimated 12 FTE separations. These separations resulted in a turnover rate of 56% for CNAs, 48% for RNs, and 29% for LPNs – with no separations being reported for APRNs.



Assisted living centers also reported vacancies for the CNA, RN, and LPN workforces. The reported vacancies mirrored the size of each workforce with CNAs having the most estimated vacancies with 202 vacant FTEs, followed by RNs and LPNs with under ten vacant FTEs each. These estimated vacancies result in a vacancy rate of 9% for CNAs, 6% for RNs, and 24% for the small LPN workforce.

ASSISTED LIVING CENTERS

Potential Change in Current Active Capacity

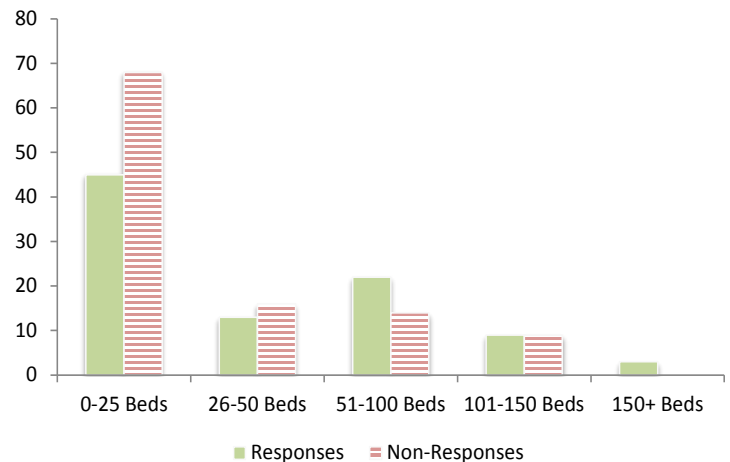


The current active capacity of nursing in assisted living centers is 2,261 FTEs – with 2,126 coming from CNAs, 100 from RNs, 33 from LPNs, and a few from APRNs. APRNs, the smallest workforce in these facilities currently has neither any vacancies nor any expected new positions, leading to an active capacity that is currently at 100% as no unfilled positions remain or are coming from new positions. The other three workforces have unfilled capacity, from both vacancies and new positions, and by filling these positions each of these nursing professions can increase their active capacity in these facilities over the next year.

CNAs are the largest workforce in assisted living centers and they have the most unfilled positions (vacant and new positions). CNAs can increase their current capacity (active FTEs) by 23% over the coming year. This increase in active capacity is a result of 202 vacant FTEs and 432 new anticipated FTEs.

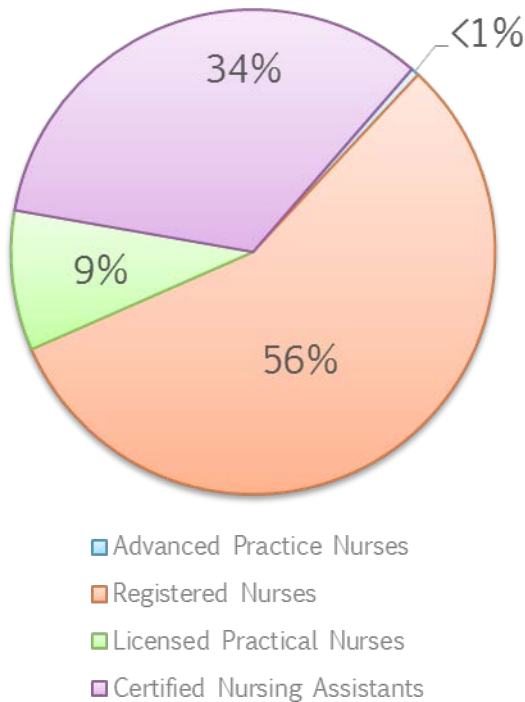
Respondents vs. Non-Respondents

	N	MEAN # BEDS
RESPONSES	91	44
% Large (> 100 Beds)	13%	Min 4
% Medium (26-100 Beds)	38%	Max 162
% Small (< 25 Beds)	50%	Median: 25
% Urban	82%	
NON-RESPONSES	97	32
% Large (> 100 Beds)	8%	Min 3
% Medium (26-100 Beds)	28%	Max 140
% Small (< 25 Beds)	64%	Median: 16
% Urban	85%	

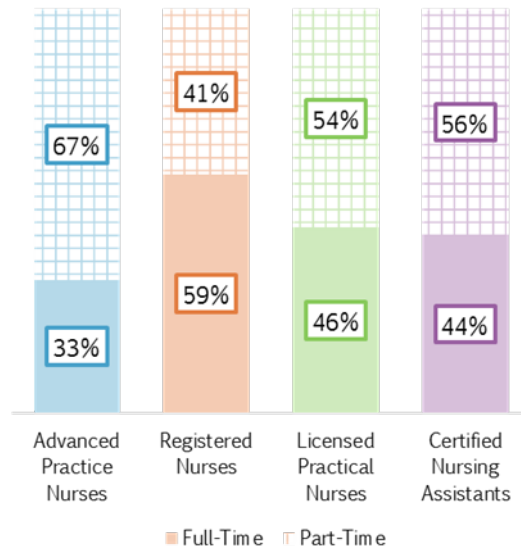


HOME HEALTH/HOSPICE

Workforce Composition (FTEs)



Full-Time vs Part-Time



Home Health agencies and Hospices provide a range of nursing services within the home of the patient. These services range from providing aid with personal care and medication administration, to more skilled services required by chronically and terminally ill patients. Different nursing occupations are utilized within these facilities in accordance with the level of care that is provided.

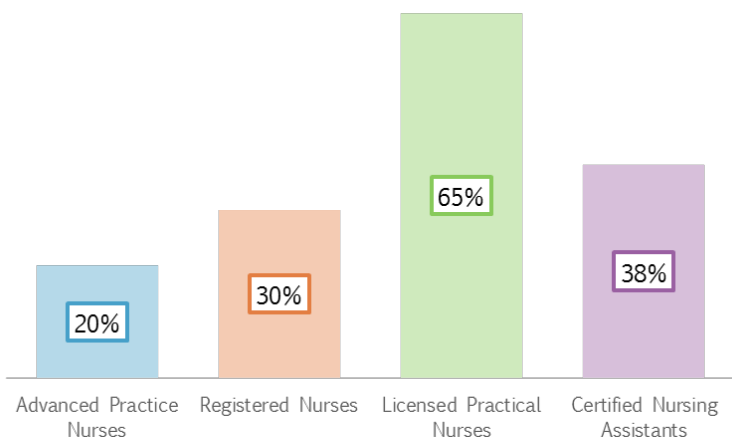
These facilities hire the second largest nursing workforce within the state – an estimated 5,967 filled FTEs. These facilities are also the second biggest employer of RNs within the state. RNs comprise 56% of the total workforce within these facilities, followed by CNAs and LPNs.

The nursing workforce within these facilities includes an estimated 3,370 RNs, 2,007 CNAs, 557 LPNs, and 33 APRNs. The workforce composition is likely not going to change over the next year as a majority of the new positions are expected to go to RNs followed by CNAs and then LPNs.

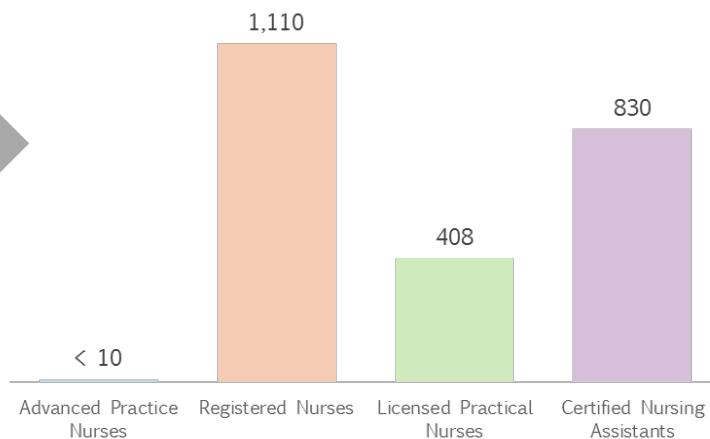
Home Health agencies and Hospices hire part-time nurses at roughly the same rate as full-time nurses for their three largest workforces. For instance, the RN workforce has 59% of all filled positions being full-time and 41% being part-time. CNAs, the second biggest workforce, has 56% of its filled positions being part-time and 44% of all filled positions being full-time.

HOME HEALTH/HOSPICE

Turnover Rate

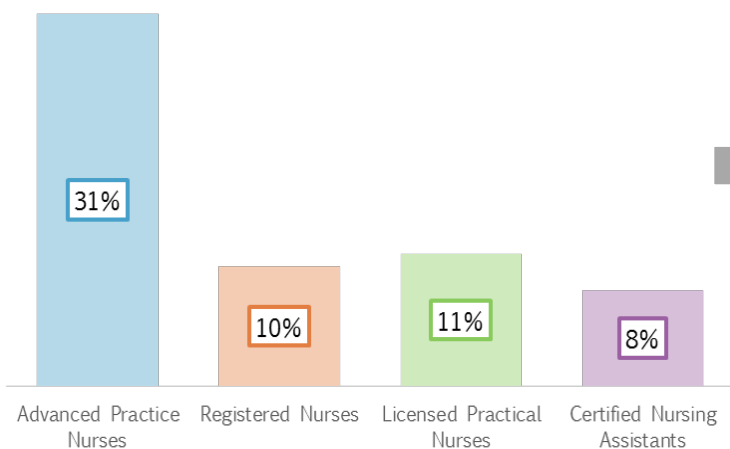


Number of Separations (FTEs)

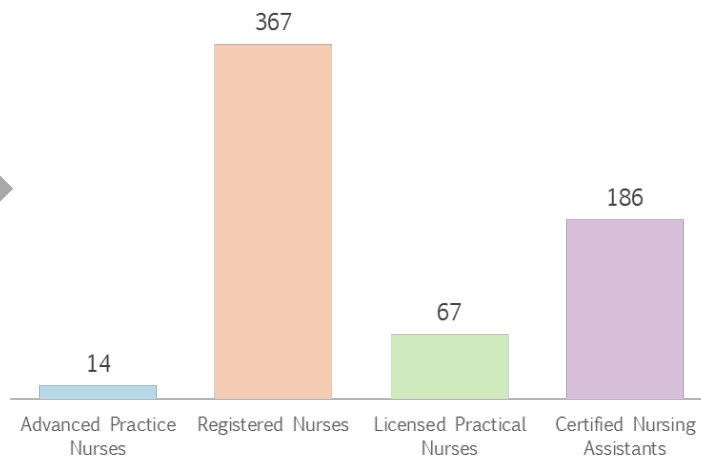


Home Health agencies and Hospices reported separations for each of the nursing professions from January 2014 – January 2015. RNs had the most separations during this period with an estimated 1,110 FTEs. CNAs had the second most separations with an estimated 830 and LPNs had 408. These facilities experienced an estimated turnover rate of 65% for the smaller LPN workforce, 38% for the CNA workforce, and 30% for the RN workforce. The APRN workforce had less than ten FTE separations with an estimated 20% turnover rate.

Vacancy Rate



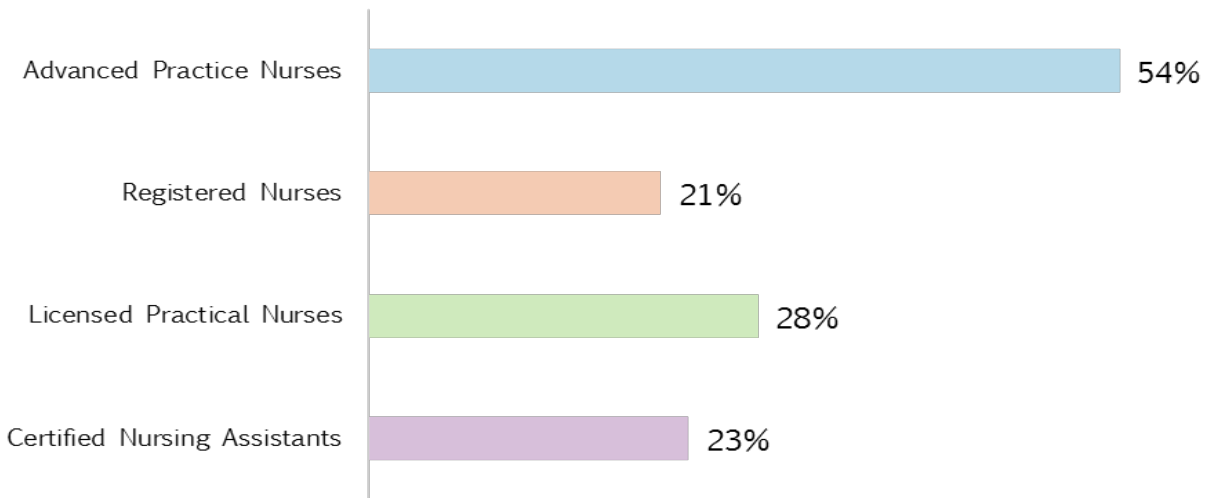
Number of Vacancies (FTEs)



In addition to separations, these facilities reported vacancies for each nursing workforce. RNs had the most estimated vacancies with 367 vacant FTEs, followed by CNAs with 186, LPNs with 67, and APRNs with 14. The highest estimated vacancy rate was with the small APRN workforce, with a 31% vacancy rate, followed by LPNs (11%), RNs (10%), and CNAs (8%).

HOME HEALTH/HOSPICE

Potential Change in Current Active Capacity



Home Health agencies and Hospices have an estimated total active nursing capacity of 5,967 FTEs. RNs account for the majority of this (3,370 FTEs), followed by CNAs (2,007 FTEs), LPNs (557 FTEs), and APRNs (33 FTEs). The total potential capacity for each of the nursing occupation is greater than the current active capacity due to both vacant positions that are actively being sought and new positions that are expected to be created over the coming year.

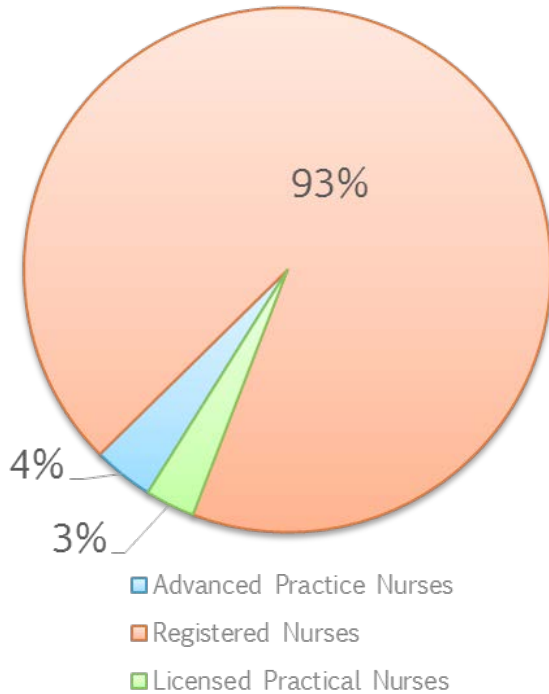
Each nursing profession within these facilities has the potential to increase their active capacity over the coming year. Specifically, the potential change in active capacity is the additional capacity that each workforce has budgeted for but is currently not filled. For example, RNs, the largest workforce in these facilities, can expand its current active capacity by 21% over the next year due to additional unfilled capacity (vacancies and new positions).

Respondents vs. Non-Respondents

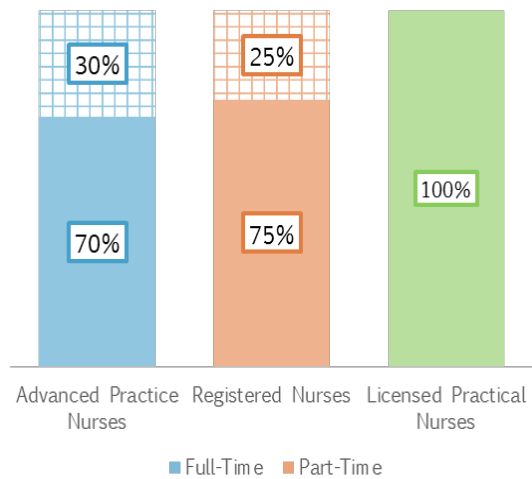
	N
RESPONSES	72
% Urban	82%
NON-RESPONSES	153
% Urban	88%

DEPARTMENT OF PUBLIC HEALTH

Workforce Composition (FTEs)



Full-Time vs Part-Time



There are currently 13 local health departments that are organized into 12 health districts* in Utah. These facilities provide a range of services and are focused on 1) the detection and prevention of communicable diseases throughout the state, 2) the promotion of healthy lifestyles, and 3) “providing access to health care services for Utah’s most vulnerable populations.”⁹

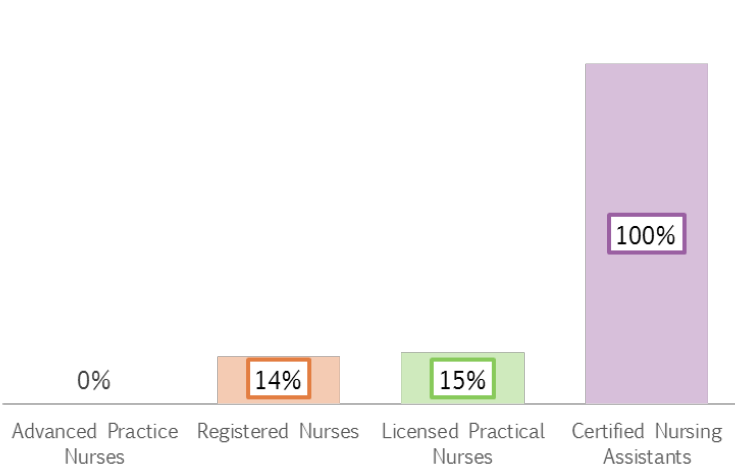
The entire nursing workforce within these facilities is quite small relative to other settings. These local health districts are estimated to employ roughly 296 FTEs – with 276 of these being RNs. Accordingly, reported vacancies, separations, and new positions revolve mostly around this workforce. For 2016, RNs are the only nursing profession with the potential to increase its current capacity within these facilities.

Local health districts currently rely on RNs to provide the majority of their services to the community. It is reported that these RN positions are 75% full-time with 25% part-time.

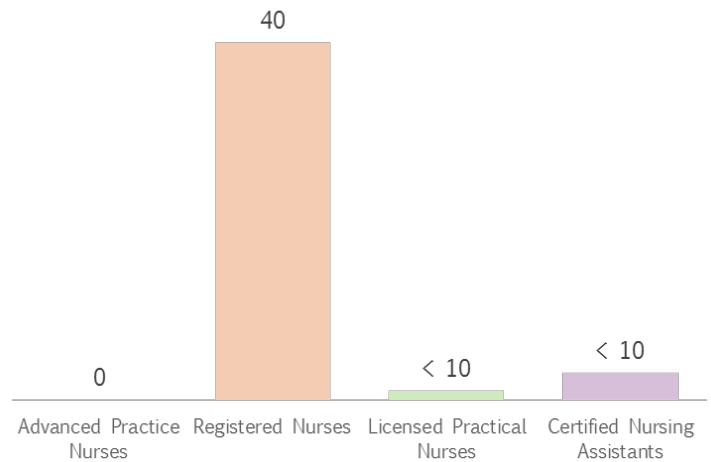
* These health districts are: Bear River, Central Utah, Davis County, Salt Lake Valley, Southeast Utah, Southwest Utah, Summit County, Tooele County, TriCounty, Utah County, Wasatch County and Weber-Morgan.

DEPARTMENT OF PUBLIC HEALTH

Turnover Rate

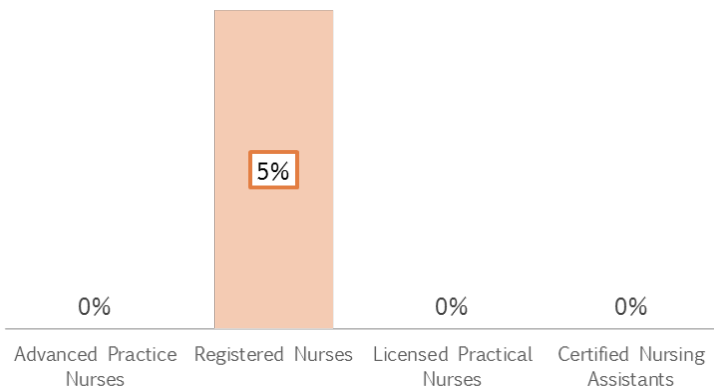


Number of Separations (FTEs)

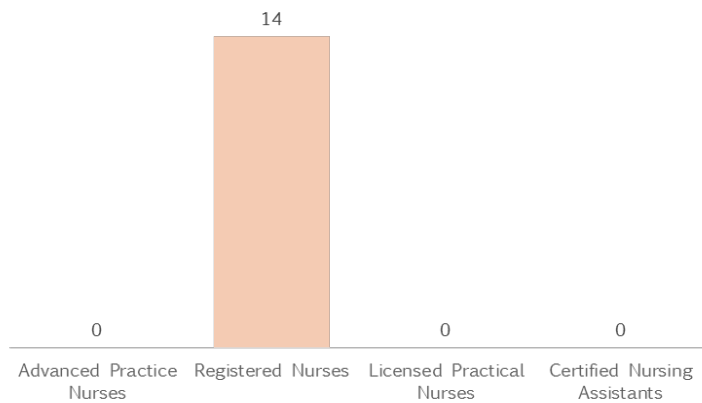


Public health districts reported separations for RNs, CNAs, and LPNs between January 2014 – January 2015. The majority of these separations were reported for RNs, with an estimated 40 FTE separations experienced by this workforce. CNAs currently have no estimated filled positions, but did experience separations from January 2014-January 2015. RNs, the largest workforce, and LPNs each had an estimated turnover rate of 14%.

Vacancy Rate

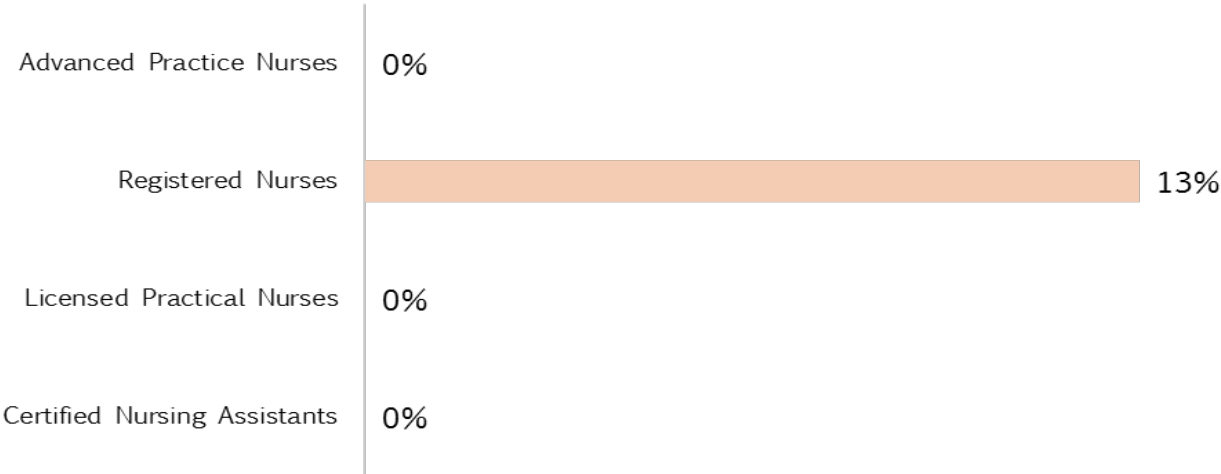


Number of Vacancies (FTEs)



RNs were the only nursing workforce to have reported vacancies during the early months of 2015. Estimated vacancies for the 12 health districts translates into a 5% vacancy rate for the RN workforce in these facilities.

Potential Change in Current Active Capacity

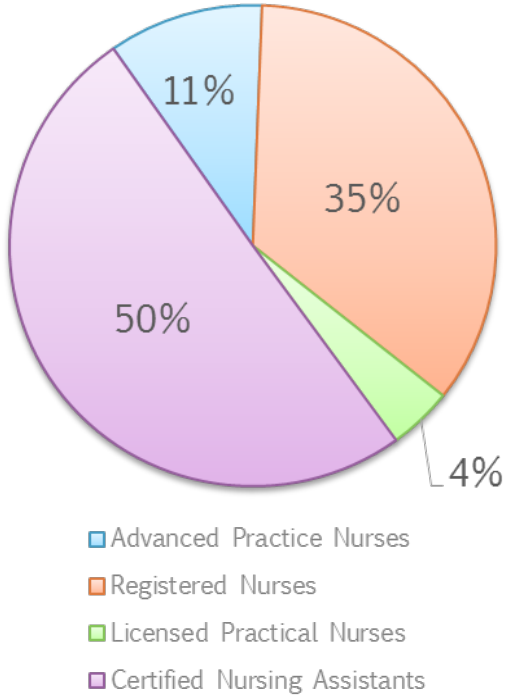


The RN workforce within local public health districts is the largest hired nursing profession within these facilities. The vast number of separations, vacancies, and the only projected new positions, are all exclusive to the RN workforce. Accordingly, the total potential capacity for RNs is greater than the current active capacity due to both vacant positions that are actively being sought and new positions that are expected to be created over the coming year.

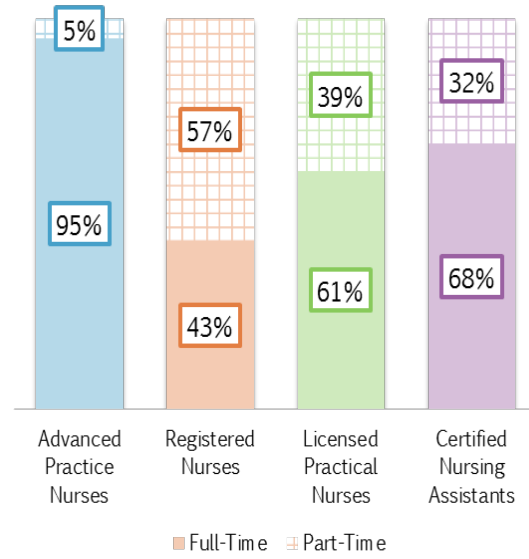
RNs are the only nursing profession within these facilities that has the expected potential to increase their active capacity over the coming year. Specifically, the potential change in active capacity is the additional capacity that is budgeted for but is not currently filled. This additional unfilled capacity is represented by current vacancies and new projected FTEs.

AMBULATORY CARE SETTING

Workforce Composition (FTEs)



Full-Time vs Part-Time



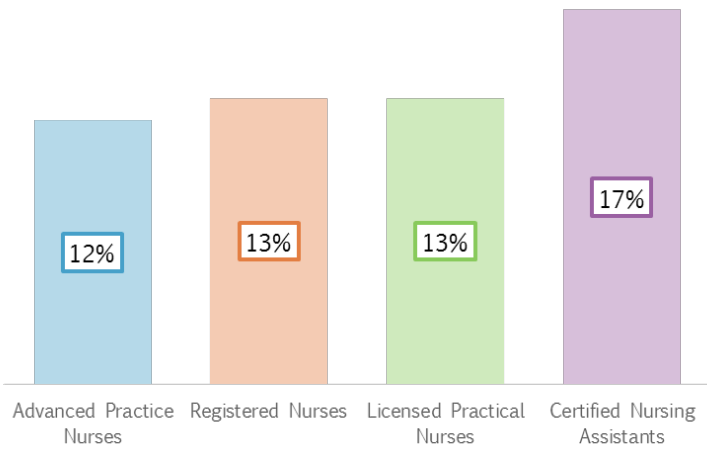
There are a variety of ambulatory care settings throughout the state. These facilities perform various medical procedures on an outpatient basis. There is currently not a verified and complete list of all facilities in the state that fall within this category. As such, the following analysis includes ONLY exact reported data for the facilities (i.e. no imputation for non-respondents) that fall strictly into this category AND are not included in a previous setting. These facilities are mainly ambulatory surgical centers and specialty clinics. As such, this section is not exhaustive of the entire ambulatory care setting within the state. While this section includes many of these settings, it does not include imputation for non-respondents and thus may lack extensive insight into this setting.

The responding facilities in this section had an average workforce composition of 50% CNAs, 35% RNs, 11% LPNs, and 4% APRNs. These facilities reported employing 1,405 FTEs across these nursing professions.

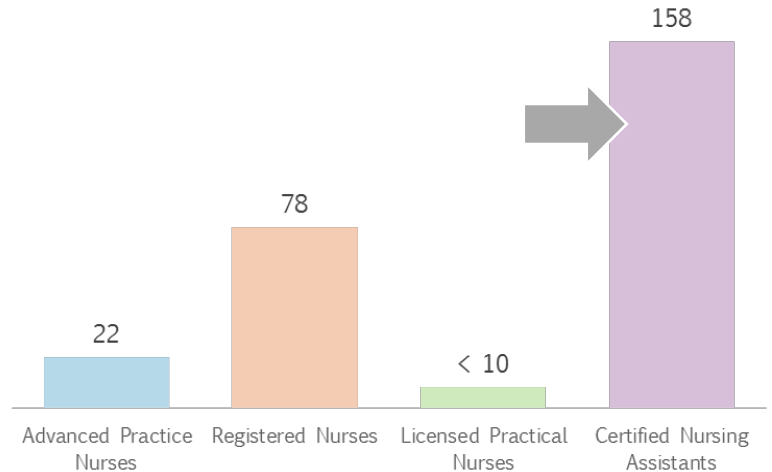
The responding ambulatory care settings reported that a majority of all filled positions within their facilities were full-time. RNs were the only workforce to have a majority of their filled positions being part-time work (57% of all filled RN positions are reported as being part-time).

AMBULATORY CARE SETTING

Turnover Rate

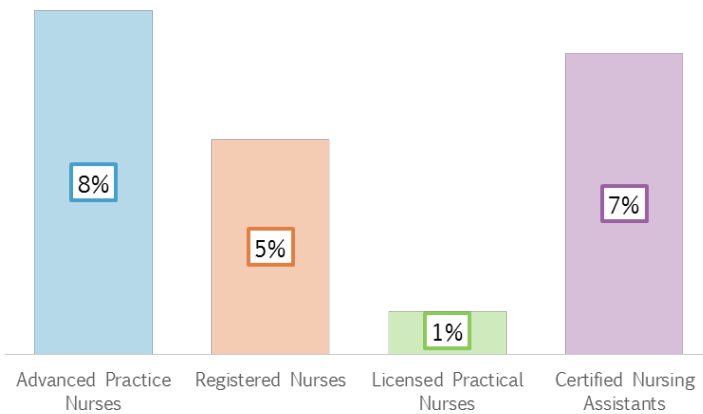


Number of Separations (FTEs)

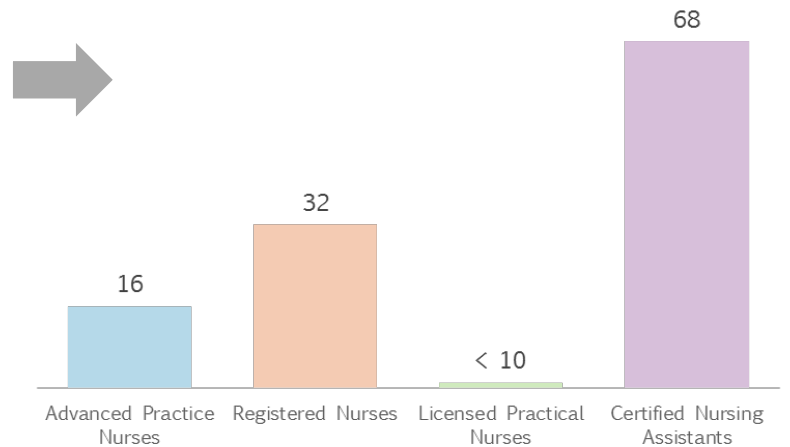


Ambulatory care settings reported separations for each of the nursing professions. CNAs had the most separations with 158, followed by RNs (78 FTEs), APRNs (22 FTEs), and less than 10 FTE separations for LPNs. Given the reported workforce capacity, these reported separations translate into a 17% turnover rate of CNAs, 13% for RNs, 13% for LPNs, and 12% for ARNs.

Vacancy Rate



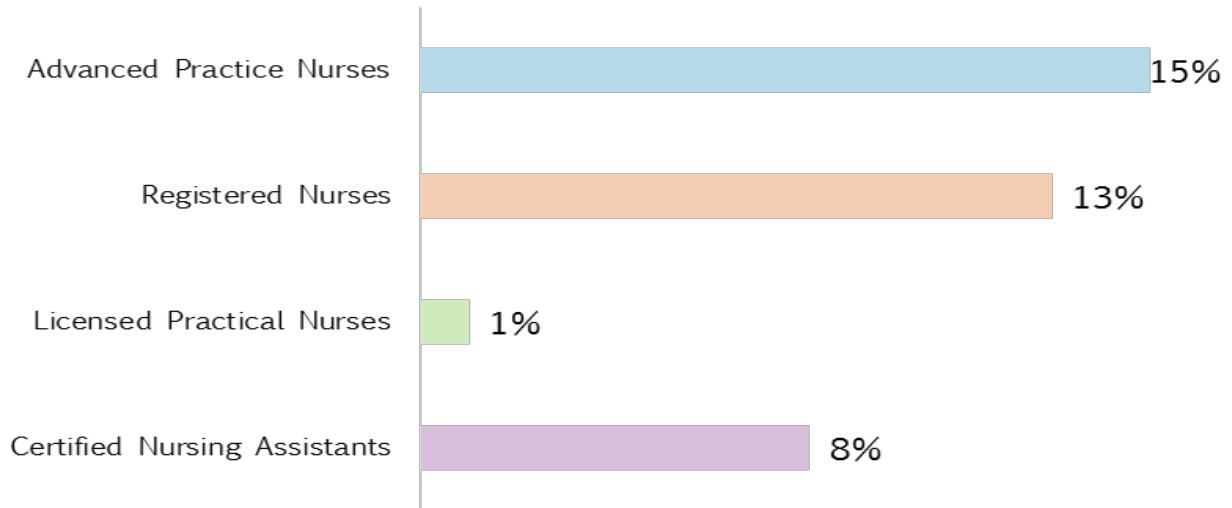
Number of Vacancies (FTEs)



These facilities also reported having vacancies for each nursing occupation. Respondents reported that CNAs had the most vacant FTEs with 68, followed by RNs with 32, APRNs with 16 and LPNs with fewer than 10. Vacancy rates were the highest for APRNs and lowest for LPNs

AMBULATORY CARE SETTING

Potential Change in Current Active Capacity



The total active capacity of all ambulatory care settings cannot be accurately estimated for at this point. However, the responding facilities provide valuable insight into the nursing workforce within their distinct settings. It is calculated that their collective facilities have unfilled capacity for each of the nursing occupations. Given vacancies and new positions, APRNs have the most unfilled capacity, followed by RNs, CNAs, and LPNs.

Each nursing profession within these surveyed facilities has the potential to increase their active capacity over the coming year. Specifically, the potential change in active capacity is the additional capacity that each workforce has budgeted for but is currently not active/filled. For example, APRNs can expand its current active capacity by 15% over the next year due to additional unfilled capacity (vacancies and new positions).

CONCLUSION

The UMEC is grateful for the widespread support it received towards accomplishing the goals of this report. The extensiveness of the report was enhanced by the reliability, fullness, and accuracy of responding institutions. In addition, high response rates allowed for the UMEC to create profiles that helped create representative proxies for non-respondents. The final report is thus thorough in providing a general (albeit not definitive) portrayal of demand across the major employer industries.

The UMEC's study provides an insightful view that illuminates both 1) where certain nursing types are utilized the most and 2) what demand for each nursing type looks like for the coming year. While the focus of this report has been to understand what the overall demand looks like for nurses in Utah, it also captures other important workforce characteristics as well.

For instance, the turnover rate is an ideal indicator of the "churn rate" that the workforce experienced during last year. The separations, which are used to determine turnover rate, represent the proportion of the workforce that discontinued working (either involuntarily or voluntarily) within a certain industry. Unfortunately the data cannot describe precisely what a high churn rate actually entails here. For instance, on the one hand, an industry may be shrinking and jobs are accordingly being cut; whereas, on the other hand, an industry may be growing and new higher paying positions has incentivized individuals to leave their employer for a new one. Given these two scenarios, the latter may be the case as new positions are expected to be created for each nursing type over the coming year.

The UMEC is optimistic that this report provides a robust depiction of the diverse marketplace for nurses in Utah. The demand data detailed in this report should not be viewed in isolation, however. Rather, the specific composition of demand should be aligned with the educational and supply streams of nurses in the state. A healthy and sufficient nursing workforce in Utah thus requires matching the appropriate mix of nurses to satisfy the overall demand across the state.

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