Demand for Nurses in Utah

The 2018 Survey of Utah's Nurse Employers

UTAH MEDICAL EDUCATION COUNCIL

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UTAH NURSING WORKFORCE INFORMATION CENTER

The Utah Medical Education Council

State of Utah

www.utahmec.org

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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 health care clinicians. The enabling legislation authorized the UMEC to conduct ongoing healthcare workforce research, to advise on Utah's health care training needs, and to influence graduate medical education financing policies. In addition, UMEC facilitates the training of healthcare professionals in rural areas of the state. The state legislature expanded UMEC's research responsibilities in 2013 to include nursing and UMEC has accepted the designation as the Nursing Workforce Information Center. The UMEC is presided over by an eight-member board appointed by the Governor to bridge the gap between the public and private health care workforce industry and educational interests.

UMEC 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 second comprehensive statewide survey of nursing employer demand across various work settings in Utah. This study of the demand for nurses in Utah is based on a survey disseminated in 2017 by the UMEC, using data from the Utah Department of Workforce Services and the Utah Division of Public Licensing to identify nursing employers across the state. The following report 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 its staff and the following individuals for their considerable contribution to this report:

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INTRODUCTION

In 2013, the Utah Medical Education Council (UMEC) was designated as the Nursing Workforce Information Center for the state of Utah. With this designation the UMEC began undertaking measures to understand the different facets of the nursing workforce in 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. This report illustrates the UMEC's efforts to understand the second major factor impacting nurses within the state.

In early 2017, the UMEC mailed out the first round of surveys to nursing employers throughout the state. These facilities include hospitals, skilled nursing facilities, long-term care centers, assisted living centers, ambulatory care settings, public health departments, and various other settings. A sufficient response rate within each facility type provided suitable data to allow for a conditional imputation of non-respondent facilities. Unless specified, the information in this report 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 Full-Time Equivalent employees (FTEs) currently reported as filled by a workforce within a certain facility type. This active workforce, however, is rarely the "total potential workforce" because of existing 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 nursing professionals 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 have been budgeted for but are not currently filled.

METHODOLOGY

Survey Instrument Design

The UMEC created its nursing demand survey instrument to conform with the questions suggested by the Minimum Data Set[1] developed by the National Forum of State Nursing Workforce Centers and the National Council of State Boards of Nursing. This was done in an effort to ensure that the survey was appropriate for the population of Utah and comparable to studies being done in other states across the nation. An advisory committee of stakeholders from the Utah Hospital Association and the Utah Action Coalition for Health approved the final survey instrument prior to distribution for data collection.

Licensure Data

In March 2017, the UMEC matched licensure data from the Division of Public Licensing (DOPL) to a list of organizations that employ nurses obtained from the Utah Department of Workforce Services (DWS). DWS also provided the organizations in aggregate by their respective North American Industry Classifications System code (NAICS)[2]. The UMEC then clubbed employers in the following categories: Offices of Physicians (Except mental health services) (621111); Home Health Services, (621610); Nursing Care Facilities (Skilled Nursing Facilities) (623110); 622110, General Medical and Surgical Hospitals; 62210, psychiatric and substance abuse hospitals, specialty hospitals 622310; 623220 Residential mental health and substance abuse facilities; 623312 assisted living facilities for the elderly; 923120

Administration of public health programs. This list was cross-referenced with an industry specific list from the Utah Hospital Association[3].

The final survey population consisted of: general hospitals, psychiatric hospitals, critical access hospitals, military hospital, children's hospital, long-term care hospitals, assisted living facilities, and multiple small practice clinics.

A list of potential contacts (Directors of Nursing, Chief Nursing Officers, and Directors of Human Resources, Administrators) was created for the major nursing employers in the state. An initial mailing was sent out to facilities as well as several hundred private offices, outpatient care centers, and ambulatory care facilities. Over the next two months, a second survey was mailed to non-respondents from the previous mailing and emails were sent to individual hospitals. The final response rate is outlined in Table 1 on page 11.

This survey received a total of 338 responses, constituting a response rate of 39%. This is an increased response from the previous iteration of the same survey completed in 2015

LIMITATIONS

In reporting the use of contract and per diem nurses, due to the survey design, it was unclear whether facilities included reported contract and per diem employees in the total number of FTE employed. This error made it impossible to determine whether these professionals should account for open positions or toward those currently employed. Future studies should clarify this when constructing the survey.

The reported Perception of Vacancy Rates should be interpreted with caution. Because the survey was distributed in January of 2017, and reflects solely the perception at that given moment, which may not be indicative of the perceived vacancy rate at any other given time in the year. Furthermore, this measure may contain biases subjective to the person(s) reporting the data. Vacancy rates, perceptions of those rates, and overall demand for nurses may fluctuate throughout busier time periods, however the reported perception of vacancy rates may not be representative of that. Possible solutions to this could include collecting data more frequently and at different times of the year. Potentially, future surveys could ask employers to report their peak vacancy/hiring times.

In reporting the percentage of RN vacancies that require a Bachelor of Science in Nursing degree (BSN), the phrasing in the survey instrument could be improved. Respondents were asked to estimate the percentage of RN vacancies that require a BSN, which could lead to confounding biases. Also, in some instances, respondents reported to not employ any RNs and no intent to create new RN positions, nevertheless, responded to this question. Future surveys could use more clear language or collect exact numbers so as to prevent this confusion and potential bias.

Additionally, this survey was targeted to collect data from employers of nursing professionals, and was not designed in a manner that would be applicable to, or facilitate collection of data from, self-employed individuals. It is currently unknown how many nurses in Utah are self-employed, but this is something to be considered further in future studies.

Data Entry and Analysis

The survey was processed in house using Snap Surveys Software. Data entry was completed by the UMEC staff in conjunction with the software. The data was then 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) filled out the number of full-time and part-time positions currently filled and then 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 majority of analyses in this report are calculated using respondent data in addition to 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, except where indicated. For non-respondents, facility profiles were created from respondent data to help predict and provide appropriate direction for these missing data points. Once these profiles were constructed, the average of the cohort was imputed to non-respondents.

Terminology and Formulas

Separations:

Describes the number of individuals that left an organization (voluntarily or involuntarily) during the chosen time frame. The survey asked facilities how many separations occurred between January 2016-February 2017. Separation data was summed by facility type and weighted by a profile ratio of full-time to part-time workers by nursing occupation type.

Turnover Rates:

Uses 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 for this analysis.

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

Vacancy Rates:

Full-time and part-time vacancies are identified as positions that are budgeted and actively recruited for. Vacancies were transformed into FTEs by transforming each full-time equivalent into 1.0 FTE and each part time to 0.5 FTE.

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

Perception of Vacancy Rates:

Facilities were asked to indicate whether they would define their current rate of vacancies as "Low, Average, or High." These perceptions were compared to raw vacancy rates in order to examine whether the data accurately represents perceived institutional need.

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. New FTE positions were added to vacant FTEs to describe the potential capacity that will be available and that are not filled. This is to highlight the true potential capacity within nursing occupations and settings.

$$\textbf{Change in Current Active Capacity} = \frac{\sum \textbf{New FTEs} + \sum \textbf{Vacant FTEs}}{\sum \textbf{Total Budgeted FTEs for 2018 } (\textit{jncluding new FTEs})}$$

Survey Results Overview

Table 1 Response Rates by Facility Type

	General Hospitals	Skilled Nursing/ Long-Term Care	Assisted Living Center	Public Health	Home Health/ Hospice
Surveys Returned	**39**	**40**	**57**	**8**	**45**
2015 Response Rate	**77%**	**35%**	**50%**	**75%**	**35%**
2017 Response Rate	**79%**	**35%**	**34%**	**87%**	**36%**

Table 1 indicates response rates across each facility type. The UMEC was fortunate to receive direct cooperation from some of the state's largest systems, resulting in higher response rates in those settings.

Table 2 Estimated FTEs by Nursing Occupation and Facility Type

SETTING	Certified Nursing Assistant (CNA)	Licensed Practical Nurse (LPN)	Registered Nurse (RN)	Advanced Practice Nurse (APRN)	Setting Total FTEs	% of Total FTEs
Hospitals/Health Systems	2193	40	7824	389	**10,057**	**44%**
LTC/SNF	656	123	322	12	**1,113**	**5%**
Assisted Living Facility	409	<10	60	<10	**469**	**2%**
Setting Type-Other	1759	155	2760	606	**5,280**	**23%**
Ambulatory Care	932	64	481	400	**1,877**	**8%**
Hospice	559	20	1822	199	**2,600**	**12%**
Home Health	268	71	457	<10	**796**	**4%**
Public Health	<10	<10	27	<10	**27**	**<1%**
Workforce Total	**6,776**	**473**	**13,753**	**1,606**	**22,608**	

Table 2 represents the estimated FTEs by nursing occupation and facility type. This data offers insights into the different nursing workforce compositions. There is an estimated total of 13,753 FTE RNs, 6,776 CNAs, 1,606 APRNs, and 473 LPNs. This table also represents the composition of nurses in each respective work force. For example, hospitals employ mostly registered nurses whereas skilled nursing facilities and assisted living facilities employ more certified nursing assistants across the state.

Use of Contract and Per-Diem Labor

Table 3 Per Diem and Contract Nursing FTEs by Facility and Profession Type

	Hospitals	SNF+LTC	ALC	Ambulatory Care	Public Health	Home Health/ Hospice	Profession Total
CNA	123	415	43	1	0	540	**1123**
LPN	8	86	0	0	0	46	**140**
RN	720	333	34	31	4	1763	**2885**
APRN	0	72	0	19	1	0	**92**
Setting Total	**852**	**905**	**77**	**51**	**5**	**2349**	

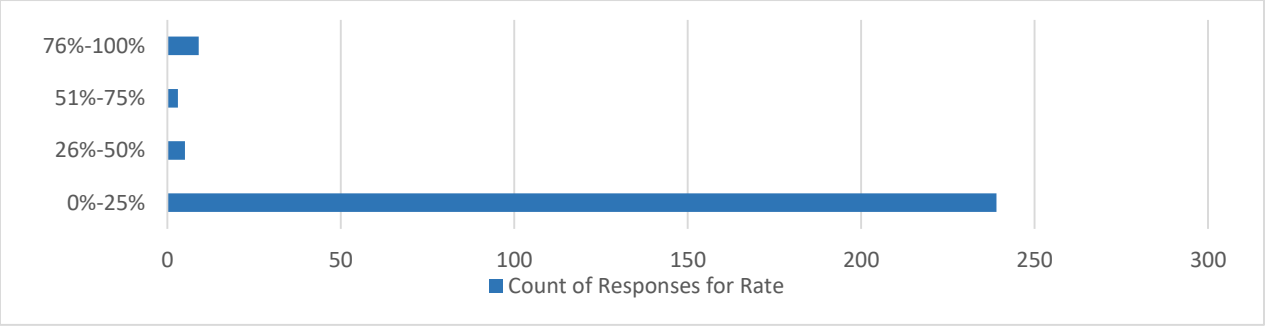
Table 3 indicates the FTE of each contracted nursing professional currently employed in each setting. For instance, an estimate of 123 FTE of CNAs are employed in hospital/health system settings.

Every facility type reported the use of contract labor, and all except public health reported to employ per-diem nursing professionals. The overall number of contract employees is similar to the 2015 report on nursing demand, demonstrating a continued need for contracted labor.

As mentioned previously in the survey limitations, the survey instrument did not ask facilities to clarify whether they included their reported FTE of contract/per diem labor in their total employed estimates. This prevents these data from being interpreted in such a way that explains whether these facilities intentionally budget for these contracted FTEs or if these professionals were utilized to fill gaps in current vacancies. For instance, hospitals may intentionally budget to hire contract labor in seasonally busier time periods, or they could hire these professionals in response to higher need. Future survey instruments should consider restructuring this question to address this concern.

Positions Requiring a Bachelor of Science in Nursing

Figure 1 Proportion of RN Positions Requiring a BSN



Employers were asked to approximate the percentage of RN vacancies they required applicants to hold a Bachelor of Science in Nursing (BSN). The majority of respondents reported that between 0-25 percent of all their RN vacancies required a BSN degree.

Most Difficult to Fill Positions

Employers were asked about the current most difficult nursing positions to fill.

Table 4 shows the top three specialties for each facility type. Some nursing positions emerged as difficult to fill across several settings. For instance, Critical Care Nurses, Cardiac and Cardiovascular positions, and Operating Room positions were listed as difficult to fill positions in multiple facility settings.

Table 4 - Top Three Reported Most Difficult to Fill Positions By Facility Type

Hospitals	Long-Term Care/ Skilled Nursing Facility	Assisted Living Center	Ambulatory Care	Home Health/ Hospice
Operating room	Critical Care	Critical Care	Cardiac/ Cardiovascular	Hospice
Labor and Delivery/ Postpartum	Psychiatric/ Mental Health	Nurse Administrators	Operating Room	Cardiac/ Cardiovascular
Critical Care	Chronic Care	Cardiac/ Cardiovascular	Pre/Post-Operative	Case Managers

Figure 2 - Top 15 Positions Reported Most Difficult to Fill (Overall Frequency)

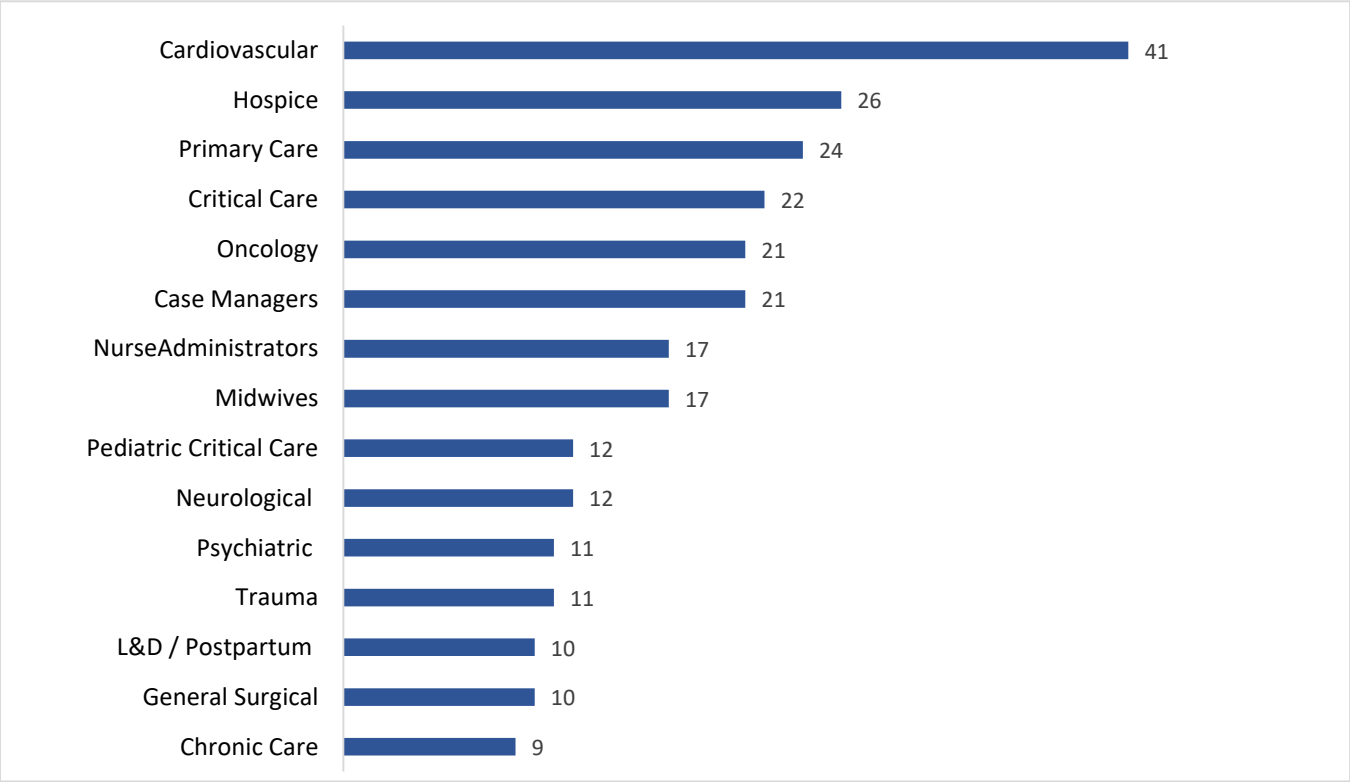


Figure 2 illustrates the Top 15 most frequency reported difficult nursing positions to fill. Cardiac and Cardiovascular positions ranked the highest, with 41 facilities reporting this position among their top 3 most difficult to fill positions.

SURVEY RESULTS: DETAILED

Table 5 Results from 2017 UMEC Survey of Nurses in Comparison to 2015 Report

		Hospitals/ Health Systems		Skilled Nursing Facility/Long-Term Care		Assisted Living Center		Ambulatory Care/Other		Hospice	Home Health	Public Health	
		2017	Change	2017	Change	2017	Change	2017	Change	2017	2017	2017	Change
(%) Workforce in Setting Type	CNA	23%	-2%	28%	--	9%	-11%	7%	-2%	25%	8%	0.0%	--
	LPN	4%	-12%	56%	+18%	1%	-1%	5%	-4%	11%	23%	0.2%	-0.8%
	RN	42%	-26%	7%	--	1%	--	2%	+1%	42%	6%	0.1%	-1.9%
	APRN	18%	-38%	4%	--	0%	--	14%	-19%	62%	1%	0.1%	-1.9%
Idle Capacity	CNA	7%	+3%	15%	+2%	16%	+7%	0%	-7%	22%	19%	0%	--
	LPN	1%	--	19%	+8%	23%	-1%	6%	+4%	27%	19%	0%	--
	RN	7%	+1%	13%	+1%	2%	-4%	2%	-5%	8%	12%	0%	-5%
	APRN	3%	-1%	13%	-14%	0%	--	0%	-8%	11%	21%	0%	--
Turnover Rate	CNA	24%	+7%	74%	+1%	76%	+20%	13%	-5%	19%	49%	0%	--
	LPN	19%	-2%	48%	+12%	27%	-2%	13%	-6%	52%	13%	50%	+35%
	RN	12%	-2%	48%	-8%	40%	-8%	12%	-2%	4%	22%	18%	+4%
	APRN	5%	-3%	22%	+17%	0%	--	5%	-6%	0%	23%	20%	+20%
New Positions	CNA	0.2%	-1.8%	14%	+9%	6%	-13%	1%	+1%	4%	56%	0%	--
	LPN	0.0%	-3%	19%	+11%	14%	+2%	2%	-5%	16%	43%	0%	--
	RN	0.0%	-2%	12%	+6%	1%	-8%	4%	-6%	1%	17%	0%	-9%
	APRN	0.5%	-6.5%	26%	+26%	0%	--	2%	-10%	0%	26%	0%	--
Change in Current Active Capacity	CNA	7%	-1%	25%	+7%	21%	-2%	1%	-8%	25%	48%	0%	--
	LPN	1%	-4%	32%	+14%	33%	+1%	8%	--	37%	43%	0%	--
	RN	7%	-1%	23%	+6%	3%	-11%	6%	-10%	9%	24%	0%	-13%
	APRN	3%	-7%	31%	+4%	100%	+100%	2%	-16%	11%	37%	0%	--

** "Change" refers to the increase or decrease from the percentages reported in 2015*

*** In 2015, Hospice and Home Health settings were analyzed as one category, whereas in 2017, they were analyzed separately. Because of these groupings, a direct change comparison between years cannot be made.*

- "Workforce in Setting Type" indicates the percentage of each nursing workforce that is currently employed in each setting. For instance, 42% of RN FTEs are estimated to be employed 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, 7% 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 a 12% turnover rate in hospital/health system settings – meaning 14% of all budgeted RN FTEs in this setting left at some point from January 2016 – January 2017.
- "New Positions" is an estimated percentage of new position FTE growth (i.e. new FTEs as a percentage of current budgeted FTEs). It is 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.

HOSPITALS

Figure 3 Hospital Workforce Composition by Nursing Type

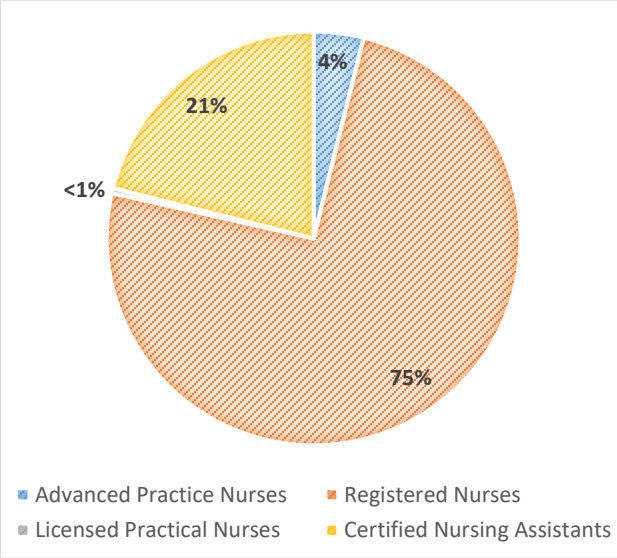
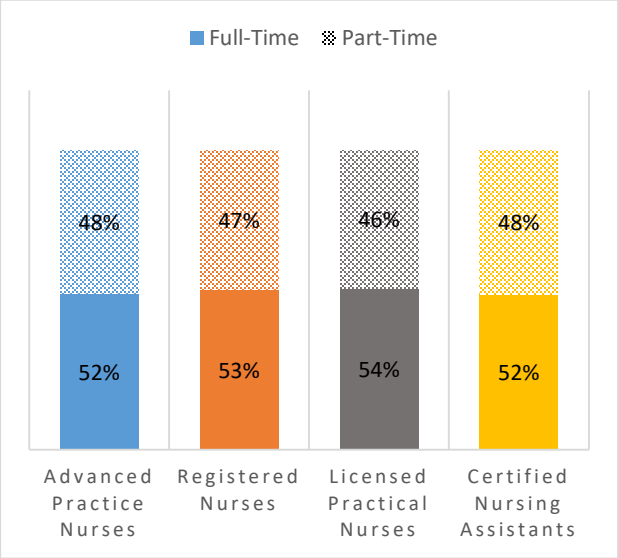


Figure 4 Hospital Full-Time vs. Part-Time Ratio



Workforce Composition

Hospitals in Utah include Acute/Short-term facilities, Critical Access Hospitals, Children's Hospitals, Psychiatric Hospitals, Federally Qualified Health Centers, and military affiliated hospitals. These facilities employ the largest segment of RNs (10,059 FTEs) in the state. They also employ an estimated 23% of Utah's total CNA workforce, 4% of the LPN workforce, 42% of the RN workforce, and 18% of the APRN workforce.

These facilities reported a nursing composition of 75% RNs, 21% CNAs, 4% APRNS, and LPNs accounted for less than 1%.

4%

Hospitals rely heavily on RNs and CNAs, which compose a proportion of greater than 95% of their total nursing staff.

In comparison to the 2015 study, the workforce composition remains similar. RNs decreased slightly from a reported 77% in 2015. The APRN workforce has nearly doubled—up from the 2% reported in 2015.

Full-Time vs. Part-Time

In 2015, all workforces reported that a majority of employees worked full-time. In 2017, full-time and part-time positions are nearly equal. Across all nursing types, just over half are full-time employees, with LPNs holding the highest percentage at 54%. CNAs and APRNs tied for the lowest percentage of full-time employees at 52% each.

Since the 2015 report, Hospitals have reported a marked decrease in full-time work in each nursing workforce. Previously, APRNs reported that 82% of their positions were full-time, followed by LPNs at 77%, RNs with 68%, and CNAs at 63%.

Figure 5 Hospital Separations in FTEs

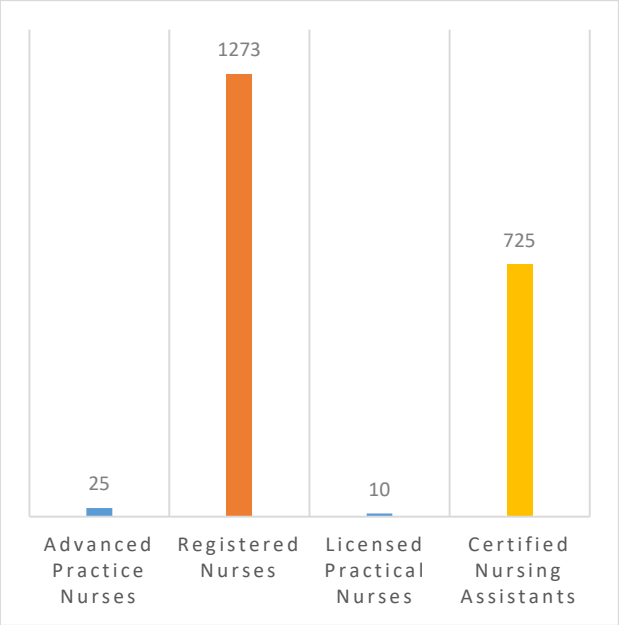
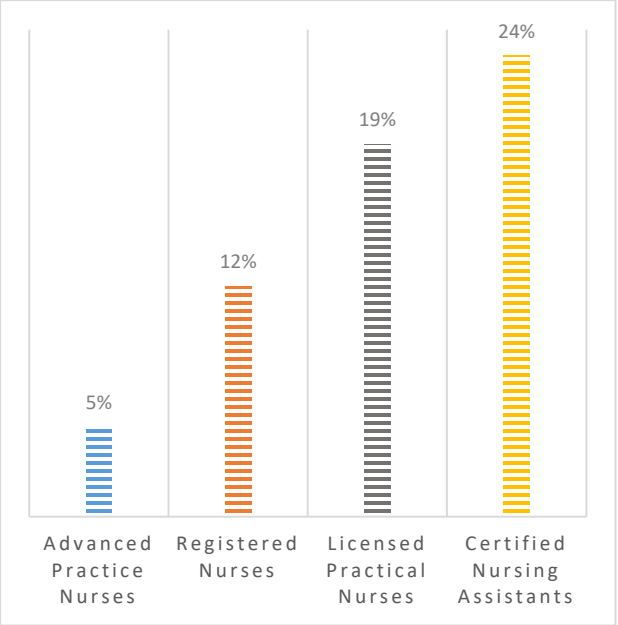


Figure 6 Hospital Turnover Rates



Number of Separations

Figure 5 illustrates Hospital and Health Systems reported separations for each nursing occupation. These facilities reported an estimated combined total of 2,033 FTEs of separations during 2017. RNs reported the most separations during this period, with an estimated 1,273 FTEs, which is not surprising given that they also account for the largest workforce in the hospital setting. RNs were followed by CNAs with an estimated 725 FTEs of separations, which once again is proportional to the workforce composition.

When compared to raw separations reported in 2015, APRNs and LPNs reported similar separations. RNs reported fewer separations in 2017, down from 1,533 in the former report. The raw number of CNA separations nearly doubled from the 476 FTE reported in 2015, which resulted in an increase in their turnover rate.

Turnover Rates

Given these reported separations, Hospital facilities experienced turnover rates for all nursing types. CNAs reported the highest turnover rate (24%), followed by LPNs (19%), RNs (12%), and APRNs (5%).

The reported turnover rates for APRNs, RNs, and LPNs were all similar, but slightly lower than those reported in 2015. CNAs were the only workforce to report a higher turnover rate in 2017, which increased by 7% (up from 17% in 2015), replacing LPNs for the highest turnover rates in this setting.

Figure 7 Hospital Vacancies in FTEs

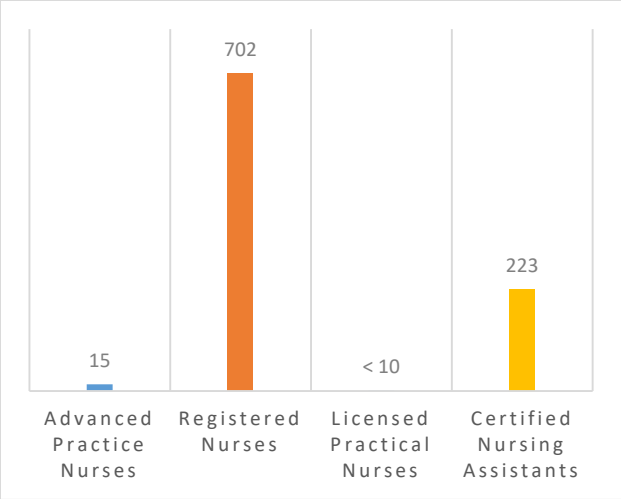
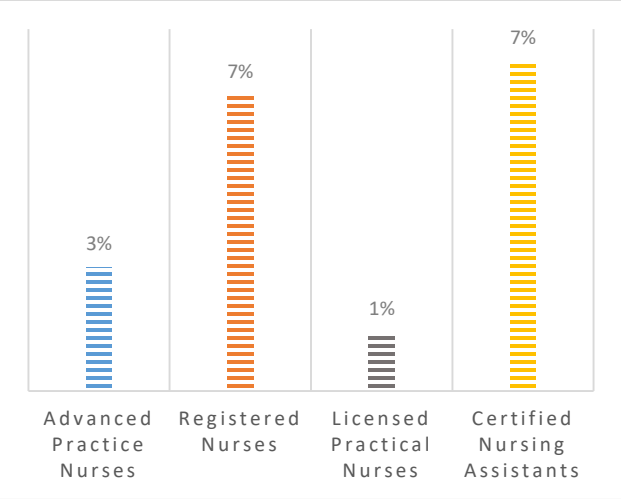


Figure 8 Hospital Vacancy Rates



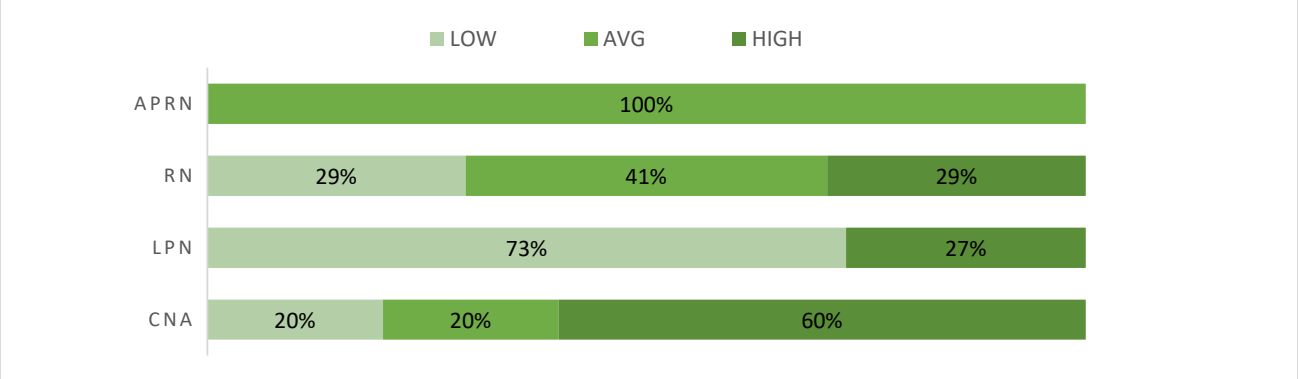
Number of Vacancies

Hospital facilities reported vacancies (budgeted for, but unfilled, positions) for each nursing occupation, for a total of approximately 940 total vacant FTEs. Most vacant positions were for the RN workforce (702 FTEs), followed by CNAs (223 FTEs)

Vacancy Rates

During this time RNs tied CNAs for the highest vacancy rates in hospitals vacancy rates for APRNs, RNs, and LPNs were nearly identical to those reported in 2015. CNA vacancy rates increased by 75%, up from the 4% reported in 2015.

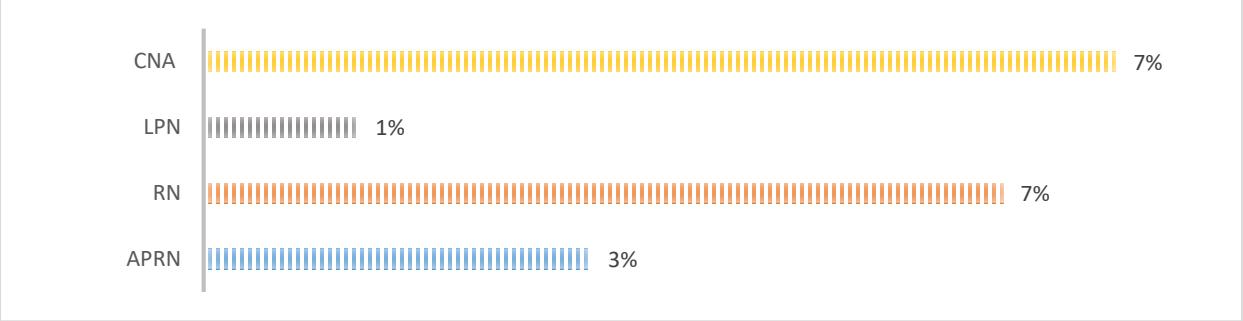
Figure 9 Hospital Perceptions of Vacancy Rates



Perceived Vacancy Rates

All respondent hospitals reported that the vacancy rate for APRN positions was average. The perception of RN vacancy rates was somewhat evenly distributed, with a slight majority labeling the vacancy rate as average. LPN vacancy rates were reported by a majority (73%) of respondents as dow, whereas 60% of respondents reported CNA vacancies were high.

Figure 10 Hospitals Potential for Change in Current Active Capacity



Potential Growth Capacity

Hospital and Health Systems have an estimated total active nursing capacity (i.e. filled budgeted positions) of 14,433 FTEs. RNs account for the majority of this having filled 10,059 FTEs, followed by CNAs (2,843 FTEs), APRNs (524 FTEs), and LPNs (51 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

2) new positions that are expected to be created over the coming year.

Accordingly, all nursing types within Hospitals and Health Systems have the potential to increase their current active capacity in 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, CNAs could potentially expand their current active capacity by 7% over the next year by filling all current vacancies and anticipated new positions.

In comparison to the 2015 survey, all nursing professions reported lower growth capacity. However, RNs and CNAs reported similar potential growth capacities, whereas APRNs and LPNs demonstrated marked decreases down from the 10% and 5% reported in 2015, respectively.

% CHANGE 2015 TO 2017				
Profession	CNA	LPN	RN	APRN
% of Workforce	+1%	0%	-2%	+2%
Full-Time Positions (relative to Part-Time)	-11%	-23%	-15%	-30%
Separations	+250	-41	-260	-6
Turnover Rate	+7%	-2%	-2%	-3%
Vacancies	+101	--	+23	--
Vacancy Rate	+3%	0%	+1%	-1%
Potential Growth	-1%	-4%	-1%	-7%

Long-Term Care and Skilled Nursing Facilities

Figure 11 SNF/LTC Workforce Composition by Nursing Type

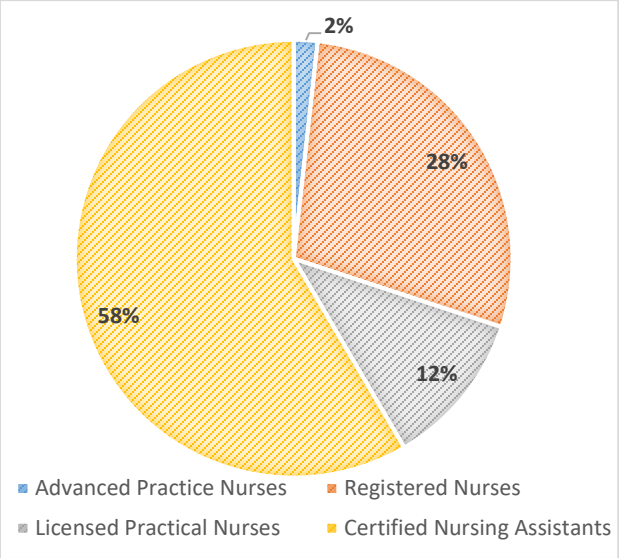
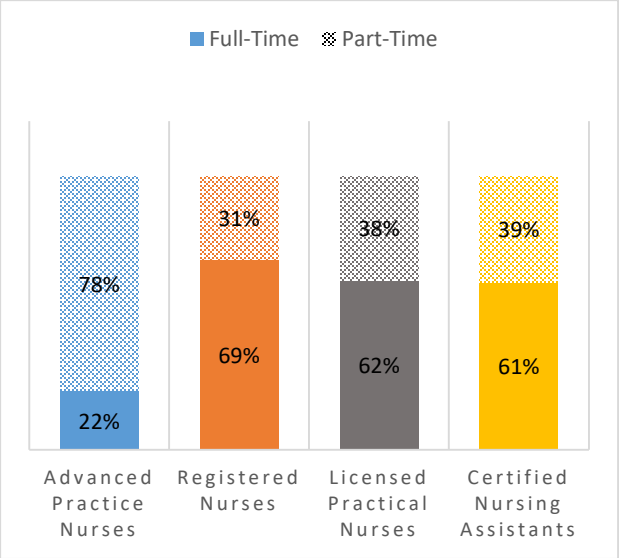


Figure 12 SNF/LTC Full-Time vs. Part-Time Ratios



For the purposes of this study, Skilled Nursing and Long-Term Care facilities are studied together because of the similar nature of the services they provide. Specifically, care provided throughout these facilities includes a broad range of health, personal care, and supportive services to elderly individuals and those whose capacity for self-care is limited.

Workforce Composition

Although the LPNs account for less than 15% of their total nursing workforce, SNF/LTC facilities hire the largest proportion of LPNs in Utah. They also rely heavily upon CNAs and RNs, which make up 86% of their total reported nursing workforce. SNF/LTC facilities tend to have a higher RN to CNA ratio in comparison to Assisted Living Centers, due to a higher number of health maintenance tasks completed in these facilities

The SNF/LTC workforce Composition has shifted only marginally since 2015. RNs were the only position that reported an increase in the SNF/LTC proportion of the workforce, up from 23% in 2015 to 29% in 2017. CNAs and LPNs both showed slight decreases from 64% and 13% in 2015 to 59% and 11% in 2017 respectively. There was no significant change reported by APRNs in this facility type.

Full-Time vs. Part-Time

Skilled Nursing and Long-Term Care Facilities rely on full-time nurses for their RN, LPN, and APRN workforces. LPNs have the highest proportion of full-time work, with 72% of filled LPN positions being full-time. While CNAs account for the 59% of their total reported workforce, they held the lowest proportion of full-time positions, with only 30% of these positions being full-time.

In comparison to the 2015 study, the proportion of full-time RNs and LPNs showed no significant changes with reports of 65% and 74% working full time in 2015, followed by 66% and 72% working full-time in

2017, respectively. APRNs showed increases from 22% working full-time in 2015, to 61% in 2017. The proportion of full-time CNAs decreased from 61% in 2015 to 30% in 2017.

Figure 13 SNF/LTC Separations in FTEs

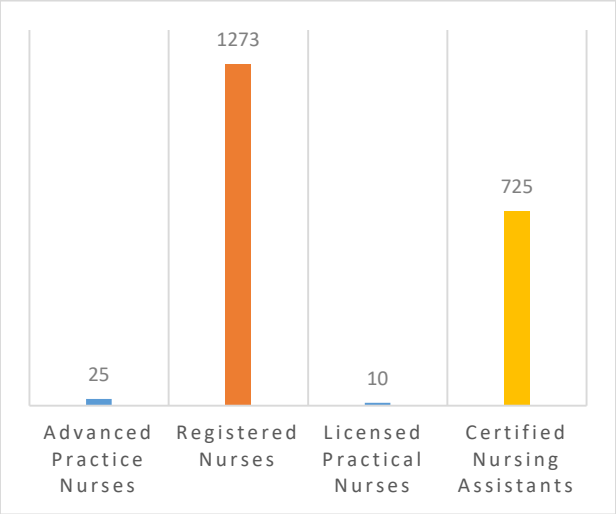
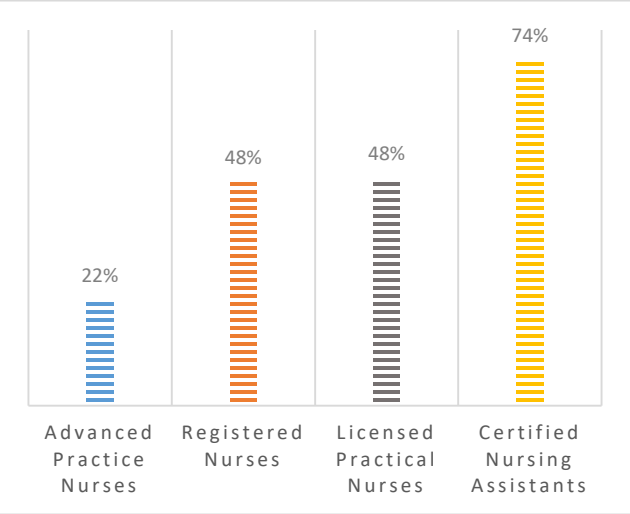


Figure 14 SNF/LTC Turnover Rates



Separations

Skilled Nursing and Long-Term Care facilities reported separations for each nursing type between January 2014 – January 2015. Figure 13 illustrates the raw number of those separations.

While CNAs account for the largest workforce in these facilities, they reported the second highest number separations (725 FTEs). RNs, the second largest nursing workforce, had the second highest number of separations (1,273 FTEs). They were followed by LPNs, and APRNs which reported 10 and 25 FTEs of separations in the study time frame.

Turnover Rates

Figure 12 above translates the given separations into a rate of the total budgeted FTEs.
CNAs reported the highest turnover rates in SNF/LTC facilities, at nearly 75%. This is similar to the 73% reported in 2015. Though RNs and LPNs had drastically different numbers of separations, their turnover rates were nearly identical. This is a result of lower numbers of total budgeted FTEs for LPNs.

In comparison to 2015, turnover rates for APRNs displayed a marked increase with an increase from 5% in 2015 to over 20% in 2017. However, this dramatic change is likely correlated with the smaller reported size of this workforce in relation to the other nursing positions within this facility type. LPNs also reported a slight increase in turnover rates, up from 36% in 2015 to 48% in 2017. The only workforce in this setting to report a decrease in turnover rate was RNs, which fell from 56% in 2015 to 48% in 2017.

Figure 15 LTC/SNF Vacancies in FTEs

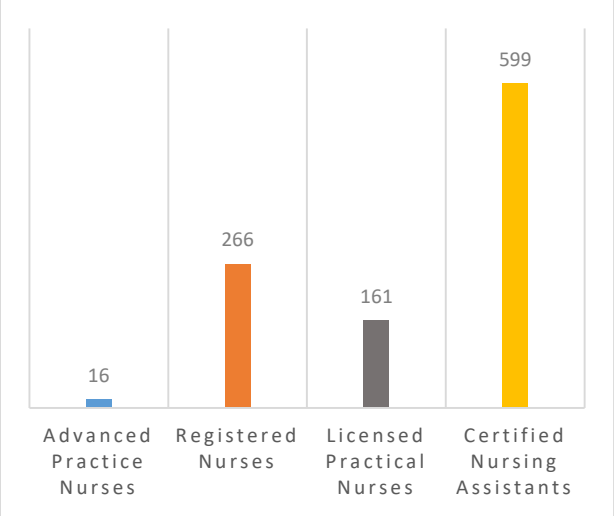
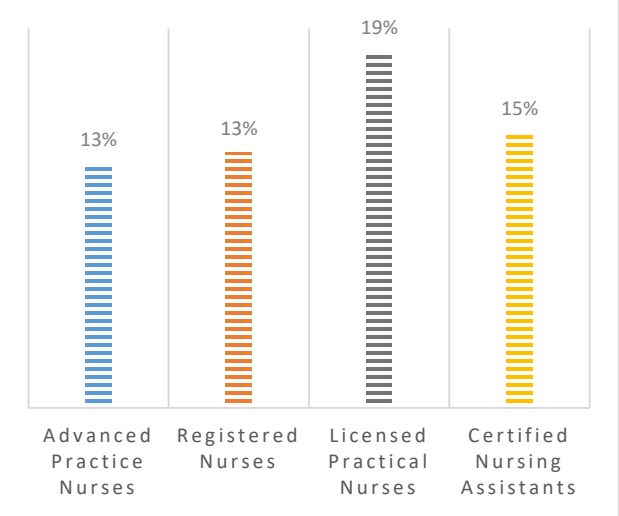


Figure 16 LTC/SNF Vacancy Rates



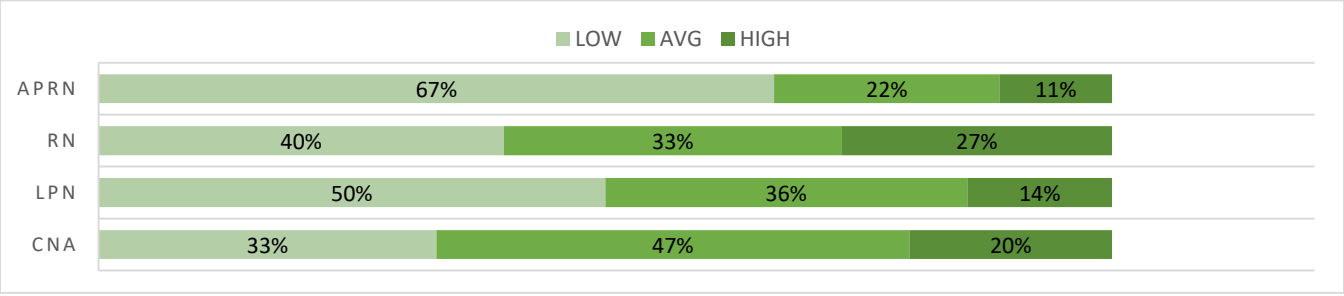
Vacancies

These facilities reported vacancies for each of the nursing occupations. The reported vacancies proportionately mirrored the composition of each workforce. Specifically, CNAs, which account for the largest proportion of the workforce, also reported highest number of vacancies with 115 vacant FTEs, followed by RNs with 48 vacant FTEs, LPNs with 27 vacant FTEs, and APRNs with fewer than 5 vacant FTEs.

Vacancy Rates

Within these facilities, LPNs report the highest vacancy rate at 18% (up from 11% reported in 2015). The vacancy rates for RNs and CNAs both increased slightly— to 13% and 15%, respectively, from 12% and 13% reported in 2015. APRNs, with a vacancy rate of 13%, had the most notable decrease, down from 27% reported in 2015.

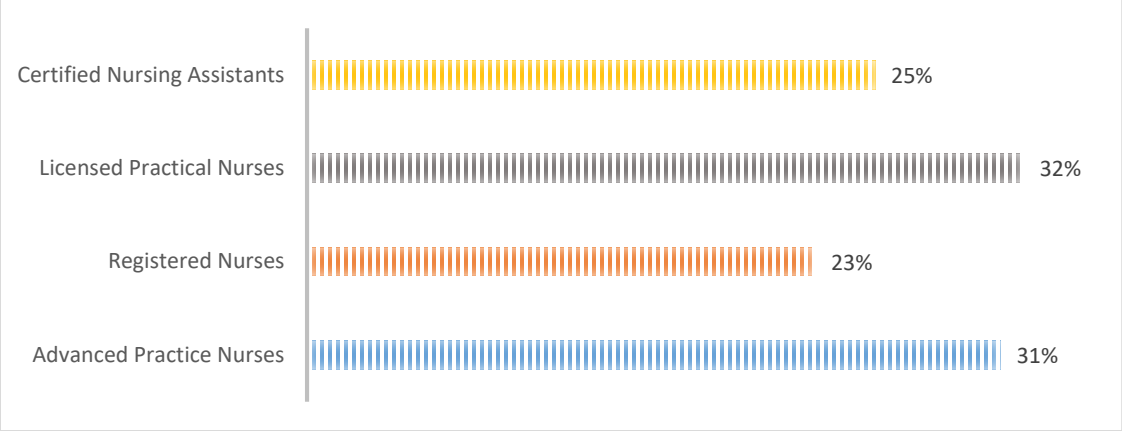
Figure 17 SNF/LTC Perceived Vacancy Rates



Perceived Vacancy Rates

Of those who responded to this question, a majority of facilities reported that the vacancy rate for APRN positions was low. The perception of RN vacancy rates was somewhat evenly distributed, with a slight majority labeling the vacancy rate as low. LPN vacancy rates were reported by a majority (50%) of respondents as low, whereas nearly 50% of respondents reported CNA vacancies were average.

Figure 18 SNF/LTC Potential for Change in Current Active Capacity



Potential Growth 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 (vacant) and/or new expected capacity.
For example, RNs currently have 48 vacant FTEs and are expected to have 37 new FTE positions – leading to 85 unfilled budgeted FTEs. RNs currently have an active capacity of 359 FTEs, and their total capacity in 2018 will be 444 FTEs (all budgeted positions). As such, over the coming year RNs in these facilities have the potential to increase their current active capacity by 24% (from 359 to 444 FTEs).

When compared to the survey completed in 2015, all facilities reported an increase in Potential Growth Capacity for each of the nursing occupations. APRNs increased from 27% in 2015 to 31% this year. RNs increased from 17% to 23%. LPNs increased from 18% to 34%. And CNAs increased from 18% to 25%.

APRNs and LPNs can achieve the highest increases in their current active capacity over the next year. For APRNs, this is a result of small number of current filled positions. For LPNs, this capacity for growth is more attributable to a higher vacancy rate.

% CHANGE 2015 TO 2017				
Profession	CNA	LPN	RN	APRN
% of Workforce	-6%	-1%	+5%	+1%
Full-Time Positions (relative to Part-Time)	0%	-12%	+4%	0%
Separations	-1,778	-227	+596	+15
Turnover Rate	+1%	+12%	-8%	+17%
Vacancies	+153	+85	+123	+6
Vacancy Rate	+2%	+8%	+1%	-14%
Potential Growth Capacity	+7%	+14%	+6%	+4%

Assisted Living Centers

Figure 19 Assisted Living Centers Workforce Composition

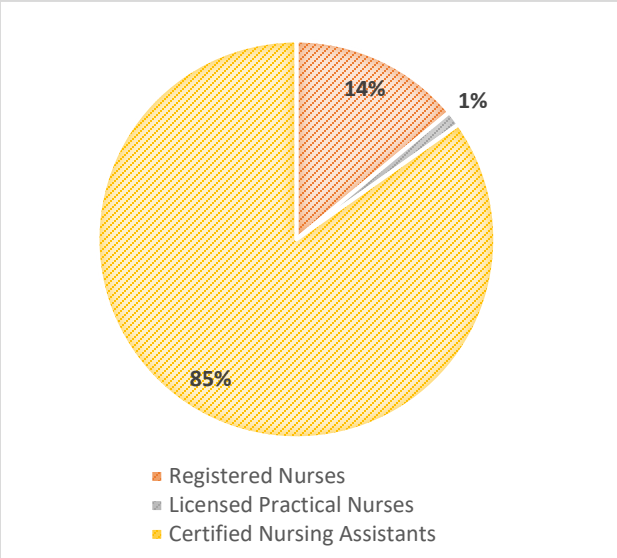
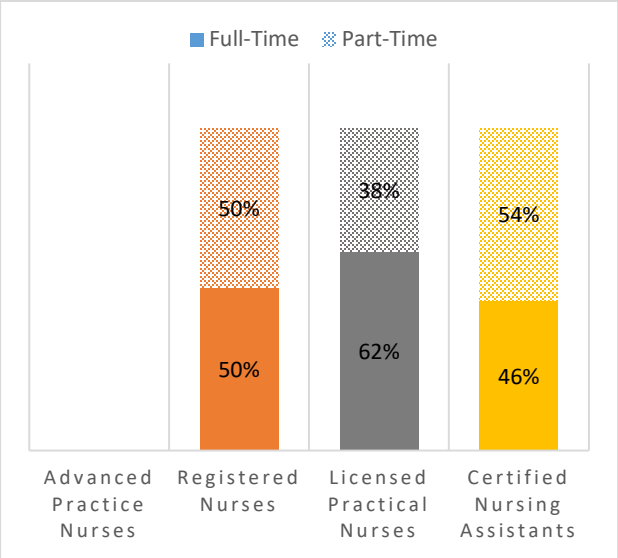


Figure 20 Assisted Living Centers Full-Time vs. Part-Time Ratios



Workforce Composition

Assisted Living Centers (ALCs) are structured to help seniors with their daily self-care activities, though some also provide intermittent nursing care as well. As such, staffing is a function of the services provided to patients.

ALCs are the third largest employer of CNAs behind Skilled Nursing Facilities/Long-Term Care and Hospitals. CNAs are the main nurse occupation in ALCs statewide, and provide for 86% of the workforce. RNs are the second largest nursing profession in these facilities followed by LPNs.

There are no APRNs reportedly employed in ALCs. However, this is not a significant shift from 2015, wherein APRNs accounted for less than 1% of the total ALC workforce.

Several changes have emerged in the Workforce Composition of ALCs since 2015. Though they are still the largest workforce in Assisted Living Centers, CNAs previously composed 94% of the total ALC workforce. RNs saw an increase from 4% of the previously reported workforce to 14% currently.

Full-Time vs Part-Time

Though they account for the vast majority of FTEs in this setting, CNAs have the lowest reported percentage of their workforce employed full-time work in these facilities. LPNs have the largest percentage of their workforce in full-time employment with 63% of positions being full-time, followed by RNs, which reported an even 50% of the workforce employed full-time.

In comparison to the 2015 Survey of Utah's Nurse Employers, CNAs and RNs full-time ratios did not report any significant changes in this report. Previously, RNs in ALCs reported 43% of their workforce was employed full-time. CNAs in the same setting previously reported 41% of their workforce was

employed full-time. LPNs saw the most notable increase in full-time employees, growing from 25% to 63% of the workforce.

Figure 21 Assisted Living Centers Separations in FTEs

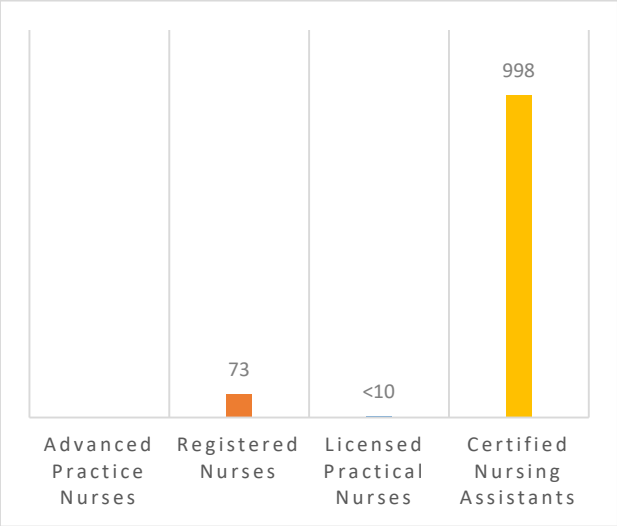
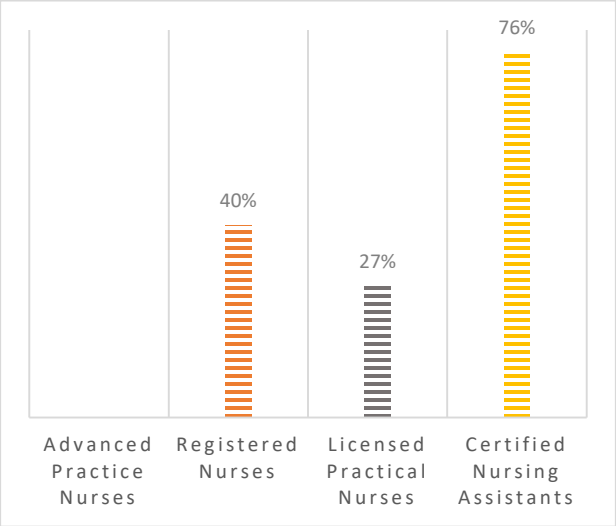


Figure 22 Assisted Living Centers Turnover Rates



Separations Figure 21 establishes the reported numbers of Separations in FTEs by nursing type in ALCs.

Of the 1,077 estimated FTE separations within these facilities, 998 are attributable to CNAs. The RN workforce had the second most estimated separations with 73 FTEs, and LPNs had fewer than 10 FTEs of separations.

In comparison to 2015, the raw number of separations is very similar, with fewer separations occurring in CNA and RN workforces (down from 1,307 and 51 FTEs respectively).

Separations for APRNs are not reported, as they did not account for any of the workforce in this setting.

Turnover Rates

These separations resulted in a turnover rate of 76% for CNAs, 40% for RNs, and 27% for LPNs.

When compared to the 2015 report, CNAs showed the greatest increase in turnover rates with an increase from the previously reported 56% to the current 71%. While their overall number of separations decreased, it is important to note that the turnover rate has increased, which suggests that there are lower numbers of total budgeted FTEs for CNAs.

RNs decreased from the previously reported rate of 48% to the current 37%. LPNs and APRNs remained fairly similar to their previously reported respective rates of 29% and 0% in 2015.

Figure 23 Assisted Living Centers Vacancies in FTEs

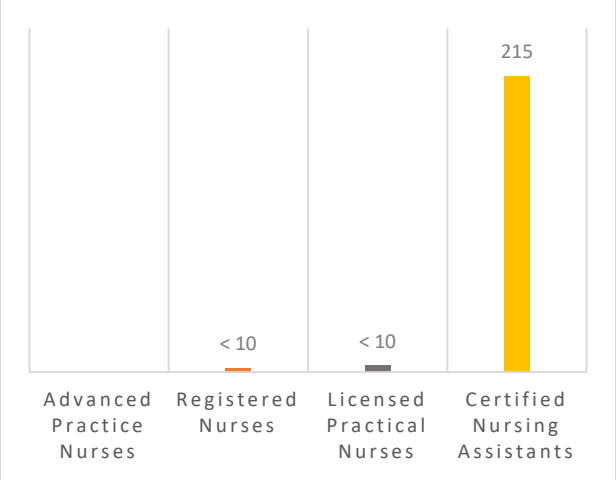
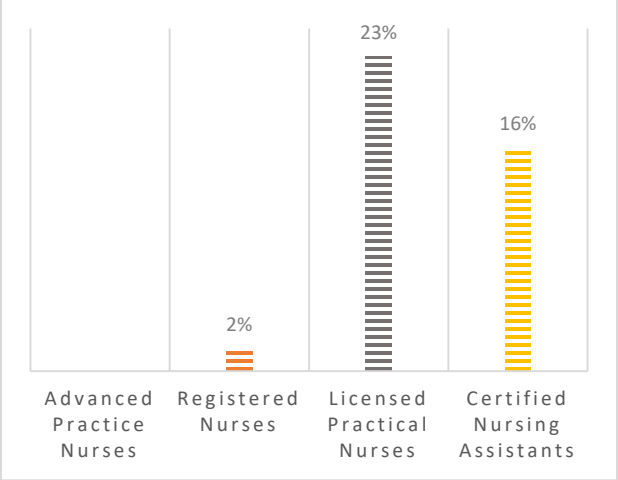


Figure 24 Assisted Living Centers Vacancy Rates



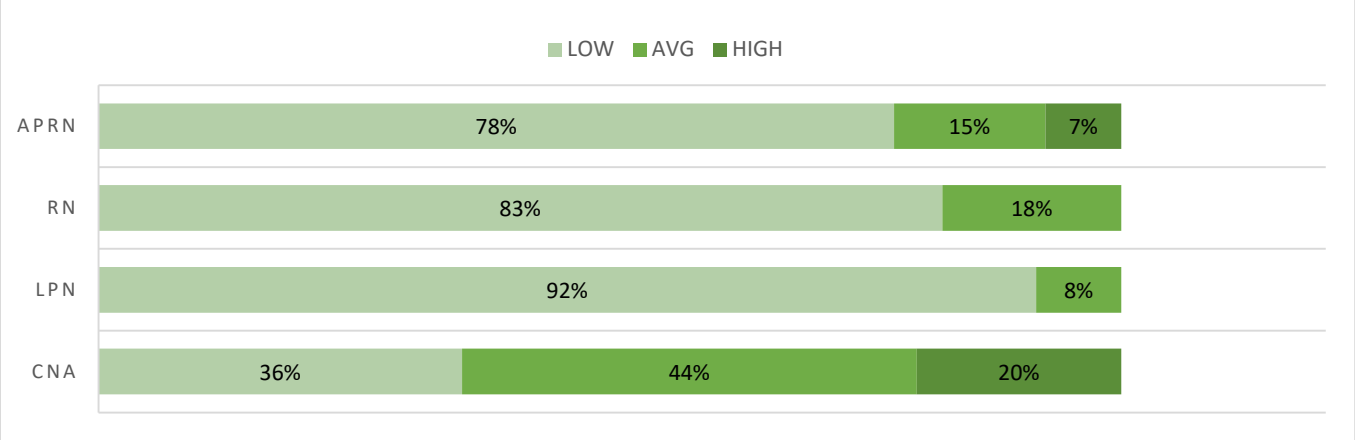
Vacancies

Assisted Living Centers reported vacancies for the CNA, RN, and LPN workforces. No vacancies were reported for APRNs. The reported vacancies mirrored the size of each workforce with CNAs reporting the most estimated vacancies with 215 vacant FTEs, followed by RNs and LPNs each under 10 vacant FTEs.

Vacancy Rates

These estimated vacancies result in a vacancy rate of 16% for CNAs, 2% for RNs, and 23% for the small LPN workforce. CNAs reported a slight in Vacancy Rate increase in comparison to the 9% reported in 2015. RNs vacancies decreased marginally from the previous 6%. LPNs did not report any significant changes.

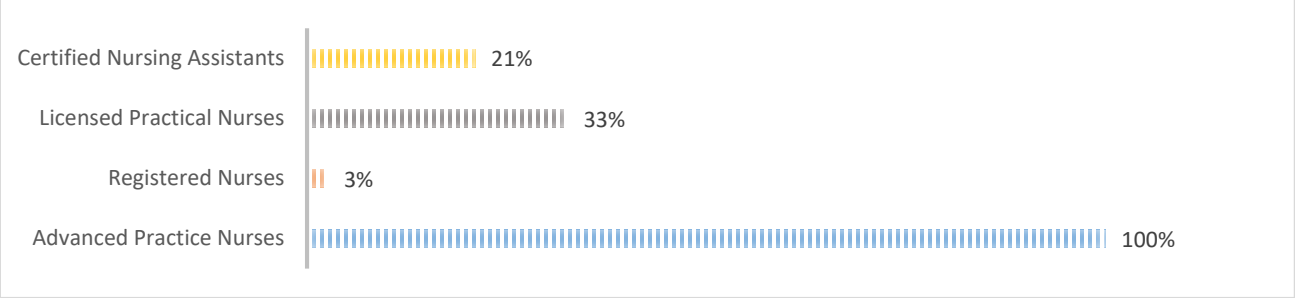
Figure 25 ALC Perceived Vacancy Rates



Perceived Vacancy Rates

A majority of respondent facilities reported the Vacancy Rate for APRN positions was Low. The perception of RN vacancy rates was Low as well with no facilities indicating the RN vacancy rate as High. LPN Vacancy Rates were reported by 92% of respondents as Low. The perception of CNA vacancy rates was more evenly distributed than in other workforces, with a slight majority labeling the Vacancy Rate as Average.

Figure 26 ALC Potential for Change in Current Active Capacity



Potential Growth Capacity

No workforce in ALCs has an active capacity that is currently at 100 percent, meaning all nursing positions reported either unfilled positions, or an intent to create new positions in the coming year. Each can increase their active capacity in these facilities over the next year. The reported estimated active capacity for nursing in Assisted Living Centers is 1,303 FTEs – comprised of 1,105 FTEs CNAs, 182 RNs, 16 LPNs, and no reported employed APRNs. Though this setting currently has no vacancies reported for APRNs, this workforce is expected to expand as these facilities did report an intent to create a total of six FTEs of new positions for APRNs.

CNAs are the largest workforce in ALCs and also report the greatest number of unfilled positions. This includes an estimated 215 vacant FTEs and 80 FTEs of new positions. If all of the vacant and new positions were filled, CNAs in Assisted Living Centers could increase their current capacity of active FTEs by 21% over the coming year.

APRNs reported increases in Potential Growth Capacity when compared to the 2015 report. In 2015, APRNs reported no unfilled positions and no intent to create new positions, which is evident in their absence from these facilities. While there were no changes in APRN vacancies, this year's data suggest new positions will be created.

Potential Growth Capacity for the RN workforce decreased from the 8% reported in 2015. The LPN workforce did not report statistically significant potential for growth.

% CHANGE 2015 TO 2017				
Profession	CNA	LPN	RN	APRN
% of Workforce	-6%	-1%	+5%	+1%
Full-Time Positions (relative to Part-Time)	0%	-12%	+4%	0%
Separations	-1,778	-227	+596	+15
Turnover Rate	+1%	+12%	-8%	+17%
Vacancies	+153	+85	+123	+6
Vacancy Rate	+2%	+8%	+1%	-14%
Potential Growth	+7%	+14%	+6%	

AMBULATORY CARE

Figure 27 Ambulatory Care Workforce Composition

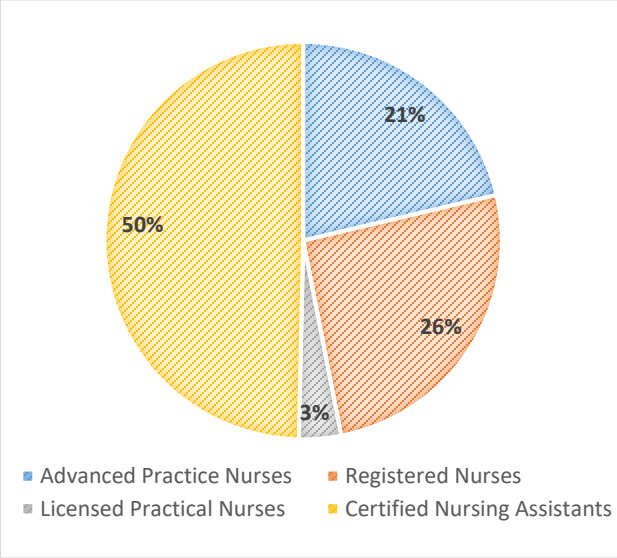
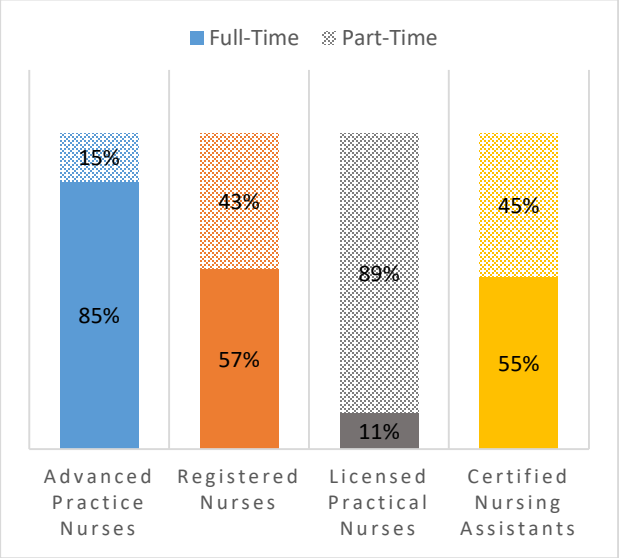


Figure 28 Ambulatory Care Full-Time vs. Part-Time Ratios



There are a variety of ambulatory care settings in Utah that perform a multitude of 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.

Workforce Composition

The responding facilities had a workforce composed of 50% CNAs, 26% RNs, 21% APRNs, and 3% LPNs for a total of 1,877 FTEs across these nursing professions.

The CNA and LPN workforces reported no significant change from the 2015 survey. However, the composition showed a decrease in the size of the RN workforce from 35% in 2015 to 26%. These positions appear to have shifted to APRNs, whose proportion of the workforce doubled from 11% in 2015 to 21%.

Full-Time vs. Part-Time

The responding ambulatory care settings reported that, with the exception of LPNs, the majority of all other filled positions within their facilities were full-time. Each workforce reported decreases in the proportions of full-time positions in comparison to the report from 2015. The workforce with the highest proportion of full-time positions was APRNs, at 85%, which is a significant decrease from 95% they reported in 2015. LPNs, which account for the smallest portion of the workforce in Ambulatory Care, with only 11% of their reported positions being full-time, demonstrated a decrease from the 61% full time employees reported in 2015.

Figure 29 Ambulatory Care Separations in FTEs

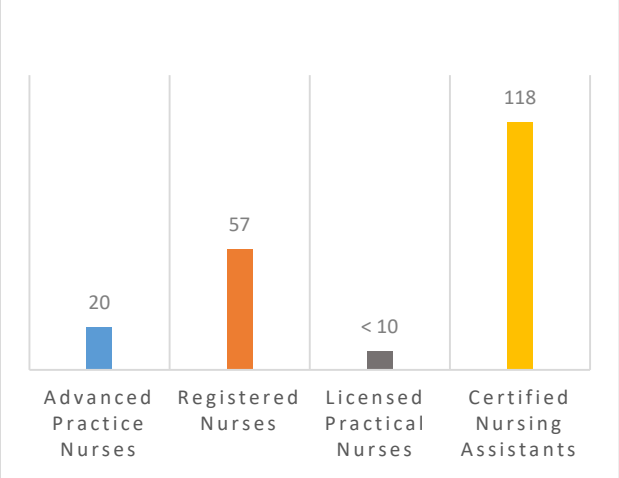
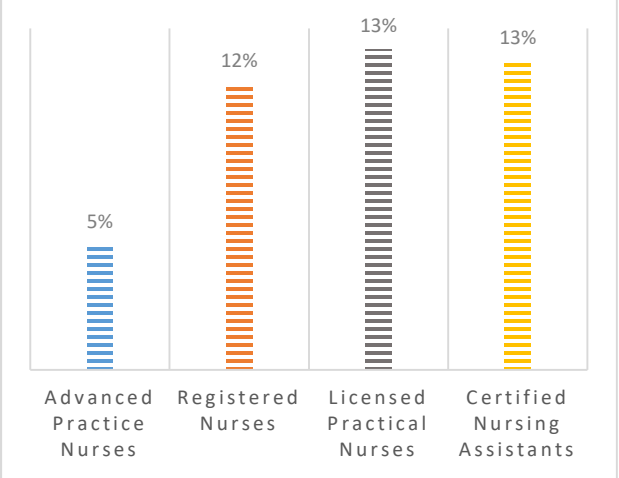


Figure 30 Ambulatory Care Turnover Rates



Separations

Ambulatory care settings reported separations for each of the nursing professions. The reported separations were similar to the size of each workforce. CNAs reported the highest number separations at 118 FTE, followed by RNs at 57 FTEs, APRNS at 20 FTE, and LPNs, which reported under 10 FTE separations.

Turnover Rates

These separations translate into a 13% turnover rate for both CNAs and LPNs, 12 percent for RNs, and 5 percent for APRNs.

The turnover rate for APRNs was significantly lower than the 12% reported in 2015. CNAs also reported a lower turnover rates than the previous 17% in 2015

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Figure 31 Ambulatory Care Vacancies in FTEs

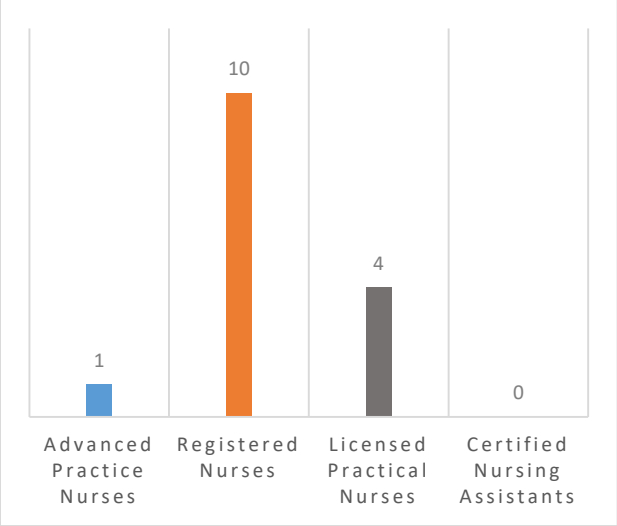
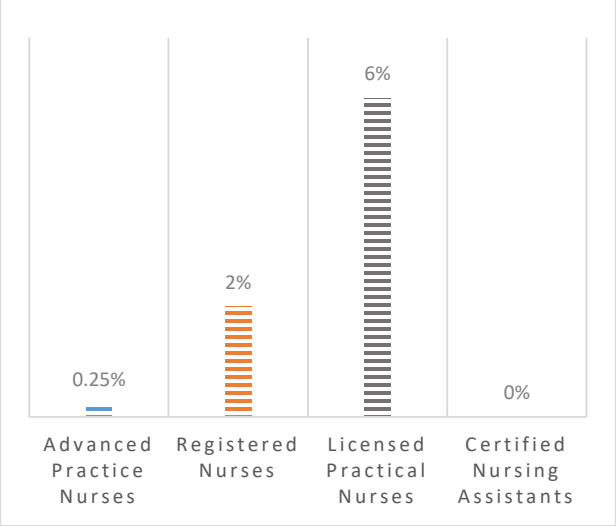


Figure 32 Ambulatory Care Vacancy Rates



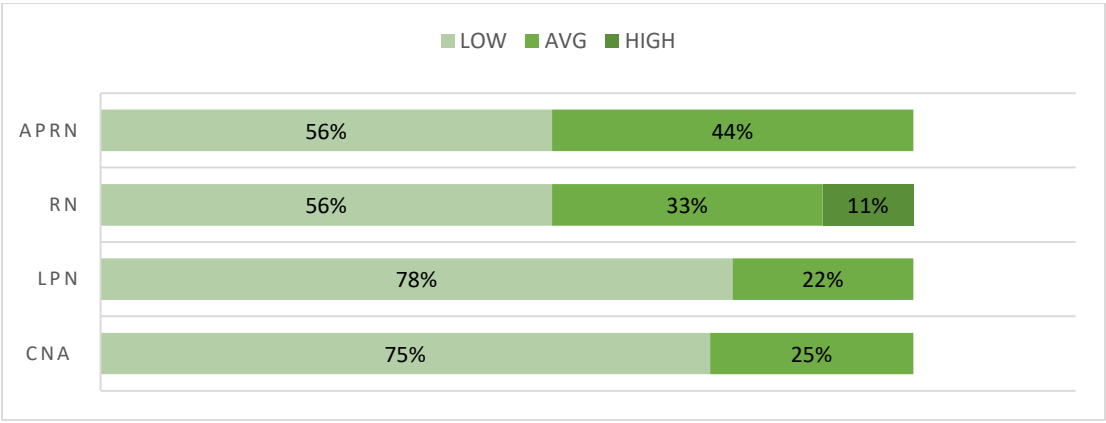
Vacancies

These facilities also reported having vacancies for each nursing occupation, except APRNs. Respondents reported that LPNs had the most vacant FTEs with ten FTE, followed by RNs with four FTE, and CNAs with fewer than five FTE.

Vacancy Rates

Both CNAs and APRNs experienced decreases in reported vacancy rates since 2015. APRNs previously held the highest vacancy rate at 8%. CNAs previously reported a vacancy rate of 7%. Vacancy rates for LPNs and RNs increased slightly from 1% and 5% (respectively).

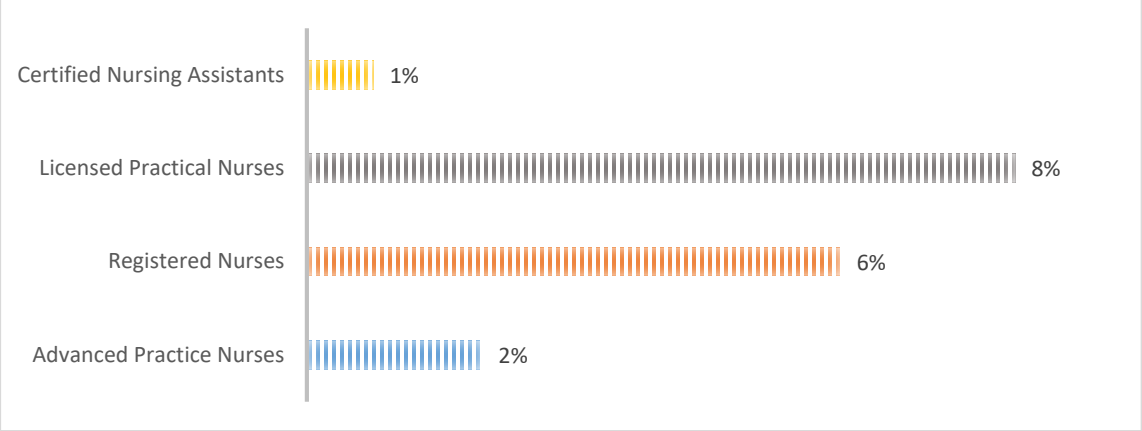
Figure 33 Ambulatory Care Perceived Vacancy Rates



Perceived Vacancy Rates

No respondent Ambulatory Care facilities reported high vacancy rates for APRN positions. The perception of RN vacancy rates by the majority of respondents (56 %) was low as well, with only 11% indicating the RN vacancy rates as high. Perceptions of the LPN and CNA vacancy rates were reported by most respondents as low, with no facilities reporting the rates as high.

Figure 34 Ambulatory Care Potential for Change in Current Active Capacity



Potential Growth Capacity

Ambulatory Care facilities are expected to have an increase in the potential active capacity of each of their nursing workforces. Each nursing workforce within these facilities can achieve a larger active capacity because each profession has unfilled (vacant) positions and/or new expected capacity.

While Ambulatory Care facilities reported vacancies in all workforces, none reported greater than 10 FTE vacancies. RNs reported the highest number of new positions to be created at 21 FTEs. The relatively small active capacity of LPNs in combination with fewer than 10 FTE of new positions to come, however, resulted in the highest potential for growth, at 8%.

When compared to the survey completed in 2015, all facilities reported decreases in potential growth capacity for each of the nursing occupations. APRNs in previously reported a 15% potential change in active capacity, RNs reported 13%, LPNs had 1%, and CNAs reported 8%.

% CHANGE 2015 TO 2017				
Profession	CNA	LPN	RN	APRN
% of Workforce	0%	-1%	-9%	+10%
Full-Time Positions (relative to Part-Time)	-13%	-50%	+14%	-10%
Separations	-40	--	-21	-2
Turnover Rate	-4%	0%	-1%	-7%
Vacancies	-68	--	-22	-15
Vacancy Rate	-7%	+5%	-3%	-7.7%
Potential Growth	-7%	+7%	-7%	-13%

Home Health Care

Figure 35 Home Health Facilities Workforce Composition

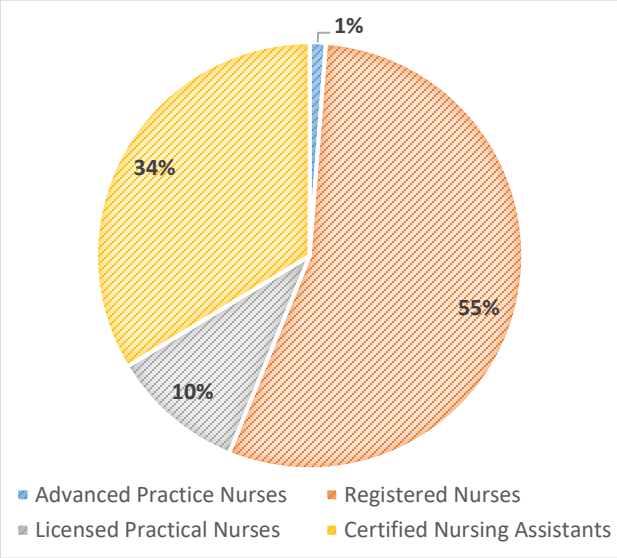
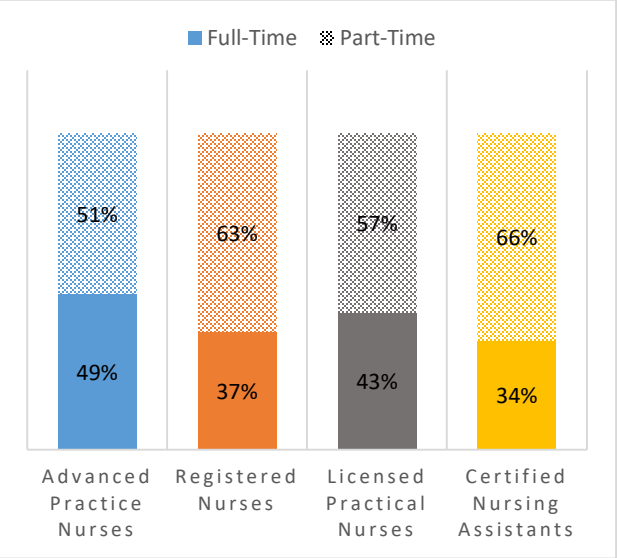


Figure 36 Home Health Facilities Full-Time vs. Part-Time Ratio



The previously completed survey studied Home Health Care Facilities in combination with Hospices, however this survey differentiates between the two facility types. This was done because although these facilities provide similar services, the nature of care, setting of services, and workforce composition vary between the two facility types.

Workforce Composition

Home Health agencies provide a range of intermittent nursing services and personal care within the home of the patient. These services range from providing aid with daily care and medication administration, to more skilled nursing services required by chronically ill patients.

These facilities employ an estimated 2,798 FTEs in Utah. The RN workforce accounts for the majority with 457 FTEs, followed by CNAs (942 FTEs), LPNs (284 FTEs), and lastly, APRNs (34 FTEs).

Full-Time vs. Part Time Ratios

The majority of nursing employees in Home Health facilities are employed part-time, as no workforce reported greater than 50% to be employed full-time. Though they account for only a small portion of the workforce, APRNs reported the highest proportion of their workforce to be employed full-time with approximately 49%. CNAs reported the lowest rates with only 34% of workers working full-time.

Figure 37 Home Health Separations in FTEs

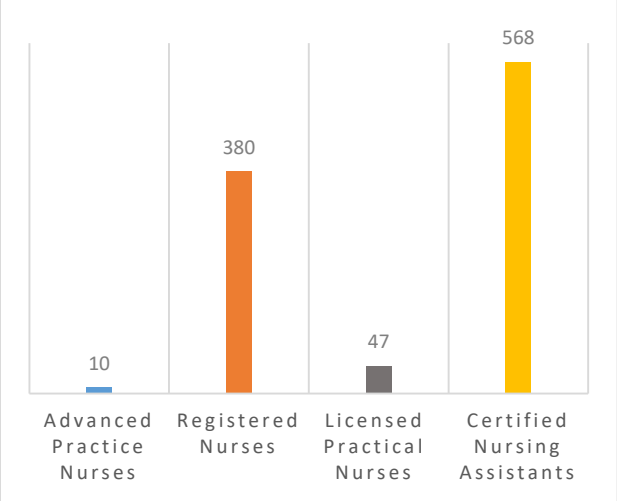
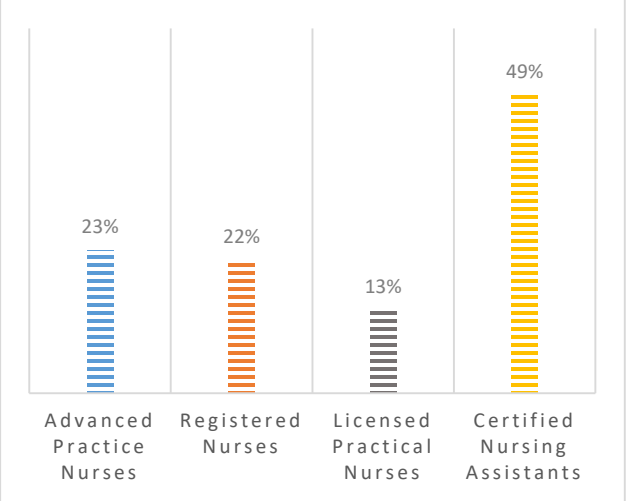


Figure 38 Home Health Turnover Rates



Separations

All nursing professions reported separations in Home Health Centers, illustrated above in Figure 37.

Of the total 1,005 estimated FTE separations within these facilities, just over half are attributable to CNAs with a total of 568 FTEs of reported separations. The RN workforce reported the second highest estimate of separations with 380 FTEs, followed by LPNs at 47 FTE, and APRNs with 10 FTEs.

Turnover Rates

These separations translate into a 50% turnover rate for CNAs, nearly double the rate of any other profession in this setting. Though CNAs reported more separations than APRNs, the smaller profession size of APRNs resulted in the second highest turnover rates in these facilities.

Figure 39 Home Health Vacancies in FTEs

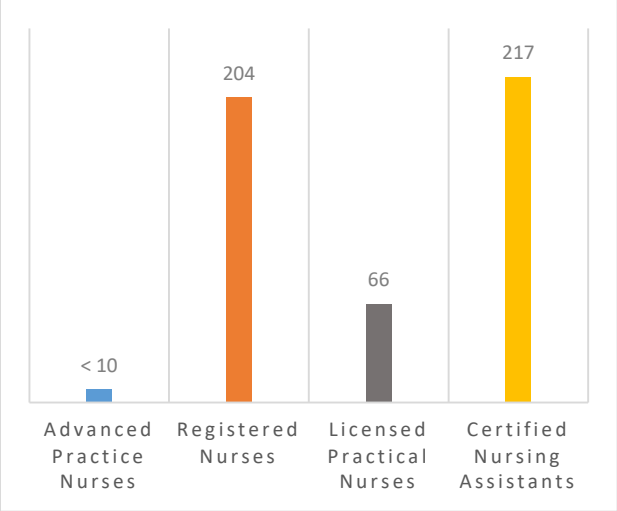
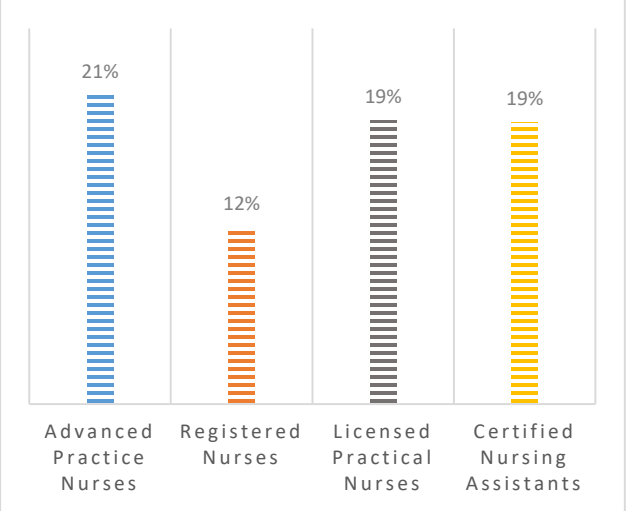


Figure 40 Home Health Vacancy Rates



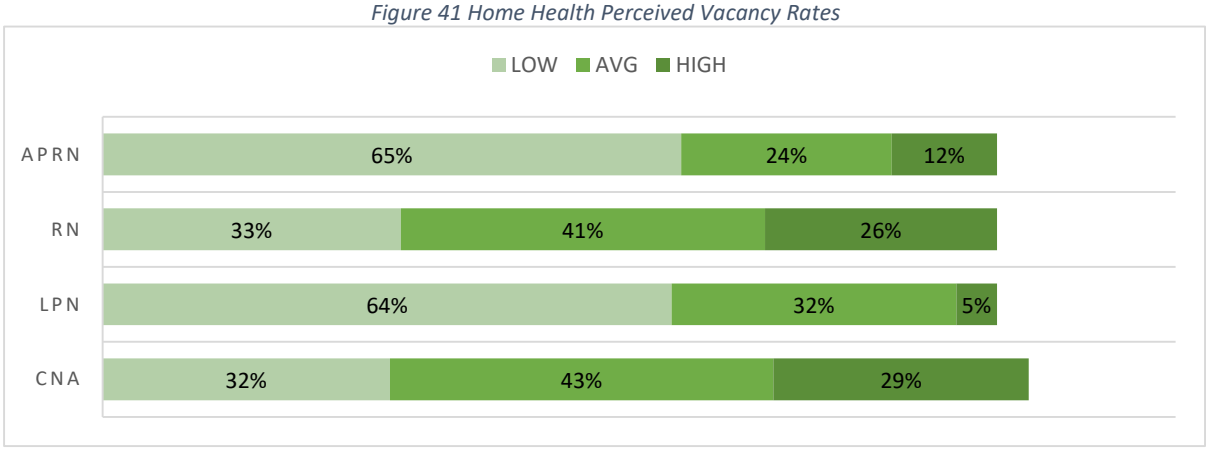
Vacancies

Home Health facilities reported vacancies for each of the nursing occupations. Specifically, CNAs had the most vacancies with 217 vacant FTEs. RNs followed closely with 204 vacant FTEs. LPNs reported 66 vacant FTEs, and APRNs had fewer than 10 vacant FTEs.

Vacancy Rates

As indicated in Figure 39, the relatively small workforce of APRNs combined with the small number of vacancies resulted in the highest vacancy rates in the Home Health setting. Though CNAs reported more than 3 times the vacancies of LPNs, the vacancy rates of these workforces were identical. RNs, the largest workforce in this setting reported the lowest vacancy rate, 12 percent.

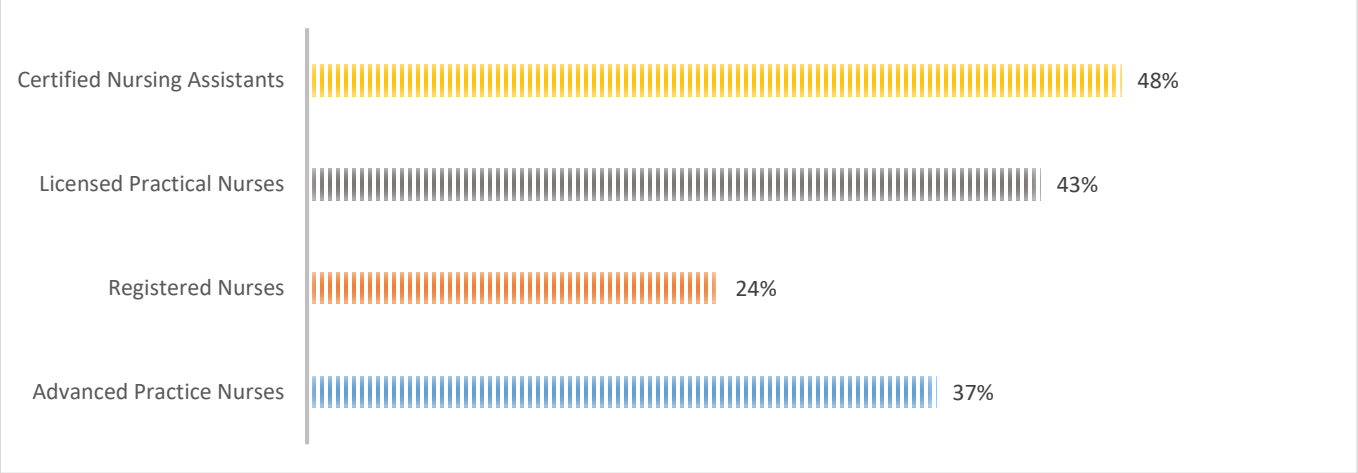
Figure 41 Home Health Perceived Vacancy Rates



Perceived Vacancy Rates

The majority of respondent facilities reported that the vacancy rate for APRN positions was low, though a small minority did report these vacancy rates were high. The perception of RN and CNA vacancy rates was somewhat evenly distributed, with a slight majority labeling the vacancy rates as average. LPN vacancy rates were reported by a majority (64%) of respondents as low.

Figure 42 Potential for Home Health Change in Current Active Capacity



Potential Growth Capacity

Home Health agencies have an estimated total active nursing capacity of 2,796 FTEs. RNs account for the majority of this (1,537 FTEs), followed by CNAs (942 FTEs), LPNs (149 FTEs), and APRNs (34 FTEs). The total potential capacity for each of the nursing profession 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.

CNAs, the second largest workforce in this setting, reported the highest potential change and can expand their current capacity by 48% over the next year due to vacancies and the anticipated creation new positions. LPNS showed the second highest potential for workforce growth at 43%.

HOSPICE

Figure 43 Hospice Workforce Composition

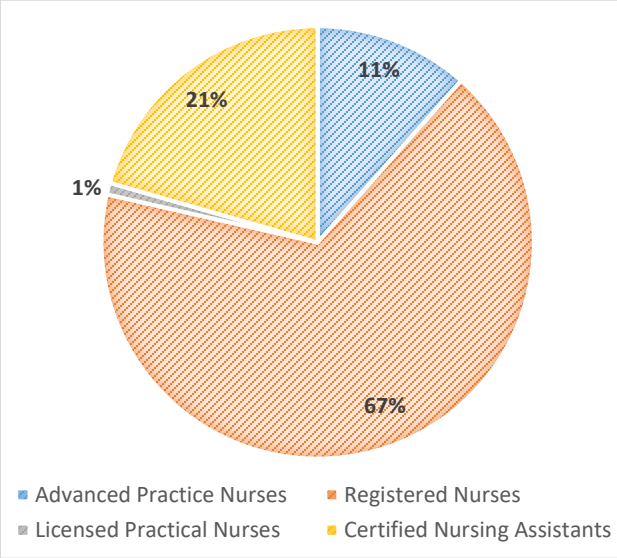
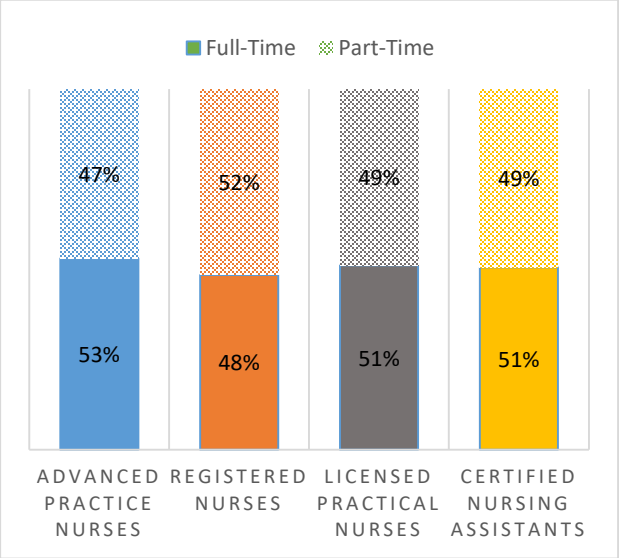


Figure 44 Hospice Full-Time vs. Part-Time Ratios



As noted in the previous section, in the 2015 Survey of Nursing Employers, the UMEC chose to combine Home Health Care Facilities with Hospices. This report differentiates between the two in order to provide more in-depth data regarding the workforces of these two facility types.

Workforce Composition

Hospice facilities employ an estimated 15,323 FTEs. Most of those FTEs come from the RN workforce (10,269 FTE), followed by the CNA workforce (3150 FTE), then APRNs (1,770 FTE), and lastly, LPNs (133 FTE).

Full-Time vs. Part-Time Ratios

Hospices hire part-time nurses at roughly the same rate as full-time nurses for their workforces. For instance, the RN workforce has 48% of all filled positions being full-time and 52% being part-time. CNAs, the second largest workforce, has 49% of its filled positions being part-time and 51% of all filled positions being full-time.

Figure 45 Hospice Separations in FTEs

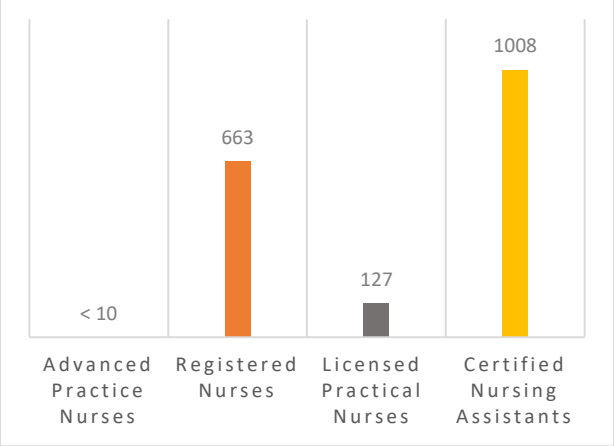
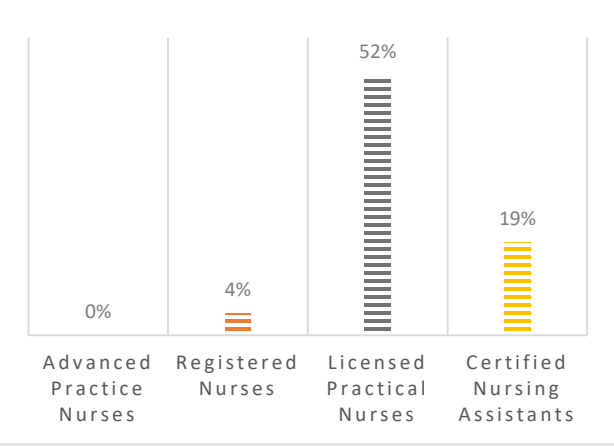


Figure 46 Hospice Turnover Rates



Separations

Hospice facilities reported separations for each of the nursing professions between January 2016 and January 2017. RNs had the most separations during this period with an estimated 1,008 FTEs. CNAs had the second most separations with an estimated 663, followed by the LPN workforce which had 127 FTE of separations.

Turnover Rates

These facilities experienced an estimated turnover rate of 52% for the smaller LPN workforce, 19% for the CNA workforce, and 4% for the RN workforce. The APRN workforce had less than ten FTEs separate, which led to a turnover rate of less than 1%.

Figure 47 Hospice Vacancies in FTEs

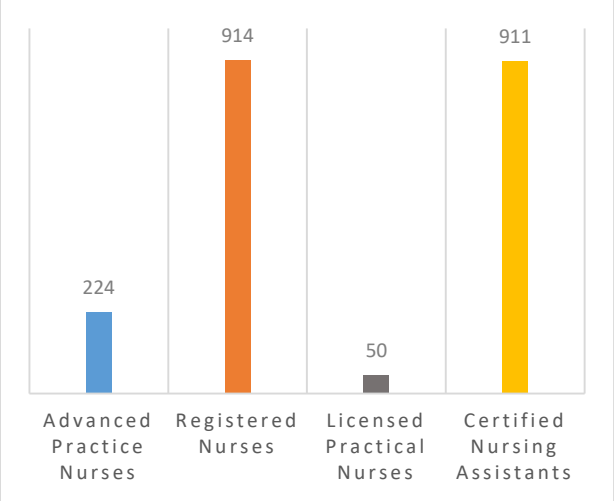
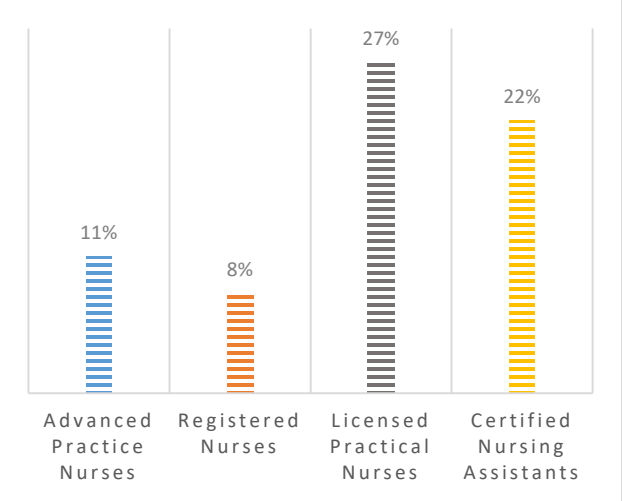


Figure 48 Hospice Vacancy Rates



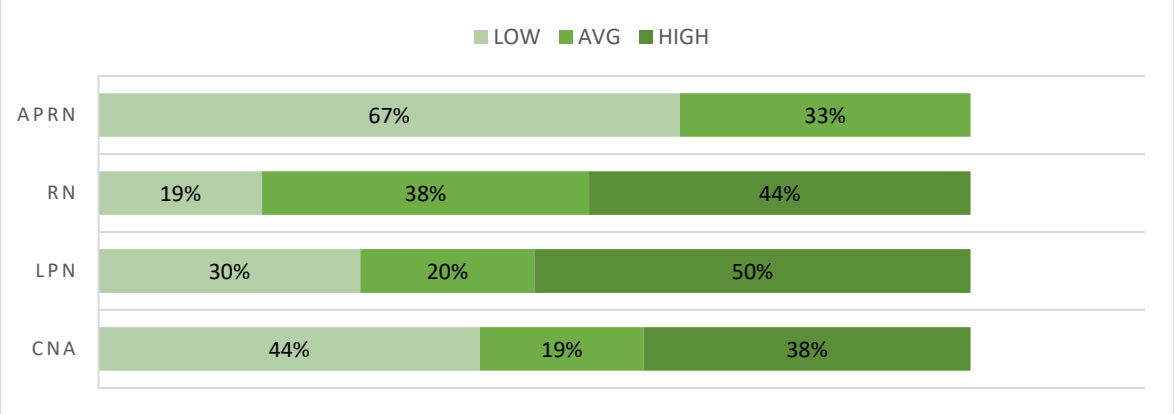
Vacancies

In addition to separations, these facilities reported vacancies for each nursing workforce. RNs had the most estimated vacancies with 914 vacant FTEs, followed by CNAs with 911 FTEs, LPNs with 50, and APRNs with 224.

Vacancy Rates

As seen in Figure 47, the highest estimated vacancy rate was with the small LPN workforce, with a 27% vacancy rate, followed by CNAs at 22%, the APRN workforce at 11%, and RNs at 8%.

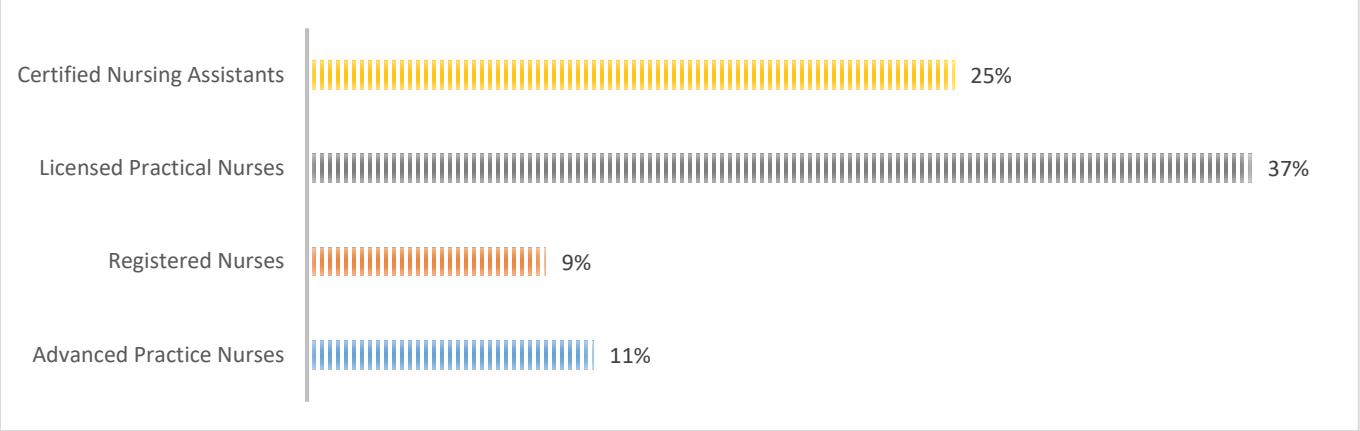
Figure 49 Hospice Perceived Vacancy Rates



Perceived Vacancy Rates

The consensus between most responding facilities is that the APRN vacancy rate is low. In fact, this is the only workforce within this setting wherein no respondents reported the vacancy rate to be high. Within the RN workforce, which accounts for 67% of nursing FTEs in hospice facilities, 44 perceived their vacancy rates to be high. LPNs reported similar numbers, with roughly 50% of facilities reporting the vacancy rate to be high. The CNA workforce seemed to be more evenly divided than in any other setting.

Figure 50 Hospice Potential for Change in Current Active Capacity



Potential Growth Capacity

Hospice facilities have an estimated total active nursing capacity of 15,323 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 profession 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).

DEPARTMENT OF PUBLIC HEALTH

Figure 51 Public Health Workforce Composition

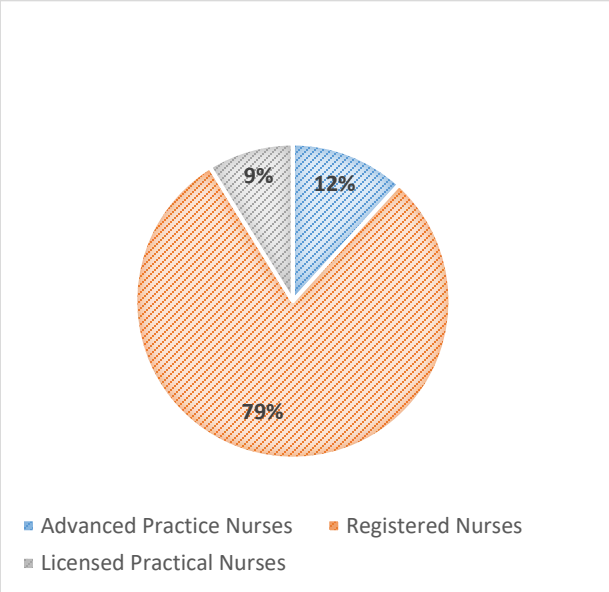
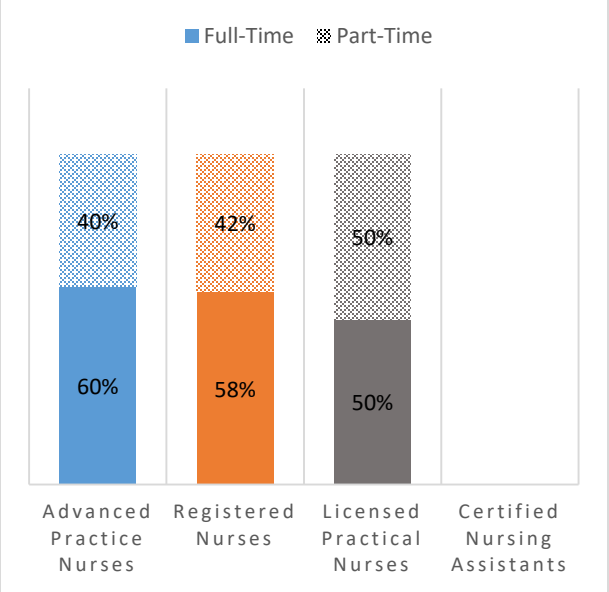


Figure 52 Public Health Full Time vs. part Time Ratios



The public health system in Utah consists of the Utah Department of Health (UDOH) as well as 13 Local Health Departments (LDHs). The UDOH along with the LHDs work to detect and prevent outbreaks of infectious disease, promote healthy lifestyles and safe behaviors, and provide access to healthcare services for Utah's most vulnerable populations. The public health capacity in Utah is provided by state and local entities. At the local level, public health services are organized into 13 health districts. Of these 13 districts, 7 are single county and 6 hold multi-county districts.

Workforce Composition

The nursing workforce in these facilities is small relative to other settings, however the data collected in this report are a result of response rates from these facilities, and as such are considered to accurately portray the demand in this setting. Public Health facilities reported to employ all but CNAs in their nursing staff mix.

Local health districts rely heavily on RNS, which account for nearly 80% of all FTEs. This is a shift from the previous report, which reported RNs to hold 93% of all nursing positions in public health facilities. These roles seem to have shifted to APRNs and LPNs, which previously composed only a combined total of 7% of the workforce, but currently account for over 20% of total nursing FTEs in public health settings.

Full-Time vs. Part Time

Local Health Departments reported that full-time work is more common for APRNs than other workforce in the Public Health setting. RNs and LPNs reported a fairly even divide between full-time and part-time staff. The full-time work positions in this setting account for a lower percentage than that reported in 2015. In 2015, the LPN workforce was composed completely of full-time positions, whereas part-time positions currently account for roughly half in this workforce.

Figure 53 Public Health Separations in FTEs

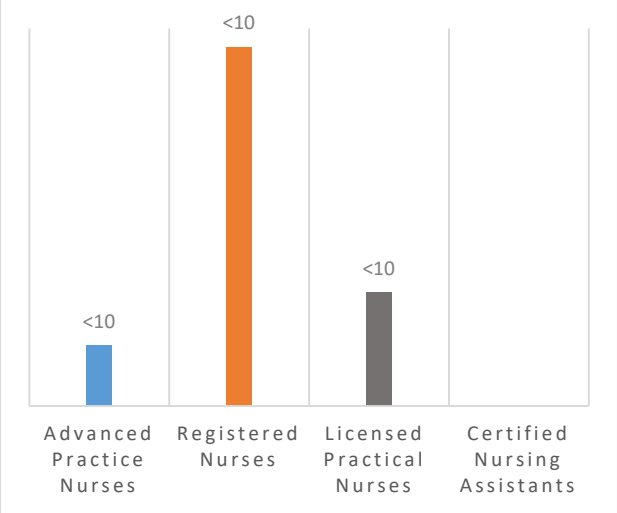
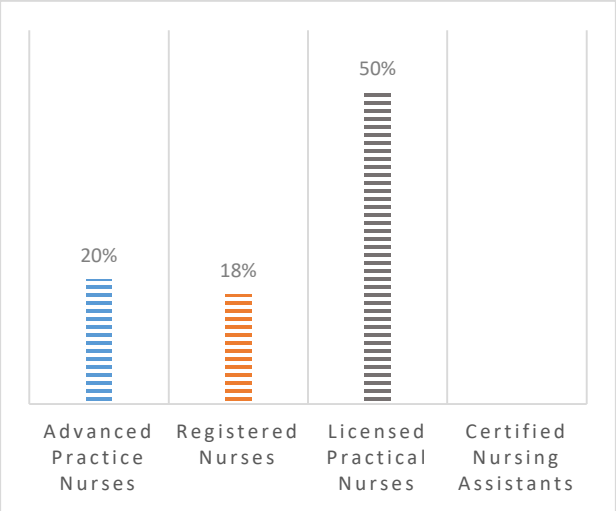


Figure 54 Public Health Turnover Rates



Separations

Public health districts reported separations for RNs, LPNs, and APRNs between January 2016 – January 2017. The majority of these separations were reported for RNs, with an estimated fewer than 10 FTE separations experienced by this workforce. CNAs currently have no estimated filled positions, and also did not experience separations in this time period.

Turnover Rates

RNs, the largest workforce, reported the lowest turnover rate of any workforce in this setting. CNAs reported to experience the greatest turnover rate, which has shifted to LPNs in this report. Public Health LPNs reported the highest estimated turnover rate of just over 50%. In the report published in 2015, APRNs reported no separations for a 0% separation rate. This has changed as well, as APRNS reported to have experienced fewer than 10 separations, resulting in a turnover rate of 20%.

Vacancies and Vacancy Rate

There were no vacancies to report for any nursing professionals in Public Health settings, which was very similar to the report in 2015, which reported fewer than 15 vacant FTEs across the entire setting.

CONCLUSION

The UMEC is grateful for the widespread support it has 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 statistically significant profiles that functioned as proxies for non-respondents. Thus, the final report provides a thorough (albeit not definitive) portrayal of demand across the major employer industries.

In every setting- except Public Health- there is a projected increase in demand capacity for all nursing types. However, some of these projected demand rates have decreased from 2015 projections, particularly in Hospital Systems and Ambulatory Care. The setting with the greatest increase in projected growth rate is Skilled Nursing and Long Term Care Facilities.

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. The most consistent shift in the workforce is the increase in proportion of part-time positions. The turnover rates and separation rates will also help employers gauge the "workforce churn" in the coming year.

Future analysis should also include a more detailed measure of employers utilizing contract and per-diem nurses, and how those positions compare to FTEs. It will be important to track the utilization of this portion of the workforce, especially if the proportion of full-time positions continues to decline.

The UMEC is optimistic that this report provides a robust depiction of the diverse marketplace for nurses in Utah. 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. 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.

Appendix A:
2015-2017 Workforce Comparison by Setting

	Nurse Profession	Hospitals/ Health Systems			Skilled Nursing Facility/Long-Term Care			Assisted Living Center			Ambulatory Care/Other			Hospice & Home Health*			Public Health		
		2015	2017	Change	2015	2017	Change	2015	2017	Change	2015	2017	Change	2015	Hospice 2017	Home Health 2017	2015	2017	Change
(%)Workforce in Setting Type	*CNA*	25%	23%	-2%	28%	28%	--	20%	9%	-11%	9%	7%	-2%	19%	25%	8%	0%	0.0%	–
	LPN	16%	4%	-12%	38%	56%	+18%	2%	1%	-1%	9%	5%	-4%	36%	11%	23%	1%	0.2%	-0.8%
	RN	68%	42%	-26%	7%	7%	--	1%	1%	–	1%	2%	+1%	22%	42%	6%	2%	0.1%	-1.9%
	APRN	56%	18%	-38%	4%	4%	--	0%	0%	–	33%	14%	-19%	5%	62%	1%	2%	0.1%	-1.9%
Idle Capacity	*CNA*	4%	7%	+3%	13%	15%	+2%	9%	16%	+7%	7%	0%	-7%	9%	22%	19%	--	0%	–
	LPN	1%	1%	–	11%	19%	+8%	24%	23%	-1%	2%	6%	+4%	11%	27%	19%	0%	0%	–
	RN	6%	7%	+1%	12%	13%	+1%	6%	2%	-4%	7%	2%	-5%	10%	8%	12%	5%	0%	-5%
	APRN	4%	3%	-1%	27%	13%	-14%	0%	--	–	8%	0%	-8%	32%	11%	21%	0%	0%	–
Turnover Rate	*CNA*	17%	24%	+7%	73%	74%	+1%	56%	76%	+20%	18%	13%	-5%	40%	19%	49%	--	0%	–
	LPN	21%	19%	-2%	36%	48%	+12%	29%	27%	-2%	19%	13%	-6%	67%	52%	13%	15%	50%	+35%
	RN	14%	12%	-2%	56%	48%	-8%	48%	40%	-8%	14%	12%	-2%	30%	4%	22%	14%	18%	+4%
	APRN	8%	5%	-3%	5%	22%	+17%	0%	--	–	11%	5%	-6%	22%	0%	23%	0%	20%	+20%
New Positions	*CNA*	2%	0.2%	-1.8%	5%	14%	+9%	19%	6%	-13%	2%	1%	+1%	20%	4%	56%	--	0%	–
	LPN	3%	0.0%	-3%	8%	19%	+11%	12%	14%	+2%	7%	2%	-5%	25%	16%	43%	0%	0%	–
	RN	2%	0.0%	-2%	6%	12%	+6%	9%	1%	-8%	10%	4%	-6%	14%	1%	17%	9%	0%	-9%
	APRN	7%	0.5%	-6.5%	0%	26%	+26%	0%	0%	–	12%	2%	-10%	54%	0%	26%	0%	0%	–
Projected Change in Active Capacity	*CNA*	+8%	+7%	-1%	+18%	+25%	+7%	+23%	+21%	-2%	+9%	+1%	-8%	+24%	25%	48%	0%	0%	–
	LPN	+5%	+1%	-4%	+18%	+32%	+14%	+32%	+33%	+1%	+8%	+8%	--	+29%	37%	43%	0%	0%	–
	RN	+8%	+7%	-1%	+17%	+23%	+6%	+14%	+3%	-11%	+16%	+6%	-10%	+21%	9%	24%	+13%	0%	-13%
	APRN	+10%	+3%	-7%	+27%	+31%	+4%	0%	+100%**	+100%**	+18%	+2%	-16%	+56%	11%	37%	0%	0%	–

* In 2015, Hospice and Home Health settings were analyzed as one category, whereas in 2017, they were analyzed separately. Because of these groupings, a direct change comparison between years cannot be made.

** Since there are no APRNs in the Assisted Living Center Workforce, any added positions would exponentially increase the growth rate. Because of this, potential growth capacity was calculated as 100%.

APPENDIX B:

SURVEY INSTRUMENT

Utah Nursing Workforce, 2017: Demand Survey

Q1 **Indicate the type of facility you represent**

- ☐ Ambulatory Care
- ☐ Assisted Living Facility
- ☐ General Medical/Surgical Hospital
- ☐ Home Health Care Services
- ☐ Hospice
- ☐ Skilled Nursing Facility
- ☐ Specialty Hospital
- ☐ Long-Term Care Facility

Other (please specify): _____

Q2 **Indicate the number of Full-Time and Part-Time nurses currently employed, as of February 1, 2017** *Full-time= Over 36 hours worked per week Part-Time= 1-35 hours worked per week*

	Full-time		Part-Time
Certified Nursing Assistant (CNA)		Certified Nursing Assistant (CNA)	
Licensed Practical Nurse (LPN)		Licensed Practical Nurse (LPN)	
Registered Nurses (RN)		Registered Nurse (RN)	
Advanced Practice Nurse (CNM, CRNA, NP, CNS)		Advanced Practice Nurse (CNM, CRNA, NP, CNS)	

Q3 **List the total number of Full-Time equivalents currently occupied, as of February 1, 2017** *To find FTEs, divide each individual hours per week by 40, then sum. Ex: Someone working 36 hours per week (36/40)=.90 FTE*

CNA		CNM	
LPN		CRNA	
RN		NP	
APRN		CNS	

Q4 **Indicate the number of per diem and contract/agency/traveling nurses currently employed as of February 1, 2017**

	Per Diem		Contract/Agency/Traveling
CNA		CNA	
LPN		LPN	
RN		RN	
APRN		APRN	

Q5 **What is the average length of time a contract/agency/traveling nurse has been employed by your organization during the past 12 months?**

CNA	
LPN	
RN	
APRN	

Q6 **Indicate the number of vacant positions being actively recruited at your facility (as of February 1, 2017)**

	Full-Time		Part-Time
CNA		CNA	
LPN		LPN	
RN		RN	
APRN		APRN	

Q7 **Indicate the number of FTE positions being actively recruited at your facility and, on average, how many weeks does it take to fill these vacancies? (As of February 1, 2017)**

	Number		Weeks
CNA		CNA	
LPN		LPN	
RN		RN	
APRN		APRN	

Q8 **What percentage of RN vacancies require being filled with a nurse with a BSN?**

BSN % ☐

Q9 **How many NEW graduates have you hired over the last twelve months?**

CNA ☐
LPN ☐
RN ☐
APRN ☐

Q10 **Please mark the TOP THREE nursing areas that have been the MOST DIFFICULT TO FILL at your facility:**

- Case Manager/Discharge Planners ☐
- Critical Care ☐
- Cardiac/Cardiovascular Care ☐
- Chronic Care ☐
- Dermatology ☐
- Emergency or Trauma Care ☐
- Gastrointestinal ☐
- General Medical surgical ☐
- Gynecology/Obstetrics ☐
- Hospice ☐
- Infectious/Communicable Disease ☐
- Labor & Delivery/Postpartum Care ☐
- Nurse Administrators ☐
- Nurse Anesthetists ☐
- Nurse Midwives ☐
- Nurse Practitioners (all types) ☐
- Neurological ☐
- Occupational Health ☐
- Operating Room ☐
- Oncology ☐
- Pediatrics ☐
- Pediatrics (critical care) ☐
- Pre-and Post-Op Care ☐
- Primary Care ☐
- Psychiatric/Mental Health ☐
- Pulmonary ☐
- Radiology ☐
- Rehabilitation ☐
- Telemetry ☐
- Other ☐

Q11 Indicate the number of nurses who have LEFT THE ORGANIZATION (VOLUNTARY/INVOLUNTARY) in the past twelve months:

	Full-Time		Part-Time
CNA		CNA	
LPN		LPN	
RN		RN	
APRN		APRN	

Q12 How many nurses have retired in the last twelve months?

CNA	
LPN	
RN	
APRN	

Q13 Indicate the number of NEW POSITIONS your organization intends to create over the next twelve months:

	Full-Time		Part-Time
CNA		CNA	
LPN		LPN	
RN		RN	
APRN		APRN	

Q14 Do you plan to change your nursing staff mix significantly in the next twelve months? If so, please describe what changes you will be making.

☐ Yes ☐ No

Q15 How would you define the current vacancy rate for each nursing profession at your facility?

	Low	Average	High
CNA			
LPN			
RN			
APRN			

Q16 How has the total number of nursing professionals at your facility changed over the LAST year?

	Fewer	Same	More
CNA			
LPN			
RN			
APRN			

Thank you for your participation. Please return the survey in the enclosed envelope.

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Phone: 801-526-4554 • Fax: 801-526-4551 • www.utahmec.org

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