



Survey of Health Care Employers in Arizona: Hospitals, 2015

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PREFACE

Survey Background

This report summarizes findings from a survey of hospital employers in Arizona conducted from summer to fall of 2015. This is the first survey of hospital employers in Arizona and provides an opportunity to evaluate overall demand for health care workers in the state. The survey also collected information specific to the hiring and training of newly graduated nurses because they are at particular risk for unemployment during a weak labor market. The data obtained in this survey reveal the regional variation in the demand for health care workers across Arizona.

Summary of Findings

The 2015 Survey of Health Care Employers in Arizona: Hospitals found that there is a perception of high demand for RNs in the current labor market in Arizona. Approximately 84 percent of hospitals reported a perception of high demand for staff RNs, and over 78 percent of hospitals reported this for RNs in other roles. Demand was reported to be in balance with the supply available for aides/unlicensed nursing assistants, medical assistants, physical therapists, and social workers. Demand for RNs was strongest among hospitals in the Tucson and Northern Arizona regions. Demand for staff was generally higher in urban settings than rural areas.

Over 47 percent of all hospitals reported that employment of staff RNs has increased over the past year, and nearly 81 percent of hospitals reported employing RNs in other roles than as a staff RN. Approximately 88 percent of hospitals reported a preference for hiring baccalaureate-prepared RNs, but no hospitals required it. Nearly 56 percent of all hospitals reported that BSN-prepared nurses represent 75 to 100 percent of all employed RNs in their hospital, which may explain why nearly 69 percent of hospitals reported no plans to increase the share of baccalaureate-trained nurses on staff.

Over 76 percent of hospitals reported having a formal clinical residency program open to new RN graduates who are not guaranteed to be hired. For hospitals with a training program, the programs are largely developed by the hospitals themselves. Approximately 96 percent of programs pay participating new graduates, and nearly 78 percent of these programs reported that 75 to 100 percent of participants are offered a job.

Approximately 76 percent of responding hospitals reported creating new job classifications in the past year. These new positions were most frequently related to case management, patient care navigation and, to a lesser degree, care coordination and documentation specialists. The challenges associated with hiring or moving RNs into these new roles were almost uniformly described by hospitals as being related to finding experienced staff willing to relocate, as well as dealing with the burden of staff shortages as staff are moved into new roles.

Nearly all hospitals reported expectations that staff employment for all types of workers would increase over the next three years; very few hospitals reported expectations that any position would employ fewer numbers. The most frequently reported reasons for expected increases in employment were

anticipated increases in patient acuity, hospital bed capacity, and patient census. Over three-quarters of hospitals reported planned new job classifications in the next two years.

Arizona Healthcare Workforce Hospitals, 2015

The University of California, San Francisco conducted the *Survey of Health Care Employers in Arizona: Hospitals, 2015* in the spring of 2016. The survey captured responses from 43% of the hospitals in Arizona. Overall survey results indicate:

DEMAND for MEDICAL STAFF



Respondents expressed a **HIGH DEMAND** for:

- Registered Nurses – Staff Providing Direct Patient Care
- Registered Nurses – Managerial and Care Coordination

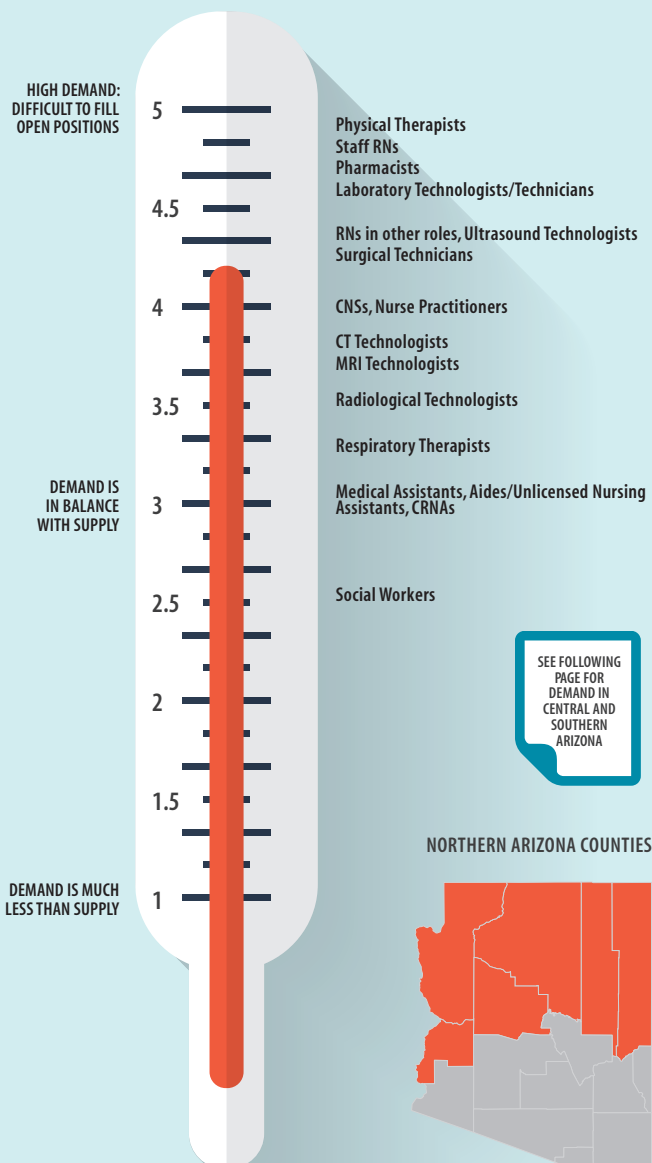
Overall, there is **BALANCED** supply and demand for:

- Patient Aides/Unlicensed Nursing Assistants
- Medical Assistants
- Physical Therapists
- Social Workers



Demand is generally higher in **URBAN** settings than in **RURAL** areas.

NORTHERN ARIZONA LABOR MARKET DEMAND FOR HOSPITALS



PROJECTED EMPLOYMENT NEEDS

Hospitals expect growth in nearly every occupation over the next three years, but particularly for:

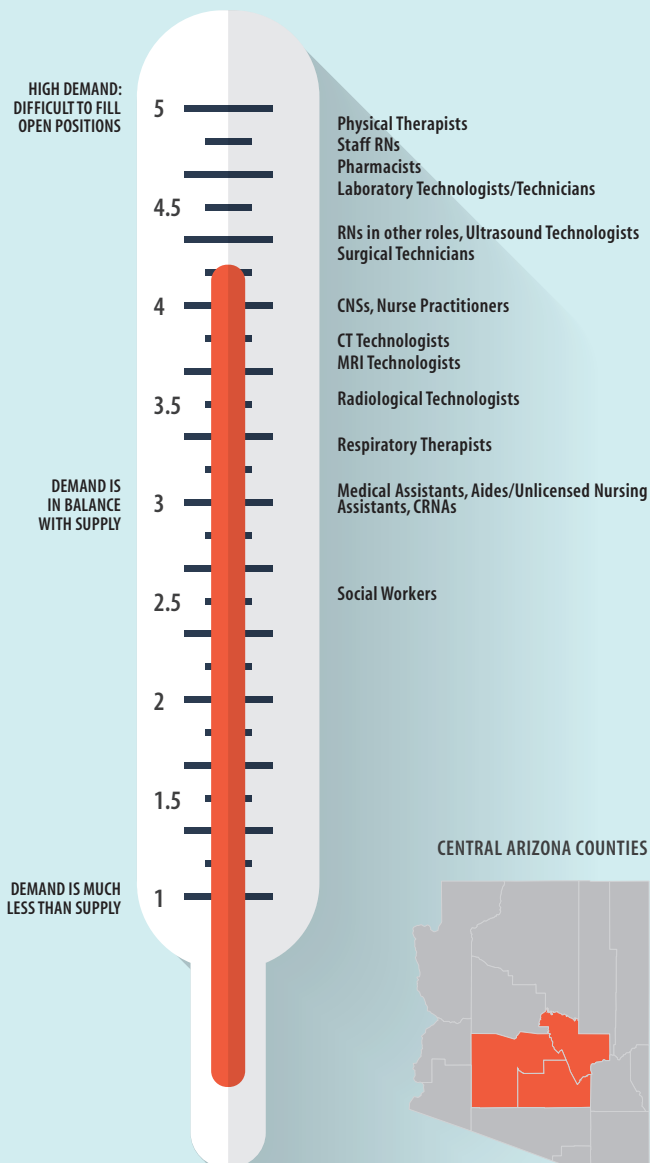


76% of hospitals **CREATED NEW RN** job classifications over the past year

78% **ANTICIPATE CREATING NEW RN-related** job classifications in the next two years – specifically relating to care coordination, case management, and specific areas of specialty care



CENTRAL ARIZONA LABOR MARKET DEMAND FOR HOSPITALS



SOUTHERN ARIZONA LABOR MARKET DEMAND FOR HOSPITALS*

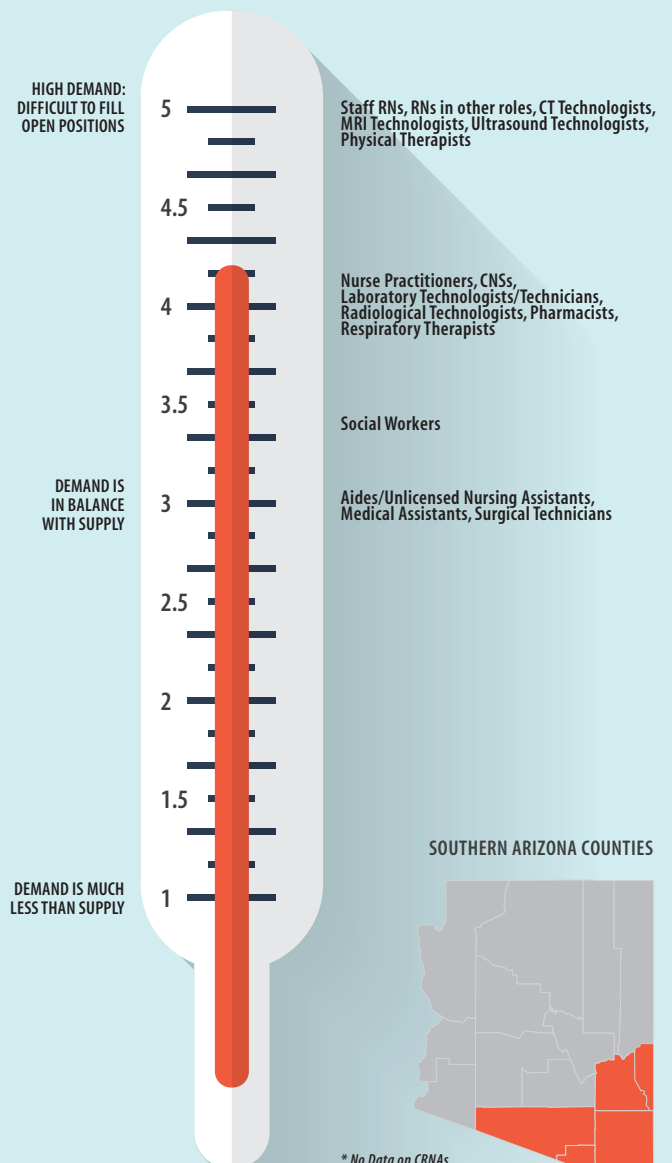


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BACKGROUND: HEALTH WORKER DEMAND IN ARIZONA

Arizona, along with the rest of the nation, experienced a deep economic recession starting in December 2007 and a slow economic recovery since mid-2009. While the state's economy has been recovering, there have been significant changes in health care financing and delivery. The state restored and expanded Medicaid coverage, and the implementation of the Affordable Care Act (ACA) of 2010 expanded private health insurance access to thousands in the state. The ACA contains provisions that are spurring an increased emphasis on the integration of care, providing high-value care, and considering population health broadly. In addition, Arizona faces an aging population, with increasing rates of chronic conditions and disabilities.¹

These factors are driving demand growth for health care workers across the state. Over the past decade, employment grew in all the health occupations in Arizona, from 75,490 in 2004 to 135,070 in 2013.² Shortages of many health workers have been reported in recent years, including for physicians, and survey research has revealed that physicians are the most difficult health professional to recruit, followed by nurse practitioners and physician assistants.³

Licensed nurse shortages also are a significant concern for Arizona. The U.S. Bureau of Health Workforce (BHW) projects that Arizona will need 87,200 registered nurses (RNs) by 2025, but supply will be only 59,100 RNs, producing a shortfall of 32 percent. BHW also forecasts a shortfall of 9,590 licensed practical nurses (LPNs), which is about 50 percent of anticipated demand.⁴ This shortfall is alarming, particularly since graduations from Arizona RN education programs grew 166 percent from 2002 to 2012 but are still not sufficient to meet projected demand.⁵ In addition, the Arizona Board of Nursing has expressed concern that too small a share of Arizona's RNs have baccalaureate-level education – in 2012, only 54 percent had a bachelor's or higher degree in any field, not necessarily in nursing, in contrast to the recommendation of the Institute of Medicine that 80 percent of all nurses hold a bachelor's or higher degree by 2020.⁶

Despite these projections of shortages of nurses, in recent years there have been reports of new nursing graduates facing difficulty finding jobs across the United States. The supply of RNs increased through delayed retirements, nurses returning to work, and part-time nurses working full-time, likely due to the increased financial pressure the recession placed on families. Additionally, the recession caused significant financial challenges for hospitals and other health care employers, with many cutting back on

¹ Borns, Kristin, and VanPelt, Kim. Health Workforce, Healthy Economy. Arizona Health Futures Policy Primer, December 2014.

² Data from the Arizona Department of Administration, reported in Irvine, Jane, and William G. Johnson, Allied Health Needs Assessment. Phoenix, AZ: Maricopa Community Colleges. May 14, 2015.

³ Tabor, Joe, Nick Jennings, Lindsay Kohler, Bill Degnan, Howard Eng, Doug Campos-Outcalt, and Dan Derksen. Arizona Center for Rural Health 2015 Supply and Demand Study of Arizona Health Practitioners and Professionals. Tucson, AZ: University of Arizona. February 2016.

⁴ Bureau of Health Workforce, Health Resources and Services Administration, U.S. Department of Health and Human Services. The Future of the Nursing Workforce: National and State-Level Projections, 2012-2025. Rockville, MD: U.S. Department of Health and Human Services. December 2014.

⁵ Randolph, Pamela K. Arizona State Board of Nursing Summary and Analysis of Annual Reports From Arizona Nursing Education Programs Calendar Year 2012. Arizona State Board of Nursing. 2012.

⁶ Randolph, Pamela K. Arizona State Board of Nursing Summary and Analysis of Annual Reports From Arizona Nursing Education Programs Calendar Year 2012. Arizona State Board of Nursing. 2012.

hiring new RN graduates due to the lack of vacant RN positions, reduced demand for healthcare services, and limited financial resources to pay for new graduate orientation programs or residencies.⁷ Surveys of recently-licensed Arizona RNs conducted from 2009 through 2013 revealed that 17 to 21 percent were not employed in nursing, due to a reported lack of jobs for new graduates.⁸ In 2014, this percentage declined to 12 percent, suggesting improvement in job availability.⁹ Employment rates were higher for baccalaureate-prepared RNs than for associate-prepared nurses, reflecting employer preferences for baccalaureate-educated nurses.

Other health care occupations also are facing substantial growth in demand. About 47,000 new jobs are expected in the allied health professions between 2013 and 2020, with the greatest growth projected for personal care aides, medical records and health information technicians, emergency medical technicians and paramedics, medical and health services managers, medical assistants, and pharmacy technicians. The Affordable Care Act's provisions also are expected to spur growth in emerging occupations, such as expanded function dental assistants, community dental health coordinators, health and transition coaches, community health workers, and integrated care case managers.¹⁰

The challenge of meeting anticipated demand for health care workers is made more complex by the significant geographic variation found in Arizona. The state has one of the largest metropolitan areas in the United States and some of the most rural areas in the country.¹¹ The numbers of physicians, physician assistants, nurse practitioners, RNs, and pharmacists per 100,000 population are substantially higher in urban settings of Arizona than rural settings.¹²

To understand the impact of Arizona's aging population, growing insurance coverage, and changing delivery system on current and future needs for health care workers, the Vitalyst Health Foundation and the City of Phoenix commissioned the University of California, San Francisco (UCSF), to survey hospitals, community health centers, long-term care facilities, and home health agencies in Arizona. Separate surveys were sent to each type of health care delivery organization, including questions about employment, vacancies, perceptions of the labor market, anticipated changes in demand, and reasons for future changes. Together, these surveys are designed to develop an accurate and up-to-date understanding of the demand for health care workers in Arizona.

⁷ Staiger, Douglas O, Auerbach, David I., and Buerhaus, Peter I. "Registered Nurse Supply and the Recession – Are We In A Bubble?" *New England Journal of Medicine*, March 21, 2012.

⁸ Borns, Kristin, and VanPelt, Kim. *Health Workforce, Healthy Economy. Arizona Health Futures Policy Primer*, December 2014. Johnson WG, Harootunian G. *What happened to the shortage of registered nurses: the Arizona experience 2008-2012*. Phoenix, AZ: Center for Health Information & Research (Prepared for Arizona Hospital and Healthcare Association). December 2013.

⁹ Randolph, Pamela K. *Arizona State Board of Nursing Employment of Newly Licensed RNs*, 2014.

¹⁰ Irvine, Jane, and William G. Johnson, *Allied Health Needs Assessment*. Phoenix, AZ: Maricopa Community Colleges. May 14, 2015.

¹¹ Borns, Kristin, and VanPelt, Kim. *Health Workforce, Healthy Economy. Arizona Health Futures Policy Primer*, December 2014.

¹² Tabor, Joe, Nick Jennings, Lindsay Kohler, Bill Degnan, Howard Eng, Doug Campos-Outcalt, and Dan Derksen. *Arizona Center for Rural Health 2015 Supply and Demand Study of Arizona Health Practitioners and Professionals*. Tucson, AZ: University of Arizona. February 2016.

SURVEY METHODS

The Survey of Health Care Employers in Arizona: Hospitals was one of four survey instruments based on the questionnaire used by the University of California, San Francisco (UCSF) in the Survey of Nurse Employers. With input from an Advisory Committee convened by Vitalyst Health Foundation and City of Phoenix, a survey instrument was designed for each setting to meet the research goals of the Foundation, and to understand current and future hiring needs of health care employers in Arizona, including hospitals, home health agencies, community clinics, and long-term care facilities. The surveys were designed to provide a snapshot of the current workforce in Arizona, and the challenges of training, recruiting, and retaining an adequate workforce. The Survey of Health Care Employers in Arizona: Hospitals was structured for human resources directors in hospital settings to provide data on staffing, including current headcounts and vacancies, as well as their perceptions of the labor market, expectations for hiring, and the characteristics of their new RN graduate residency programs.

The survey was posted online following approval by the UCSF Committee on Human Research. Survey emails were sent to all human resources directors provided by the Vitalyst Health Foundation and City of Phoenix. The invitation from UCSF included a link to the online version of the survey, as well as a fillable-PDF form that could be completed by the respondent and returned to UCSF via email or fax. Facilities were contacted with follow-up emails and telephone calls, both by UCSF and members of the Advisory Committee, to encourage participation.

Survey Participation and Data Analysis

The Survey of Health Care Employers in Arizona: Hospitals elicited 22 unique responses, representing 42 hospitals and 3,586 beds.¹³ These totals represent approximately 26 percent of the total number of licensed beds at hospitals in Arizona, and 43 percent of the total hospitals in Arizona.¹⁴

Throughout the report we provide the number of facility responses (N) represented by the statistics in tables and figures. The number of responses reflects the fact that in some cases the data represent multiple hospital facilities.

Certain data are used to describe differences in labor market conditions across geographic regions of Arizona. The multi-hospital data are included in these analyses if they were reported for facilities that were all within the same region; if the facilities crossed regional boundaries the data were excluded. Table 1 below lists the regions used in this report and the counties each region represents.

¹³ Some responding hospitals provided data that also described associated outpatient and specialty clinics, as well as long-term care facilities.

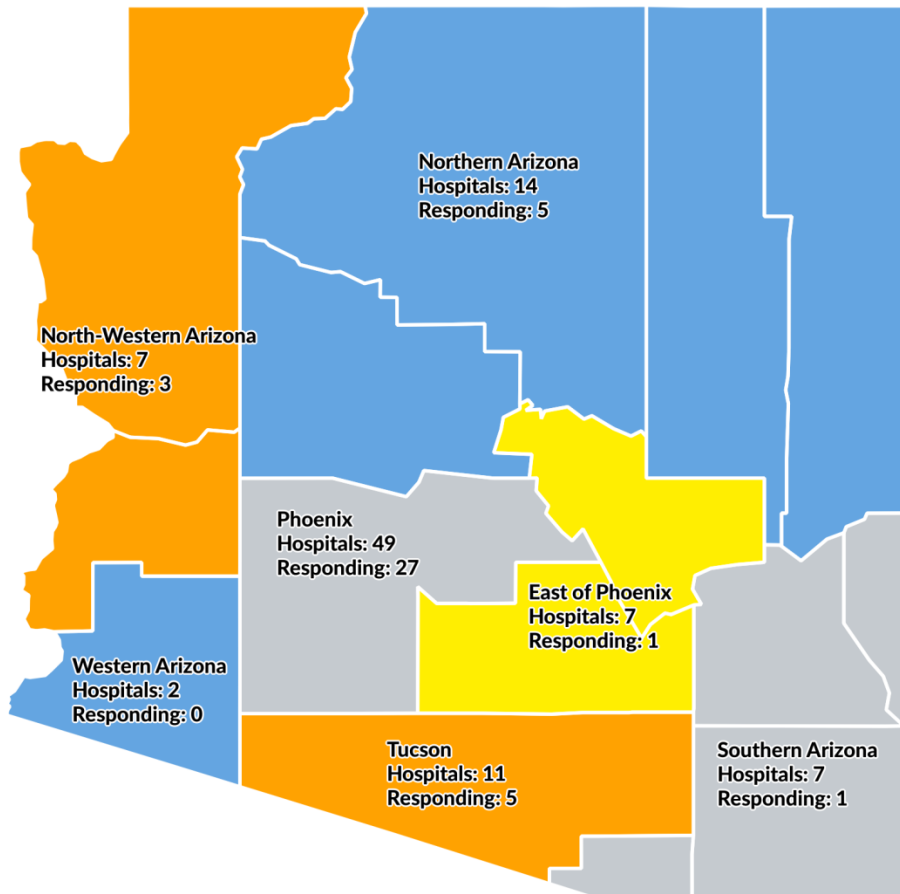
¹⁴ Hospitals were identified using the Arizona Department of Health Services hospital listing database, information derived from the American Hospital Association member database, and hospital listings from the Arizona Hospital and Healthcare Association.

Table 1. Geographic regions and the counties they represent

Region	Counties
Phoenix	Maricopa
Tucson	Pima
Northern Arizona	Apache, Coconino, Navajo, Yavapai
East of Phoenix	Pinal, Gila
Western Arizona	Yuma
North-Western Arizona	Mohave, La Paz
Southern Arizona	Santa Cruz, Cochise, Graham, Greenlee

Figure 1 compares the geographic distribution of hospitals that responded to the UCSF survey with the distribution of hospitals across the geographic regions used in this report. In the UCSF survey, hospitals in Phoenix are overrepresented, while hospitals in the East of Phoenix and Southern Arizona regions are underrepresented, and Western Arizona is not represented. Because there was only one respondent in each of the East of Phoenix and Southern Arizona regions, we do not report disaggregated data for these regions.

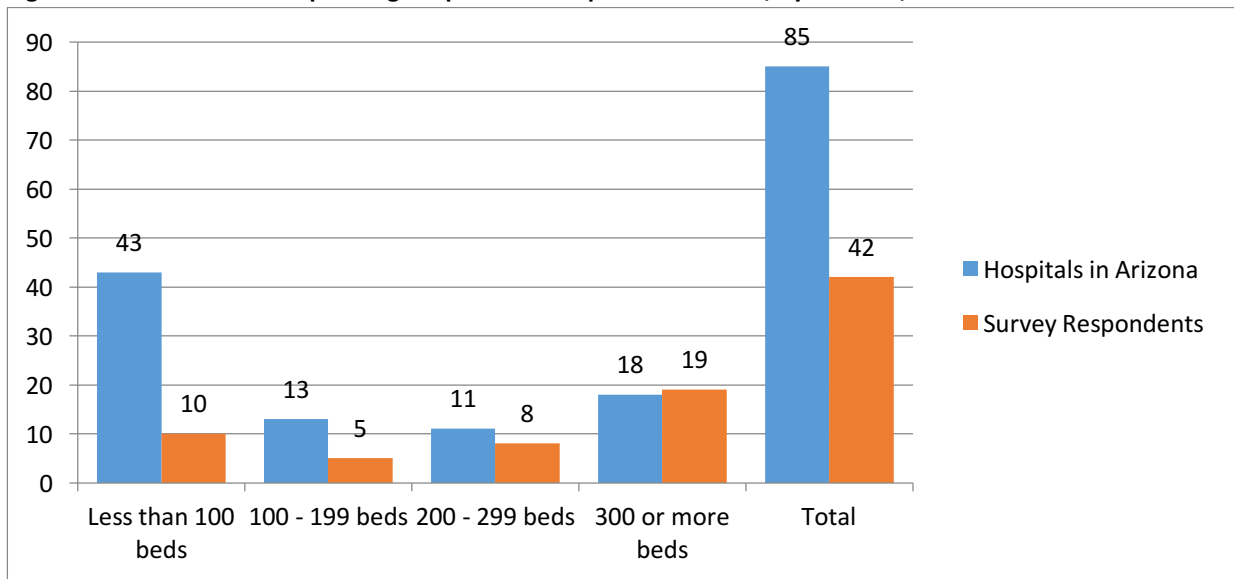
Figure 1. Distribution of responding hospitals vs. all hospitals in Arizona, 2015



Note: Percentages may not sum to 100% due to rounding

Figure 2 compares the distribution of survey respondents with hospitals in Arizona, based on facility size, as measured by the total number of licensed beds. Large hospitals of 400 or more beds are overrepresented in the Arizona survey, while small hospitals of less than 100 beds are underrepresented in the UCSF data.

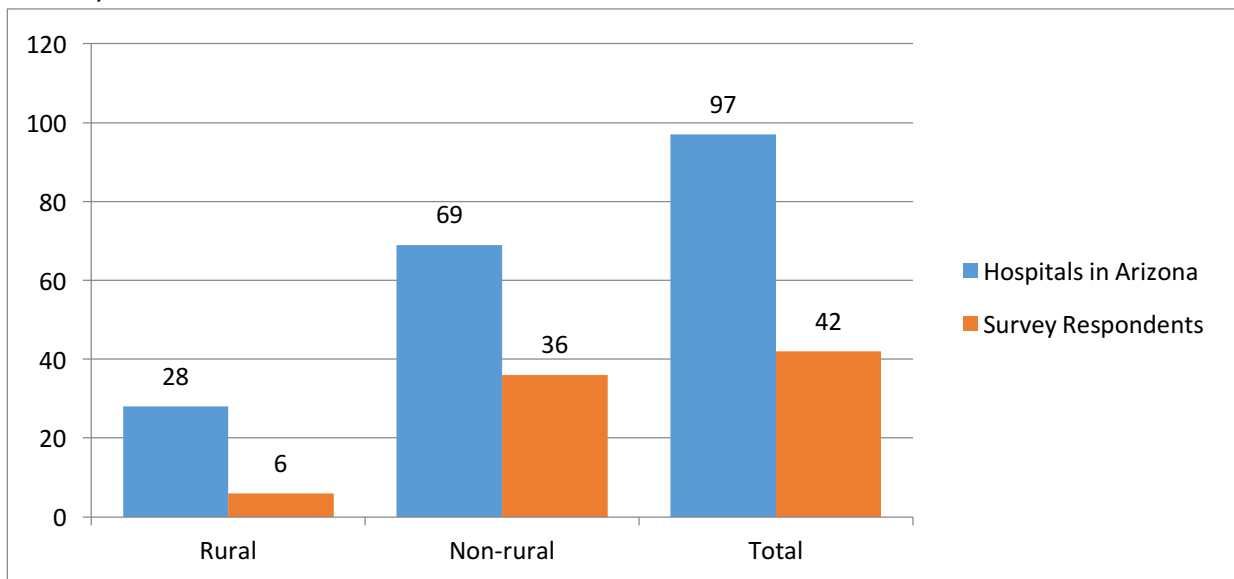
Figure 2. Distribution of responding hospitals vs. hospitals in Arizona, by bed size, 2015



Note: Hospital systems that provided one report crossing multiple regions are excluded.

Figure 3 compares the distribution of survey respondents with hospitals in the state based on whether or not the geographic location of the facility is considered rural.¹⁵ Rural facilities are underrepresented in the data.

Figure 3. Distribution of responding hospitals vs. GAC hospitals in Arizona, by rural/non-rural geographic location, 2015



Note: hospital systems that provided one report crossing both urban and rural regions are excluded.

¹⁵ The rural vs. non-rural status of a facility was determined using the 2010 Rural-Urban Commuting Area codes and the hospital's zip code. For more information see: <http://depts.washington.edu/uwruca/>

FINDINGS

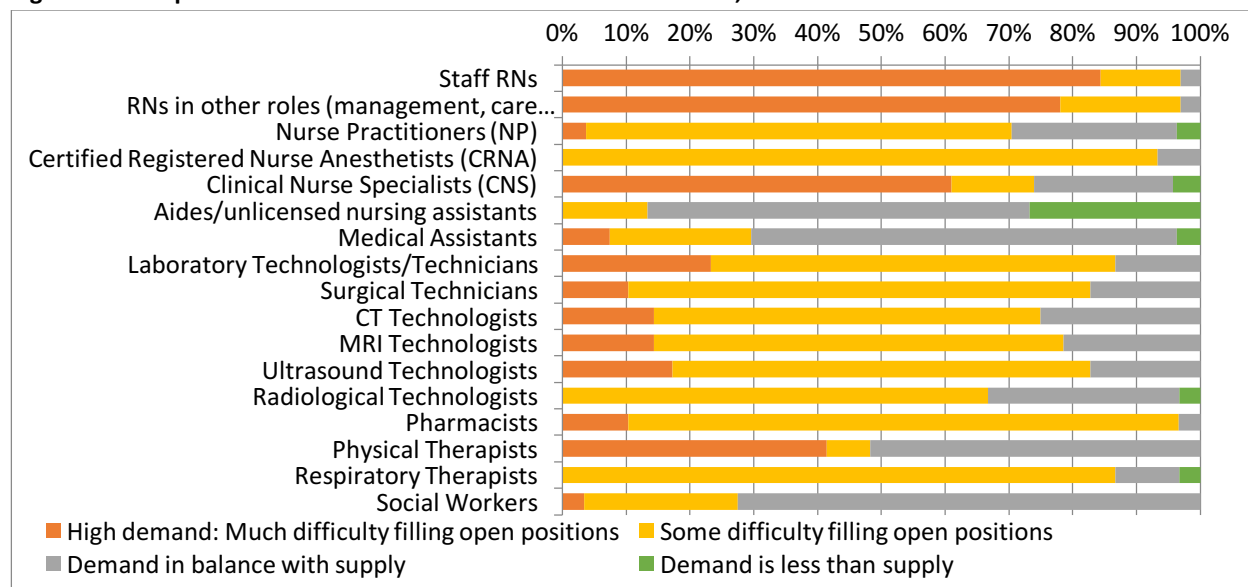
Perception of Labor Market Conditions

Hospitals were asked to report their perception of labor market conditions for hospital staff in their region, using a rank order scale of 1 to 5. A score of “1” indicated that demand for staff was much less than the available supply, while a score of “5” indicated high demand for staff and difficulty filling open positions. Figure 4 and Table 2 compare the reported results of overall labor market conditions for hospital staff in fall 2015.

Approximately 84 percent of hospitals reported a perception of high demand for staff RNs (difficult to fill open positions), and over 78 percent for RNs in other roles (management, care coordination, utilization review, etc.). Other positions with reported high demand include Clinical Nurse Specialists (60.9%). Moderate demand, with some difficulty filling positions, was reported by Arizona hospitals for the following positions: Certified Registered Nurse Anesthetists (93.3%), Respiratory Therapists (86.7%), Pharmacists (86.2%), Surgical Technicians (72.4%), Nurse Practitioners (66.7%), Ultrasound Technologists (66.7%), MRI Technologists (64.3%), Laboratory Technologists/Technicians (63.3%), and CT Technologists (60.7%). Hospitals were asked to describe the types of RN positions that were difficult to fill. Responses indicate particularly high demand for RNs in intensive care units (ICU), cardiac departments and emergency departments, as well as informatics-related positions.

Supply was often reported to be in balance with demand for Aides and unlicensed nursing assistants (60.0%), Medical Assistants (66.7%), Physical Therapists (51.7%), and Social Workers (72.4%). While no position was reported as having demand much less than supply, eight hospitals that have reported Aides/unlicensed nursing assistants as having demand less than supply. No hospitals indicated that there was high demand for Aides/unlicensed nursing assistants.

Figure 4. Perceptions of health worker market demand in Arizona, 2015



Note: No hospitals reported that “demand is much less than supply.”

Table 2. Perception of labor market demand in Arizona, 2015

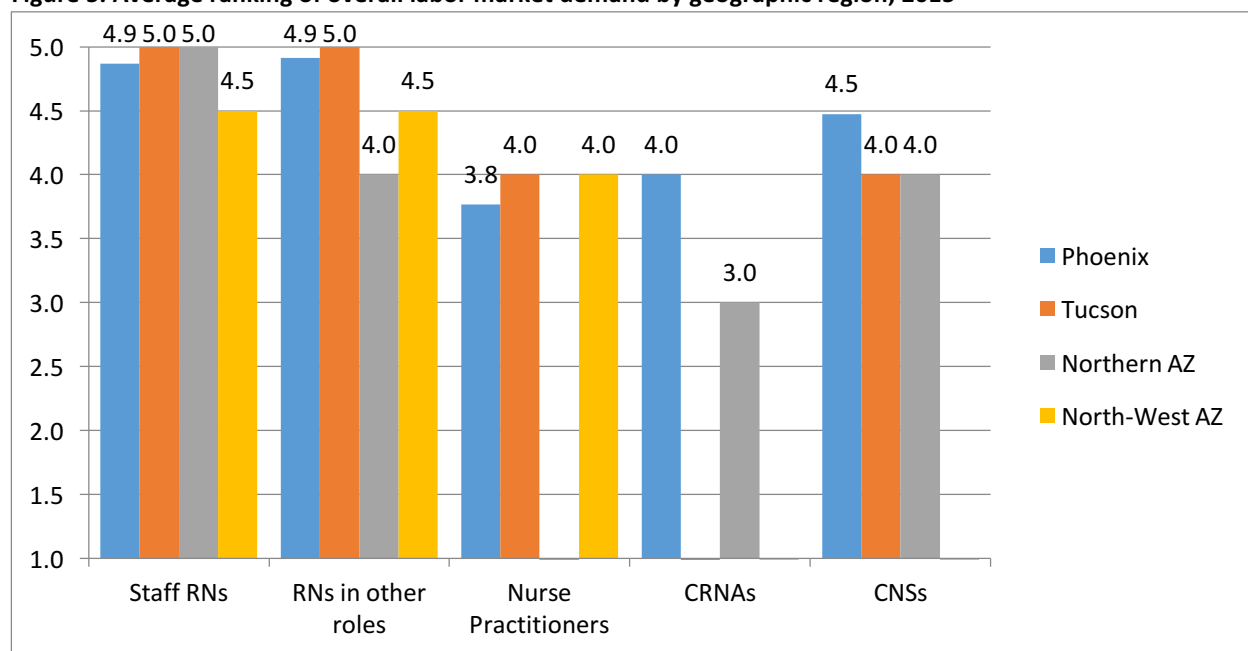
Perception of labor market demand in Arizona, 2015											
Description	High demand		Some difficulty filling positions		Demand is in balance with supply		Demand is less than supply		Demand is much less than supply		Responses
	#	%	#	%	#	%	#	%	#	%	#
Staff RNs	27	84.4	4	12.5	1	3.1	0	0	0	0	32
RNs in other roles (management, care coordination, utilization review, etc.)	25	78.1	6	18.8	1	3.1	0	0	0	0	32
Nurse Practitioners (NP)	1	3.7	18	66.7	7	25.9	1	3.7	0	0	27
Certified Registered Nurse Anesthetists (CRNA)	0	0	14	93.3	1	6.7	0	0	0	0	15
Clinical Nurse Specialists (CNS)	14	60.9	3	13	5	21.7	1	4.3	0	0	23
Aides/unlicensed nursing assistants	0	0	4	13.3	18	60	8	26.7	0	0	30
Medical Assistants	2	7.4	6	22.2	18	66.7	1	3.7	0	0	27
Laboratory Technologists/Technicians	7	23.3	19	63.3	4	13.3	0	0	0	0	30
Surgical Technicians	3	10.3	21	72.4	5	17.2	0	0	0	0	29
CT Technologists	4	14.3	17	60.7	7	25	0	0	0	0	28
MRI Technologists	4	14.3	18	64.3	6	21.4	0	0	0	0	28
Ultrasound Technologists	5	17.2	19	65.5	5	17.2	0	0	0	0	29
Radiological Technologists	0	0	20	66.7	9	30	1	3.3	0	0	30
Pharmacists	3	10.3	25	86.2	1	3.4	0	0	0	0	29
Physical Therapists	12	41.4	2	6.9	15	51.7	0	0	0	0	29
Respiratory Therapists	0	0	26	86.7	3	10	1	3.3	0	0	30
Social Workers	1	3.4	7	24.1	21	72.4	0	0	0	0	29

Note: Percentages may not sum to 100% due to rounding.

Figures 5 through 8 show the average ranking of overall labor market conditions for all surveyed positions by region. There was only one respondent in each of the East of Phoenix and Southern Arizona regions, so these are not reported. The data presented are the average scores for each type of worker, with a 1 indicating low demand relative to supply, and a 5 indicating high demand relative to supply. A score of 3 would indicate a balanced labor market.

Very high demand was reported for staff RNs in the Phoenix, Tucson and Northern Arizona regions, with nearly all hospitals reporting that demand was much higher than the supply available (Figure 5). Overall, there is a perception of strong demand for staff RNs across the state. RNs in other roles also were in very high demand in Phoenix and Tucson, and in moderately high demand relative to supply in Northern Arizona and North-West Arizona. Hospitals that reported conditions for NPs and CNSs generally indicated that demand was higher than the supply available. Demand was more often reported to be balanced with supply for CRNAs.

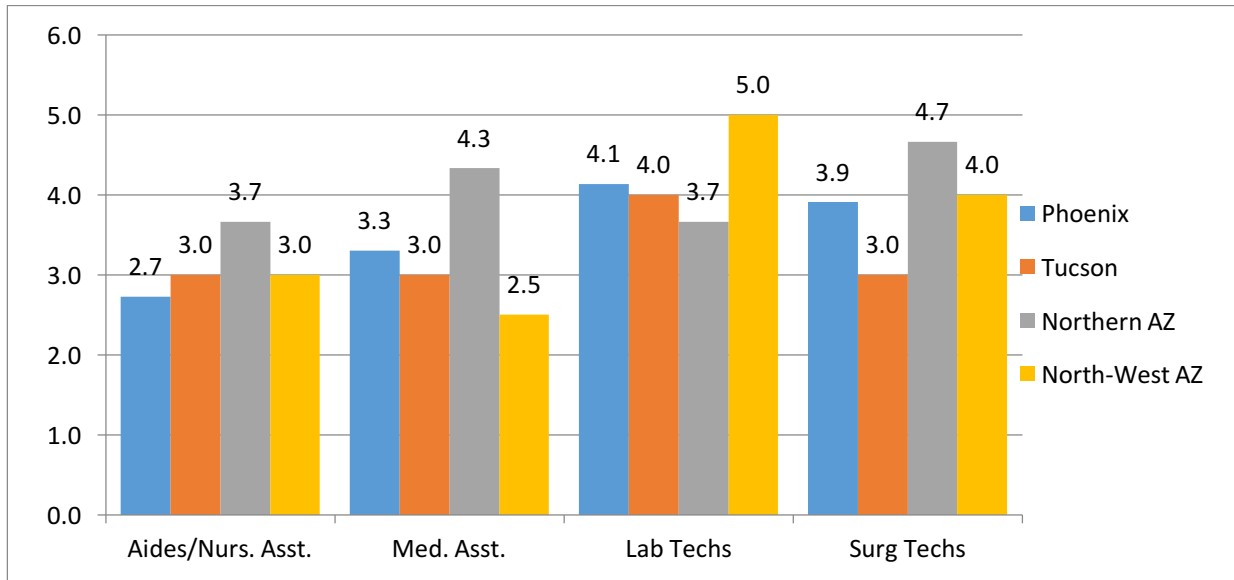
Figure 5. Average ranking of overall labor market demand by geographic region, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

As seen in Figure 6, there is high demand for laboratory technicians and technologists across Arizona, particularly in North-West Arizona. The demand for surgical technicians is high relative to supply in Northern Arizona, North-West Arizona, and Phoenix, but is balanced in Tucson. Demand and supply are generally balanced for aides/nursing assistants and medical assistants, except in Northern Arizona where demand is somewhat higher than supply.

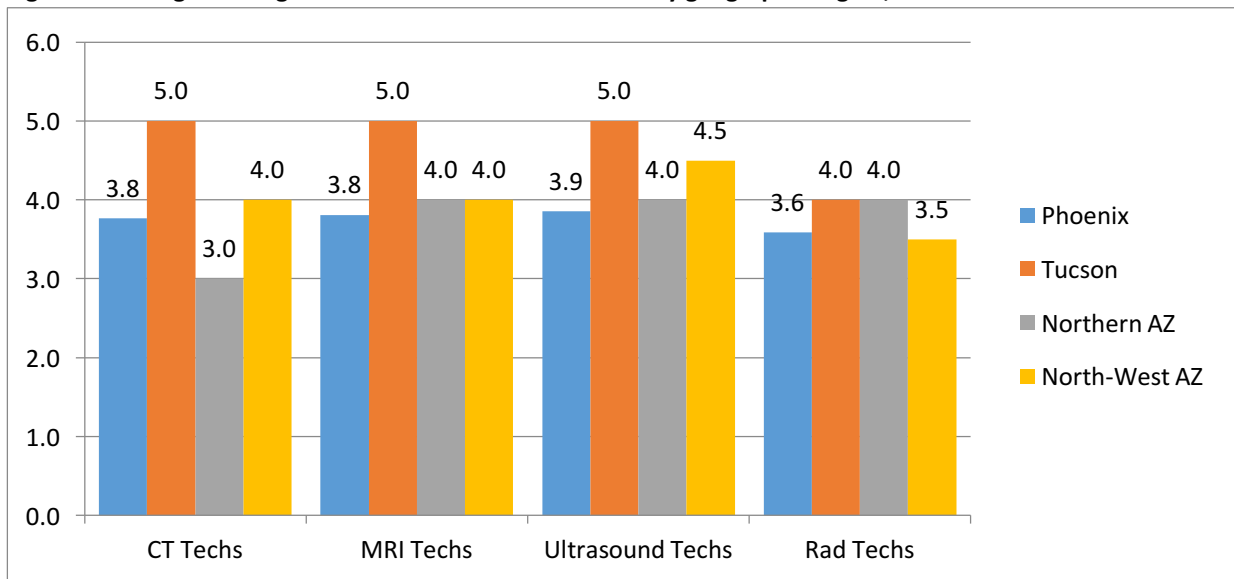
Figure 6. Average ranking of overall labor market demand by geographic region, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Significant shortages of CT technicians, MRI technicians, and ultrasound technicians were reported by hospitals in Tucson (Figure 7). Hospitals in most regions of Arizona reported some shortage of these three occupations, as well as of radiation technicians.

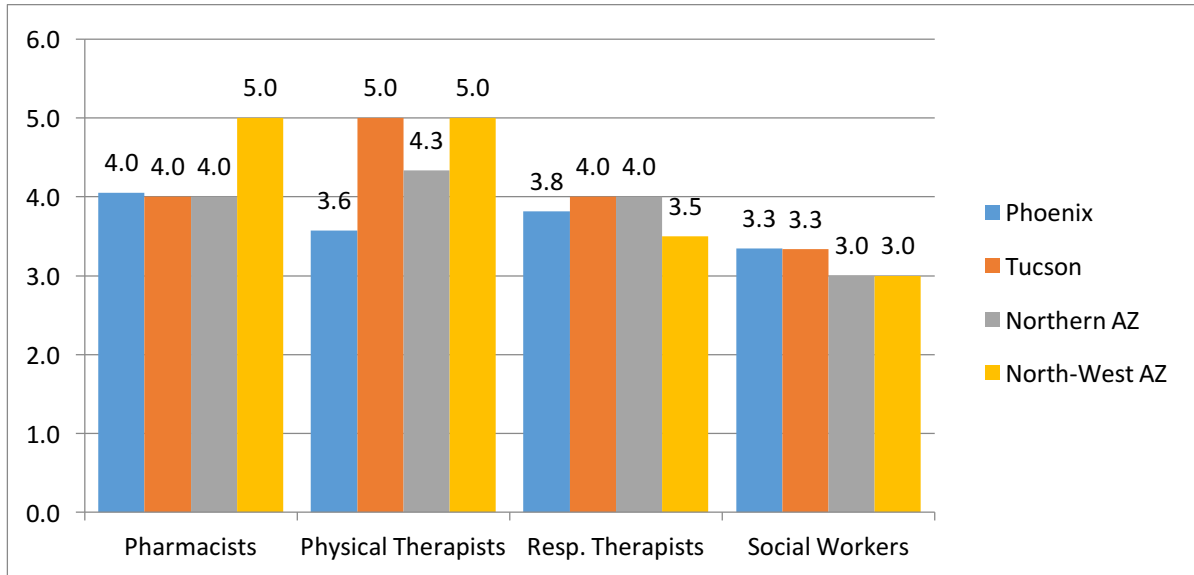
Figure 7. Average ranking of overall labor market demand by geographic region, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

As seen in Figure 8, hospitals in North-West Arizona reported severe shortages of pharmacists and physical therapists, while the labor markets for respiratory therapists and social workers were balanced in this region. On average, there was a moderate shortage of pharmacists, physical therapists, and respiratory therapists reported in Phoenix, Tucson, and Northern Arizona. Demand for social workers was reported as being balanced with supply across the state.

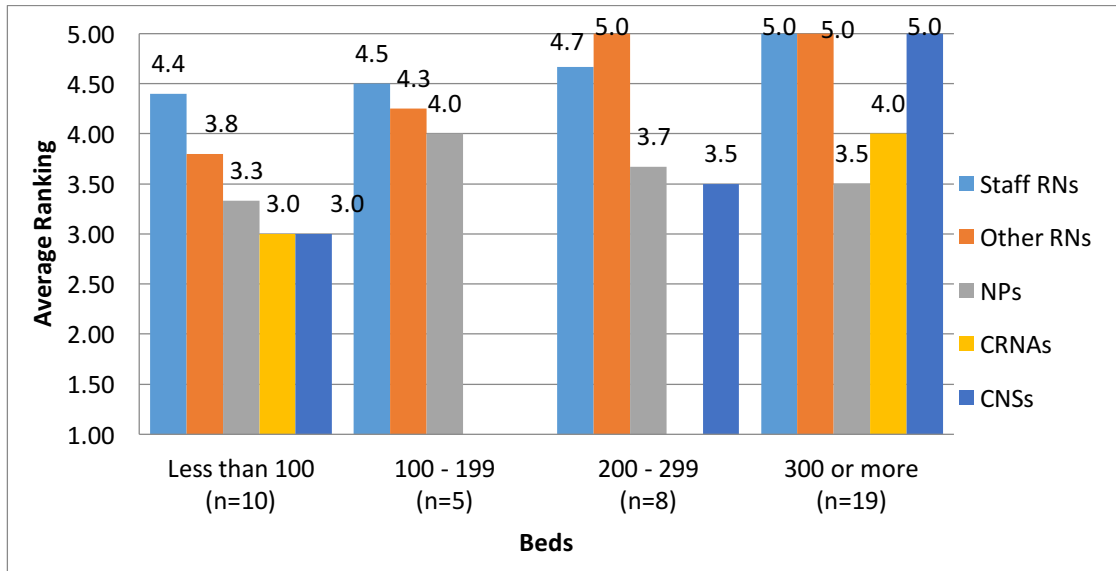
Figure 8. Average ranking of overall labor market demand by geographic region, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Figures 9 through 12 compare the demand for hospital staff by hospital size (total number of licensed beds) for 2015. These data indicate that staff RN demand is high across all hospital sizes, but particularly in large hospitals of over 300 beds (Figure 9). Other RNs were reported as being in higher demand in hospitals with 200-299 total beds and large hospitals with 300 or more beds. NPs were reported as being in higher demand in hospitals with 100-199 beds, while CRNAs and CNSs were reported as being in balanced demand in hospitals of less than 100 beds.

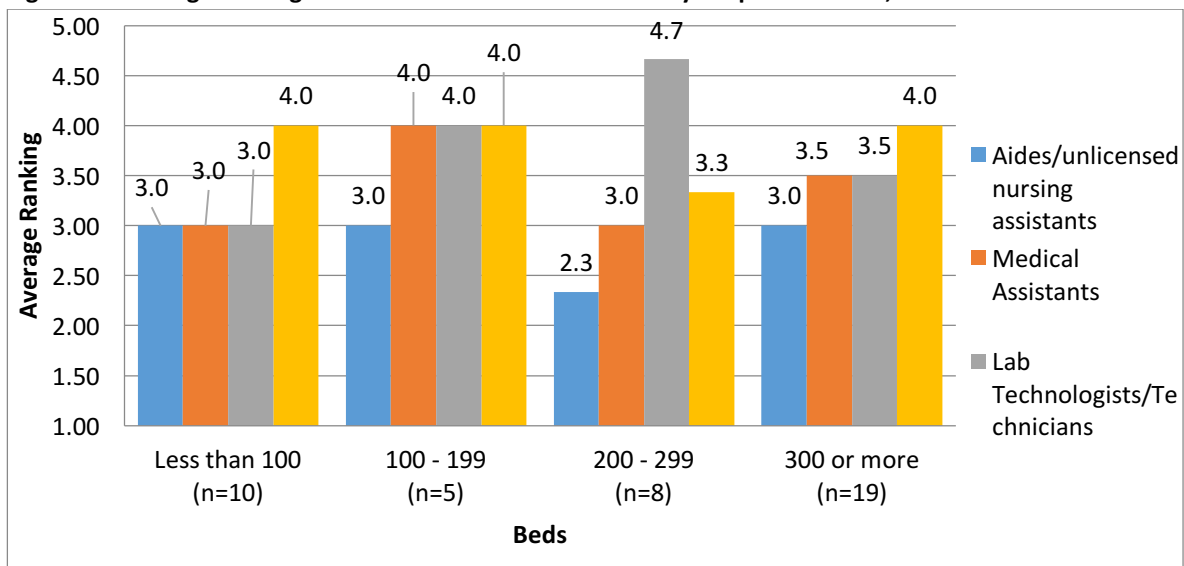
Figure 9. Average ranking of overall labor market demand by hospital bed-size, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Aides were reported as being in lower demand in hospitals with 200-299 beds, and moderate demand was indicated for Medical Assistants in hospitals with 100-199 beds (Figure 10). Lab Technologists/Technicians were reported as being in particularly high demand in hospitals with 200-299 beds. Surgical Technicians showed moderate demand across hospitals of all sizes, with the exception of hospitals with 200-299 beds reporting less demand.

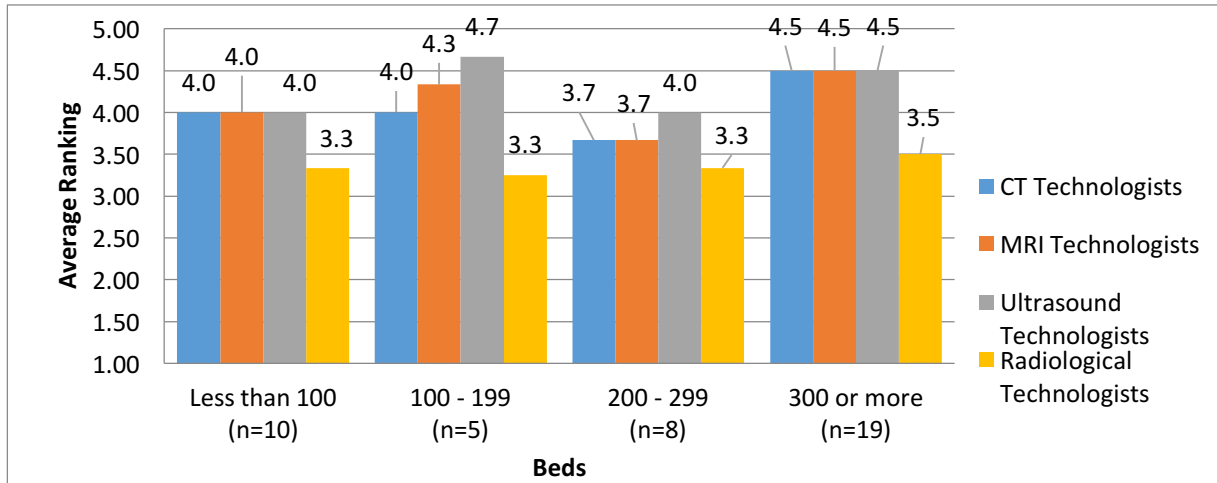
Figure 10. Average ranking of overall labor market demand by hospital bed-size, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

In Figure 11, CT technologists were reported as being in weaker demand for hospitals with 200-299 beds. Demand for MRI technologists was strongest in hospitals with 300 or more beds, and demand for Ultrasound technologists was highest in hospitals with 100-199 beds, while Radiological technologists were weakest in hospitals with 100-199 beds.

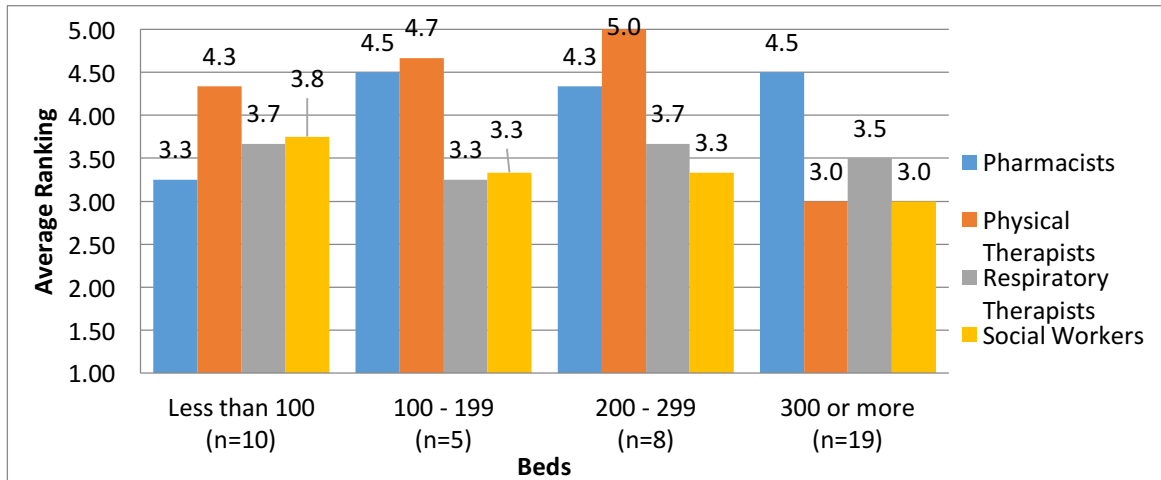
Figure 11. Average ranking of overall labor market demand by hospital bed-size, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

The weakest perception of demand for pharmacists was in hospitals with less than 100 beds (Figure 12). Physical therapists were in high demand in hospitals with less than 300 beds. Respiratory therapists had similar demand across all hospital sizes, with slightly weaker demand in hospitals with 100-199 beds. Social workers were in stronger demand in hospitals with less than 100 beds, and balanced demand in hospitals with 300 or more beds.

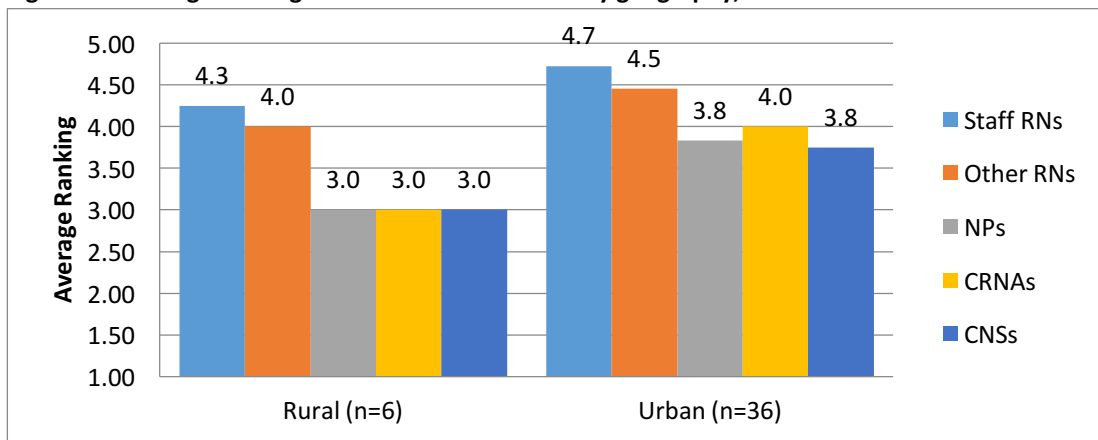
Figure 12. Average ranking of overall labor market demand by hospital bed-size, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Figures 13 through 16 compare average demand for hospital staff by whether or not the hospital is located in a geographically rural area. Among rural hospitals, the average score of 4.25 corresponds to a perception that demand for staff RNs is moderately strong, with some difficulty filling open positions, however, among urban hospitals, an average score of 4.73 indicates an even greater demand for staff RNs relative to supply (Figure 13). Urban hospitals also reported stronger demand than rural hospitals for other RNs, NPs, CRNAs, and CNSs.

Figure 13. Average ranking of labor market demand by geography, 2015

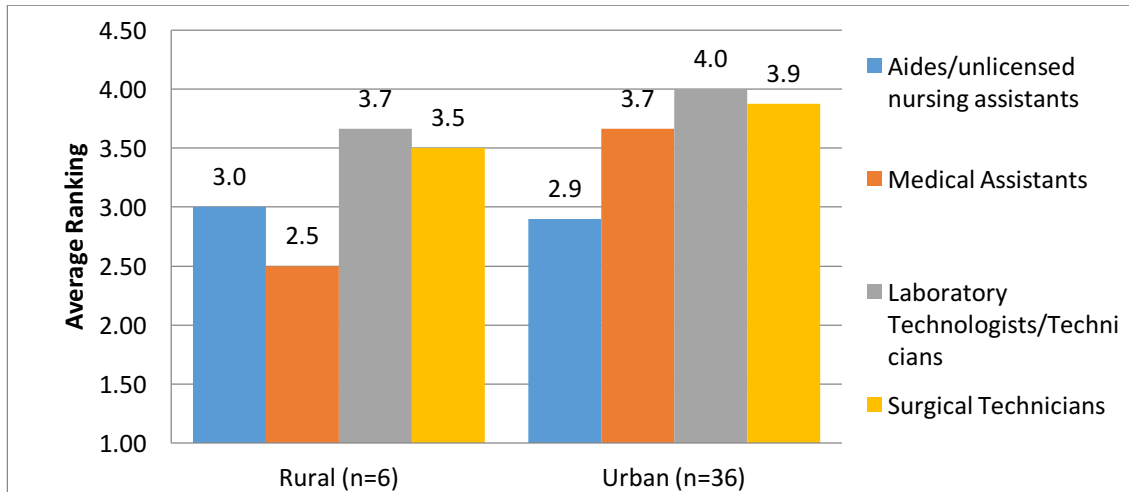


Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Stronger demand for many other categories of hospital personnel was reported by urban hospitals than rural hospitals, as seen in Figure 14, with the exception of Aides/unlicensed nursing assistants. A mean

score of 3.00 corresponds to balanced demand for Aides/unlicensed nursing assistants in rural hospitals; in urban hospitals, a lower score of 2.90 was reported for Aides/unlicensed nursing assistants.

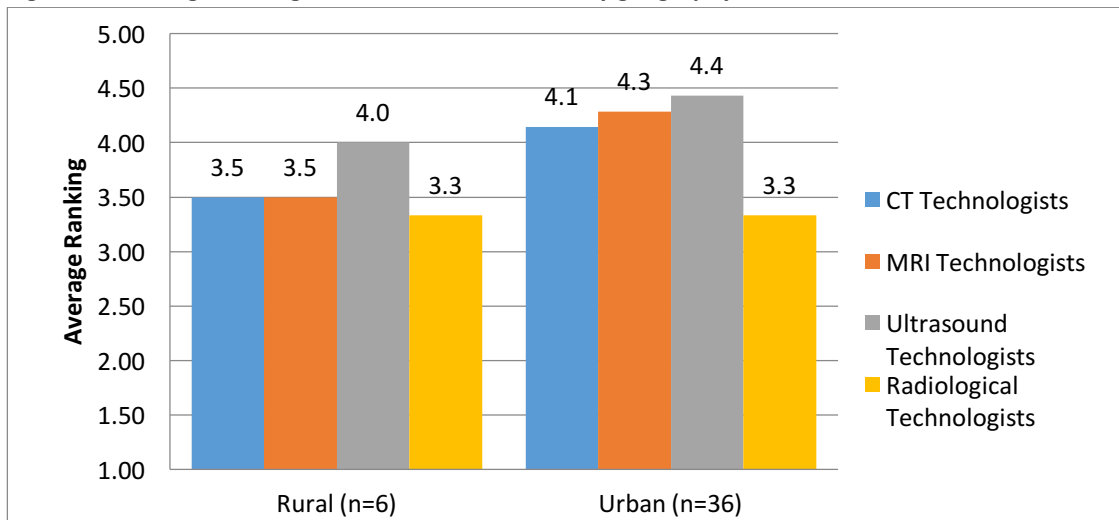
Figure 14. Average ranking of labor market demand by geography, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

In Figure 15, stronger demand was reported by urban hospitals than rural hospitals for all positions except for Radiological Technologists, which had the same score of 3.33 (demand is generally in balance with supply) in both urban and rural hospitals.

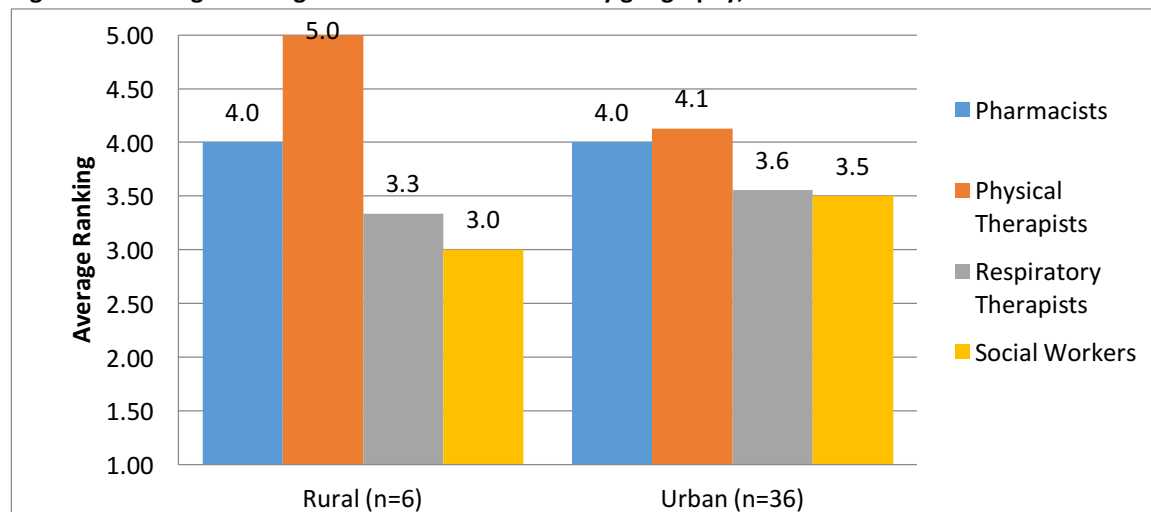
Figure 15. Average ranking of labor market demand by geography, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

In Figure 16, a score of 4.00 (moderate demand) was indicated by both rural and urban hospitals for Pharmacists. Strong demand was reported for Physical Therapists in rural hospitals, but only moderate demand (score of 4.12) was reported in urban hospitals. Demand for Respiratory Therapists and Social Workers was also stronger in urban hospitals than rural hospitals.

Figure 16. Average ranking of labor market demand by geography, 2015



Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Current Employment of Staff

Responding hospitals reported total current employment of 13,992 registered nurses (Table 10). Hospitals were asked to differentiate between staff RNs, who represent more than 80 percent of all employed registered nurses, and non-staff RNs in other roles such as management and care coordination.

As seen in Table 10, there is wide variation in full-time versus part-time employment across the different types of positions. Other RNs are much more likely to work part-time in comparison to staff RNs. Few hospitals reported employment of Clinical Nurse Specialists, and no hospitals reported employment of Certified Registered Nurse Anesthetists. Ultrasound Technologists, Physical Therapists, Respiratory Therapists, and Social Workers are much more likely to work part-time than other hospital positions.

Nearly 14,098 employees across the different types of nursing positions are detailed in Table 3, but APRN nurses (NPs, CRNAs, and CNSs) accounted for just 0.8 percent of the total number employed. Hospitals were asked to describe what “full-time” employment meant at their organization. On average, hospitals defined full-time employment as 38 hours per week.

Table 3. Number of current staff (headcount) by position, as of May 1, 2015

Description	Full-time		Part-time*		Total
	Headcount	% of total	Headcount	% of total	

Staff RNs	10,272	90.1	1,134	9.9	11,406
RNs in other roles (management, care coordination, utilization review, etc.)	2,119	81.9	467	18.1	2,586
Nurse Practitioners (NP)	91	96.8	3	3.2	94
Certified Registered Nurse Anesthetists (CRNA)	0	0.0	0	0.0	0
Clinical Nurse Specialists (CNS)	12	100.0	0	0.0	12
Aides/unlicensed nursing assistants	1,862	85.0	328	15.0	2,190
Medical Assistants	446	94.9	24	5.1	470
Laboratory Technologists/Technicians	338	93.9	22	6.1	360
Surgical Technicians	329	92.9	25	7.1	354
CT Technologists	188	86.6	29	13.4	217
MRI Technologists	80	80.8	19	19.2	99
Ultrasound Technologists	208	75.1	69	24.9	277
Radiological Technologists	402	81.9	89	18.1	491
Pharmacists	393	87.7	55	12.3	448
Physical Therapists	298	73.0	110	27.0	408
Respiratory Therapists	794	79.4	206	20.6	1,000
Social Workers	199	73.7	71	26.3	270

**Note – Some hospitals did not report part-time positions.*

Current Vacancies

Figure 17 and Table 4 present vacancy rates by position as of May 1, 2015. The overall vacancy rate for registered nursing positions was 4.6 percent (Figure 17), but there are differences in the rate depending on the type of nursing position (including full-time versus part-time) (Table 4). Among registered nurses, RN positions in other roles have a higher vacancy rate than staff RNs, with a greater difference between full-time and part-time vacancy rates.

Figure 17. Vacancy rates by position, May 1, 2015

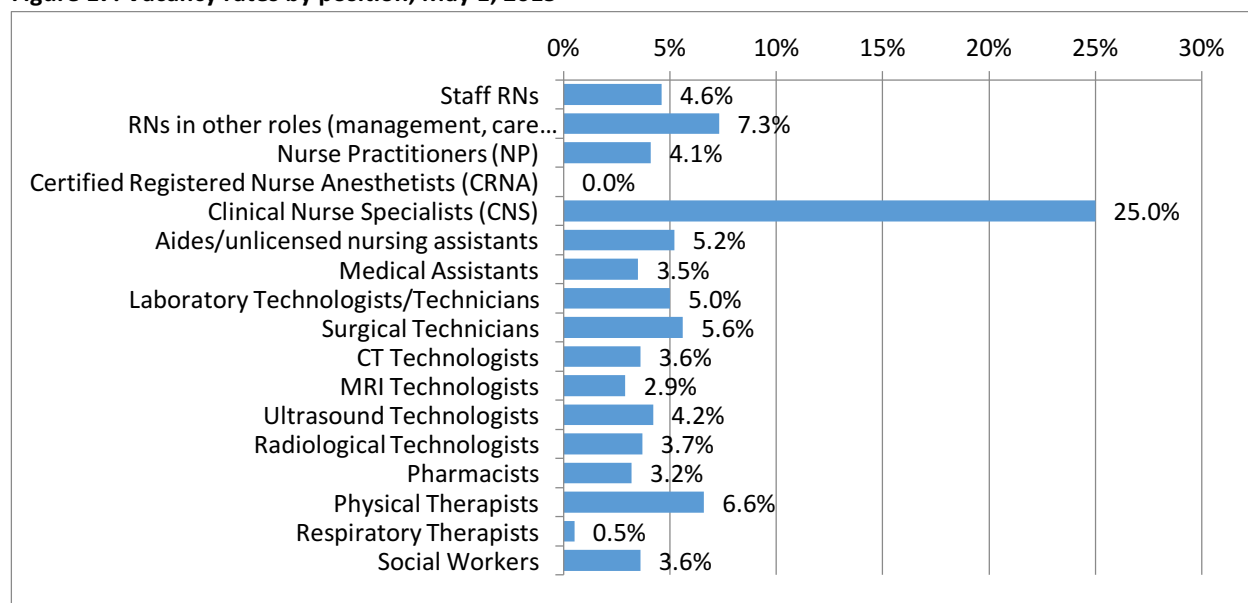


Table 4. Vacancy rates by position, May 1, 2015

Description	Full-time		Part-time		Total	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
Staff RNs	475	4.4	70	5.8	545	4.6
RNs in other roles (management, care coordination, utilization review, etc.)	200	8.6	5	1.1	205	7.3
Nurse Practitioners (NP)	3	3.2	1	25.0	4	4.1
Certified Registered Nurse Anesthetists (CRNA)	0	0.0	0	0.0	0	0.0
Clinical Nurse Specialists (CNS)	4	25.0	0	0.0	4	25.0
Aides/unclicensed nursing assistants	99	5.0	20	5.7	119	5.2
Medical Assistants	16	3.5	1	4.0	17	3.5
Laboratory Technologists/Technicians	16	4.5	3	12.0	19	5.0
Surgical Technicians	18	5.2	3	10.7	21	5.6
CT Technologists	4	2.1	4	12.1	8	3.6
MRI Technologists	0	0.0	3	13.6	3	2.9
Ultrasound Technologists	6	2.8	6	8.0	12	4.2
Radiological Technologists	11	2.7	8	8.2	19	3.7
Pharmacists	10	2.5	5	8.3	15	3.2
Physical Therapists	16	5.1	13	10.6	29	6.6
Respiratory Therapists	2	0.3	3	1.4	5	0.5
Social Workers	5	2.5	5	6.6	10	3.6

Changes Experienced In the Past Year

Hospitals were asked about changes in staff employment levels during the past year. Figure 18 and Table 5 show that over 47 percent of hospitals increased employment of staff RNs in the past year, and over 80 percent increased employment of RNs in other roles. NPs experienced similar levels of decreased employment and increased employment, with 12 percent of hospitals reporting no changes. Nearly 53 percent of hospitals reported decreasing employment of Aides/unlicensed nursing assistants. Other positions for which more hospitals reported decreased employment than increased employment in the past year include: Surgical Technicians, and CT Technologists. In contrast, positions for which more hospitals increased employment than decreased employment in the prior year include: Medical Assistants, MRI Technologists, Ultrasound Technologists, Pharmacists, Physical Therapists, and Social Workers.

Figure 18. Changes in Employment of RNs in the past year, by position, 2015

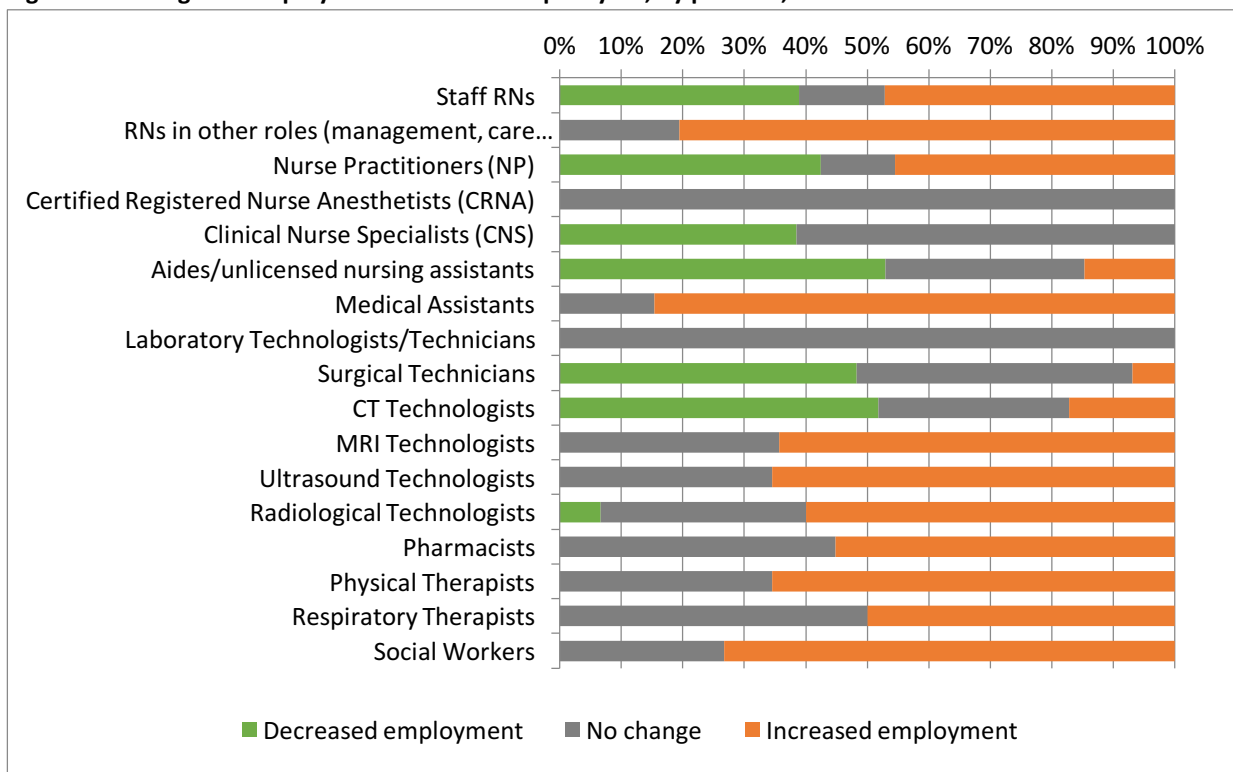


Table 5. Changes in Employment of RNs in the past year, by position, 2015

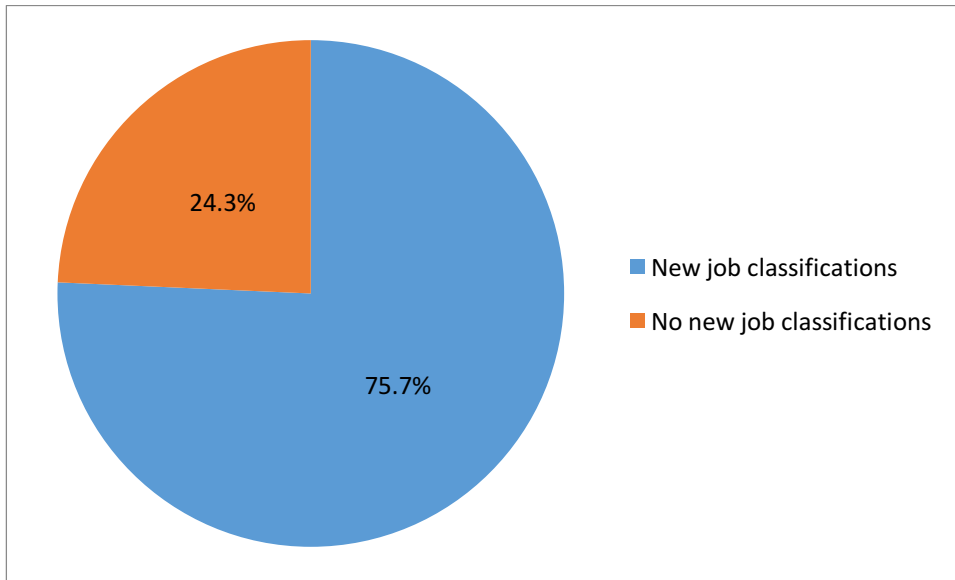
Position	Difficulty Recruiting in the Past Year						
	Decreased Employment		Increased Employment		No change		Responses
	#	%	#	%	#	%	#
Staff RNs	14	38.9	17	47.2	5	13.9	36
RNs in other roles (management, care coordination, utilization review, etc.)	0	0.0	29	80.6	7	19.4	36
Nurse Practitioners (NP)	14	42.4	15	45.5	4	12.1	33
Certified Registered Nurse Anesthetists (CRNA)	0	0.0	0	0.0	4	100.0	4
Clinical Nurse Specialists (CNS)	5	38.5	0	0.0	8	61.5	13
Aides/unlicensed nursing assistants	18	52.9	5	14.7	11	32.4	34
Medical Assistants	0	0.0	11	84.6	2	15.4	13
Laboratory Technologists/Technicians	0	0.0	0	0.0	16	100.0	16
Surgical Technicians	14	48.3	2	6.9	13	44.8	29
CT Technologists	15	51.7	5	17.2	9	31.0	29
MRI Technologists	0	0.0	18	64.3	10	35.7	28
Ultrasound Technologists	0	0.0	19	65.5	10	34.5	29
Radiological Technologists	2	6.7	18	60.0	10	33.3	30
Pharmacists	0	0.0	16	55.2	13	44.8	29
Physical Therapists	0	0.0	19	65.5	10	34.5	29
Respiratory Therapists	0	0.0	15	50.0	15	50.0	30
Social Workers	0	0.0	22	73.3	8	26.7	30

Hospitals were also asked about other types of environmental changes experienced over the past year. More than 91 percent of hospitals reported facing budget constraints. Over 75 percent of hospitals reported current staff were working more shifts, over 80 percent noted an increase in patient census, and 72 percent reported an increase in outpatient and ancillary services provided by nurses. Nearly 78 percent reported an increase in the use of traveler nurses, 72 percent of hospitals noted increased turnover, and 81 percent of hospitals reported an increase in patient acuity.

Hospitals were asked to report whether they had created new job classifications over the past year. Figure 19 shows that in 2015, nearly 76 percent of hospitals indicated they had created new job classifications in the past year. The most frequently reported new job classifications were related to case management and patient care navigator; less frequently reported were care coordinator and clinical documentation specialists.

Hospitals reported that the challenges associated with hiring or moving staff into these new roles include difficulty in recruiting qualified staff willing to relocate to rural hospitals, defining the new roles that staff are being hired into, and dealing with shortages on the floor as staff are being moved into new roles. These are important factors influencing the creation of new job classes, as these positions have not existed in the market previously, and the challenges encountered are new to hospitals.

Figure 19. Creation of new job classifications in the past year, 2015



Number of respondents=37.

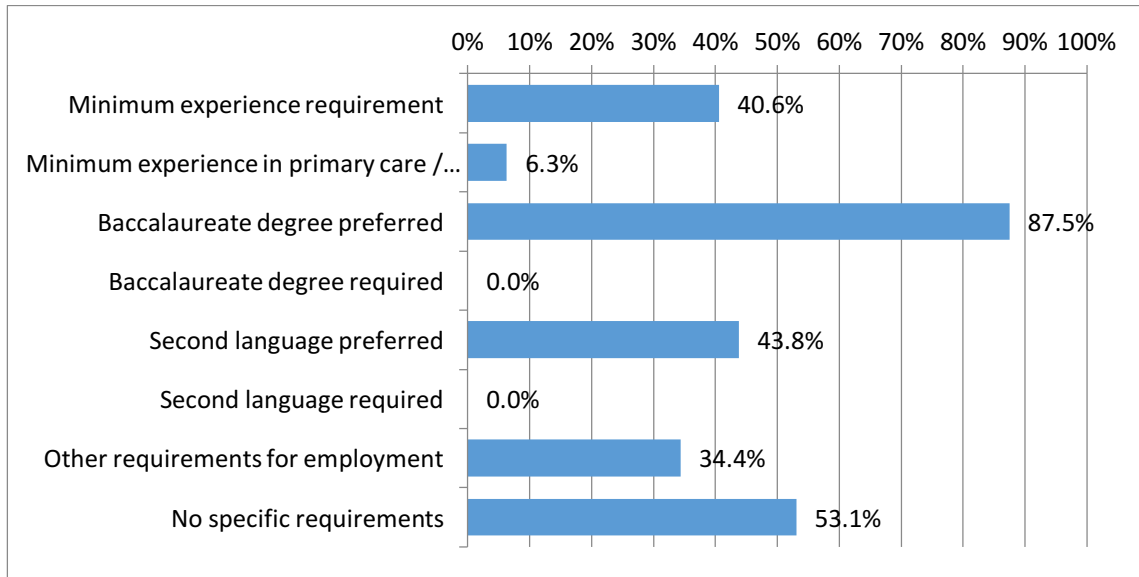
Requirements for RN Employment

A series of questions focused on RN employment, since RNs are the largest group of workers in most hospitals. As seen in Figure 20, approximately 41 percent of hospitals reported having a minimum experience requirement for RN hiring. Approximately 63 percent of these hospitals reported having a requirement of at least 6 months of experience to be hired into a general staff RN position; the number of months of experience required ranged from 1 to 12 months. Only 6.3 percent of hospitals required a minimum amount of experience in a primary/ambulatory care setting.

Approximately 88 percent of hospitals reported a preference for hiring baccalaureate trained RNs. No hospitals reported *requiring* a baccalaureate degree. Hospitals were asked about second language skills as a requirement for employment in 2015; no hospitals reported requiring a second language, but 44 percent indicated that it was a preference. Of these hospitals, Spanish was most often reported as the preferred language.

Hospitals were given the opportunity to report other types of requirements for employment in a staff RN position. Most of the write-in responses reported basic requirements such as RN licensure in Arizona or a compact state, and life skills certification such as advanced cardiovascular life support (ACLS). Over 53 percent of hospitals indicated having no specific requirements for employment in a staff nursing position.

Figure 20. Requirements for registered nursing employment, 2015

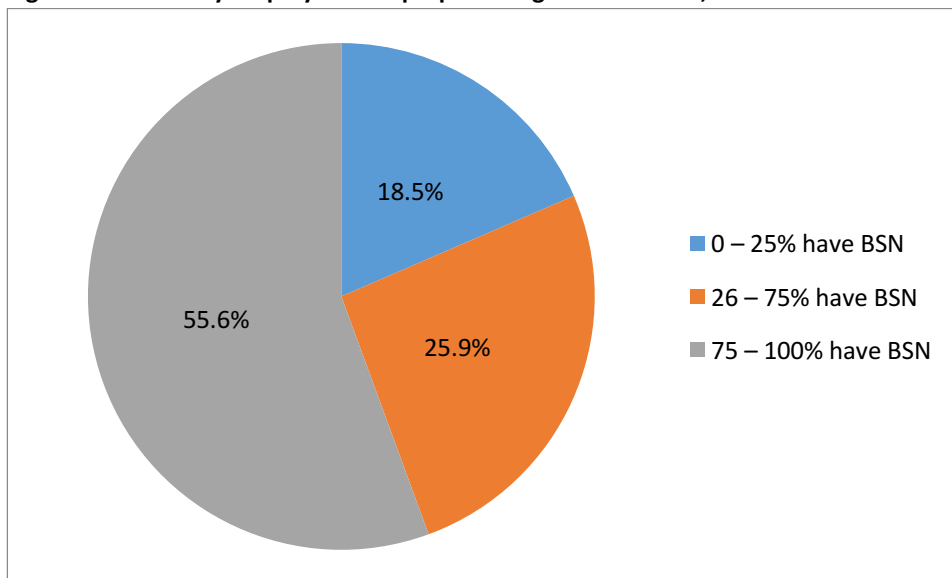


Note: Number of respondents = 32

Baccalaureate-prepared Nurses

Respondents were asked to report the share of RNs currently employed in their hospital prepared at the BSN level. The response choices were presented as categories, listed in Figure 21. Over half of all hospitals reported that BSN-prepared nurses represent 75 to 100 percent of all employed RNs in their hospital. Approximately 19 percent of respondents indicated that RNs holding a BSN degree accounted for less than 25 percent of their registered nursing staff.

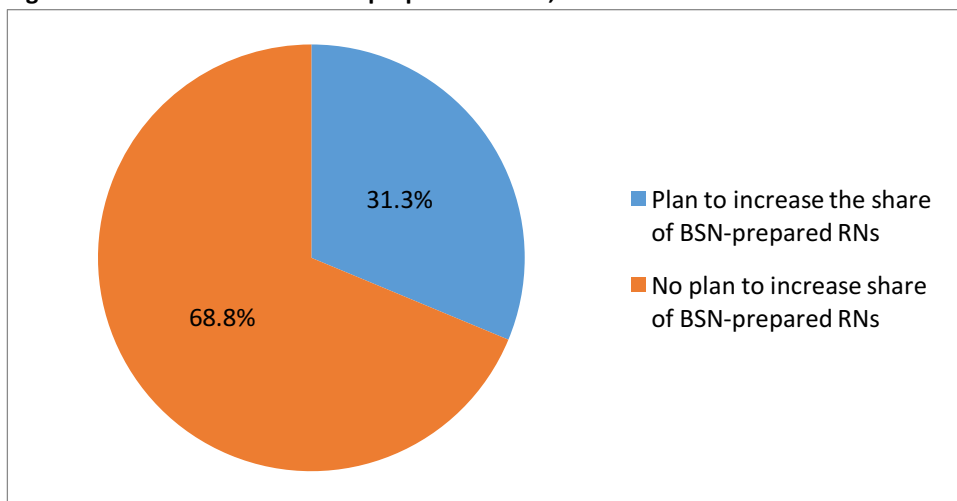
Figure 21. Currently employed BSN-prepared registered nurses, 2015



Note: Number of respondents = 27

Hospitals were asked to report whether or not they had goals or plans in place to increase the number of baccalaureate-prepared nurses on staff. Figure 22 shows that over 31 percent of responding hospitals indicated having a plan to do so. Hospitals that indicated plans to increase the share of BSN-prepared RNs on staff were asked to report the extent to which they planned to do so. Ninety percent have a goal of increasing the share of BSN-prepared RNs to more than half of all RNs on staff in the next three years, and the remaining 10 percent have a goal of 26-50 percent.

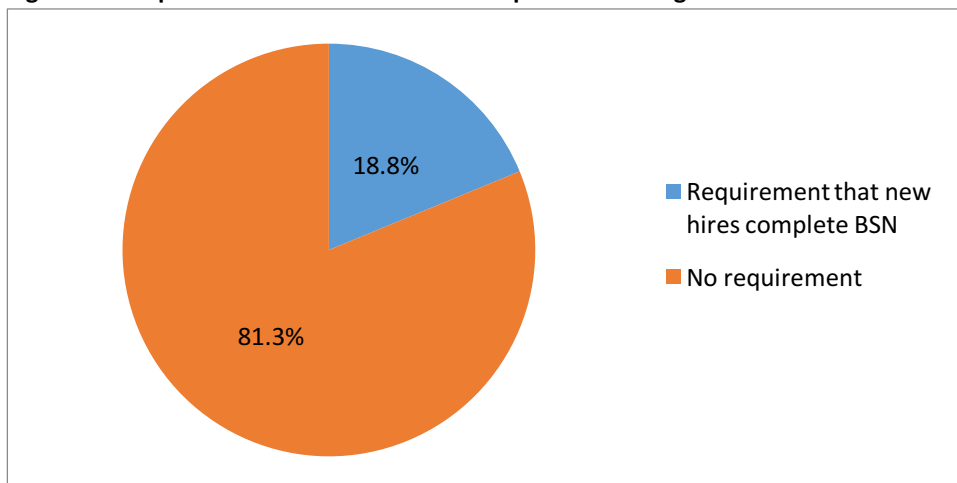
Figure 22. Plans to increase BSN-prepared nurses, 2015



Note: Number of respondents = 32

Hospitals were asked whether new hires educated with associate degrees or diplomas are required to complete a BSN degree and, if so, how much time they have to complete it. Nearly 20 percent of hospitals require newly hired employees that don't already hold a BSN to obtain one (Figure 23). For those hospitals that have this requirement, a time table of up to 4 years to completion was reported.

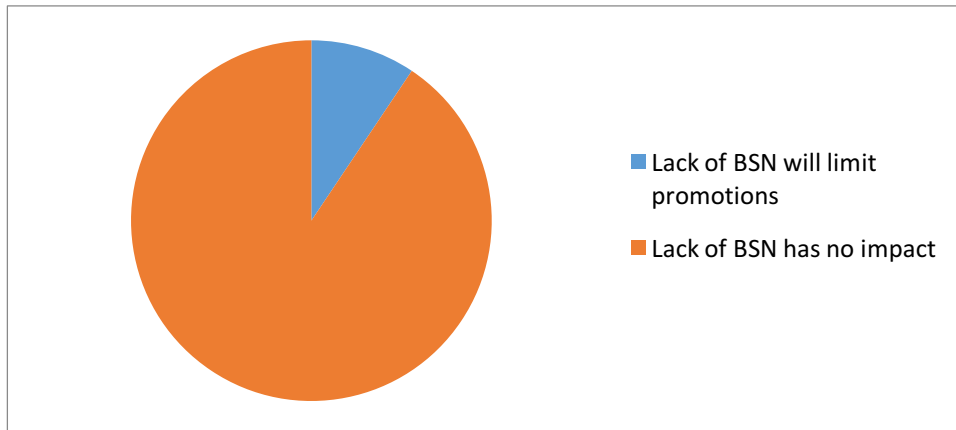
Figure 23. Requirements for new hires to complete a BSN degree within a certain time, 2015



Note: Number of respondents = 32

Perhaps because few hospitals require newly hired RNs educated below the baccalaureate level to obtain a BSN, over 90 percent of all hospitals reported not having a BSN has no effect on being promoted beyond the position of staff nurse (Figure 24).

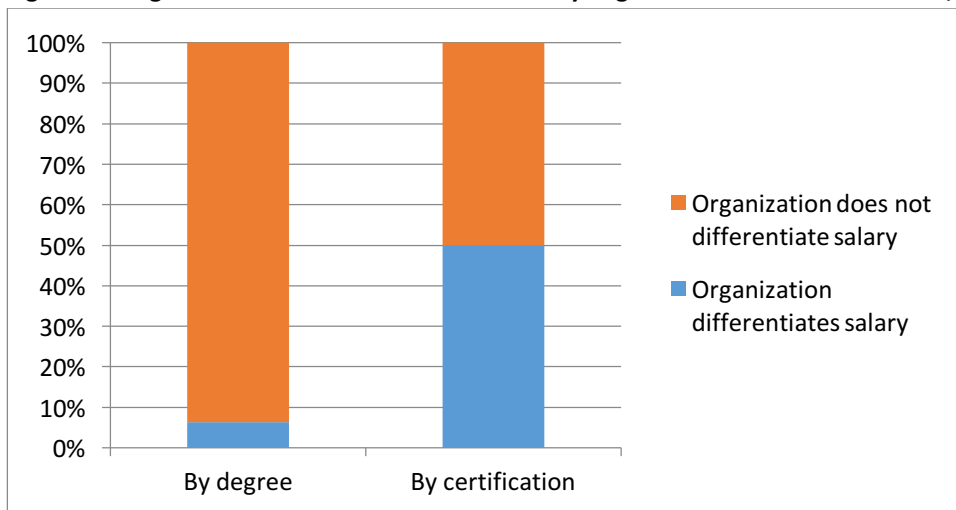
Figure 24. Impact of BSN on promotion, 2015



Note: Number of respondents = 32

There is a perception among incumbent RNs educated below the baccalaureate level that the BSN degree has no potential to increase earnings. Figure 25 suggests this might be accurate in Arizona, as nearly 94 percent of hospitals reported that their organization does not differentiate salary by degree. In addition to differentiating RN salaries based on the type of degree held, hospitals were asked about differentiation based on advanced certifications (e.g. critical care, peri-operative, oncology). An equal share all hospitals reported salary differentiation based on advanced certifications and no salary differentiation.

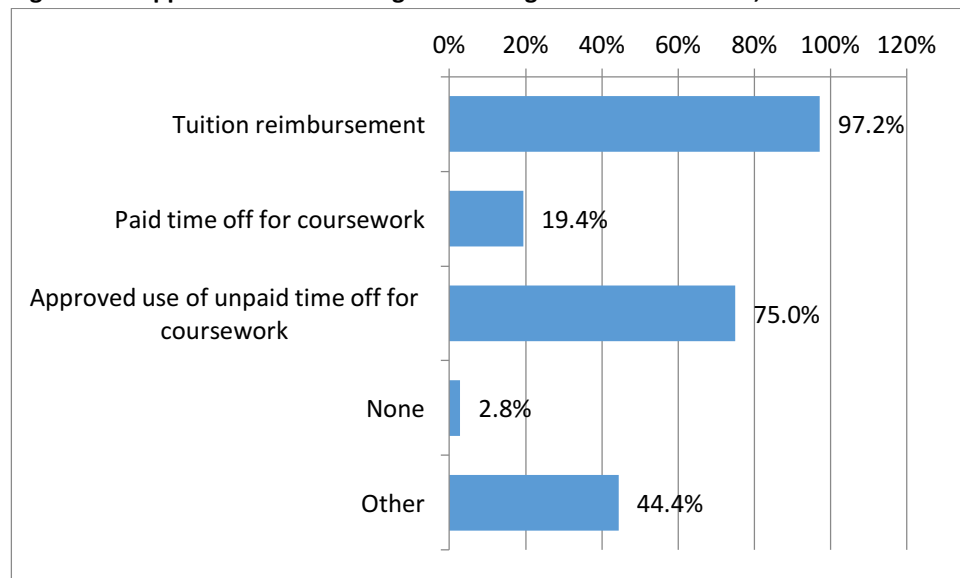
Figure 25. Organization differentiates RN salaries by degree or advanced certification, 2015



Note: Number of respondents = 32

Hospitals were asked about the types of support offered to employed staff who are enrolled in a degree program, or working toward a certification (Figure 26). Ninety-seven percent of hospitals reported offering tuition reimbursement in support of employed staff seeking an additional degree. Less common is the provision of paid time off for coursework (19.4%). Seventy-five percent of the responding hospitals reported allowing current staff to take unpaid time for coursework. Hospitals were given the chance to describe other types of support for RNs working toward a degree or certification. The most common responses were the provision of non-organizational scholarships, grants, and loan repayment programs, as well as partnerships with community colleges.

Figure 26. Support for staff working toward degrees or certification, 2015



Note: Number of respondents = 36

Hospitals that provide tuition reimbursement were asked about the maximum benefit paid per RN per year. Table 6 shows that a majority of hospitals offer currently employed RNs between \$4,500 and \$6,000 per year in tuition reimbursement. Fewer hospitals reported payment of tuition reimbursement on a per program basis; for the hospitals that offer this form of tuition reimbursement, over 55 percent of them offer between \$4,500 and \$6,000 per completed program.

Table 6. Tuition reimbursement benefits per RN per year, and per completed program, 2015

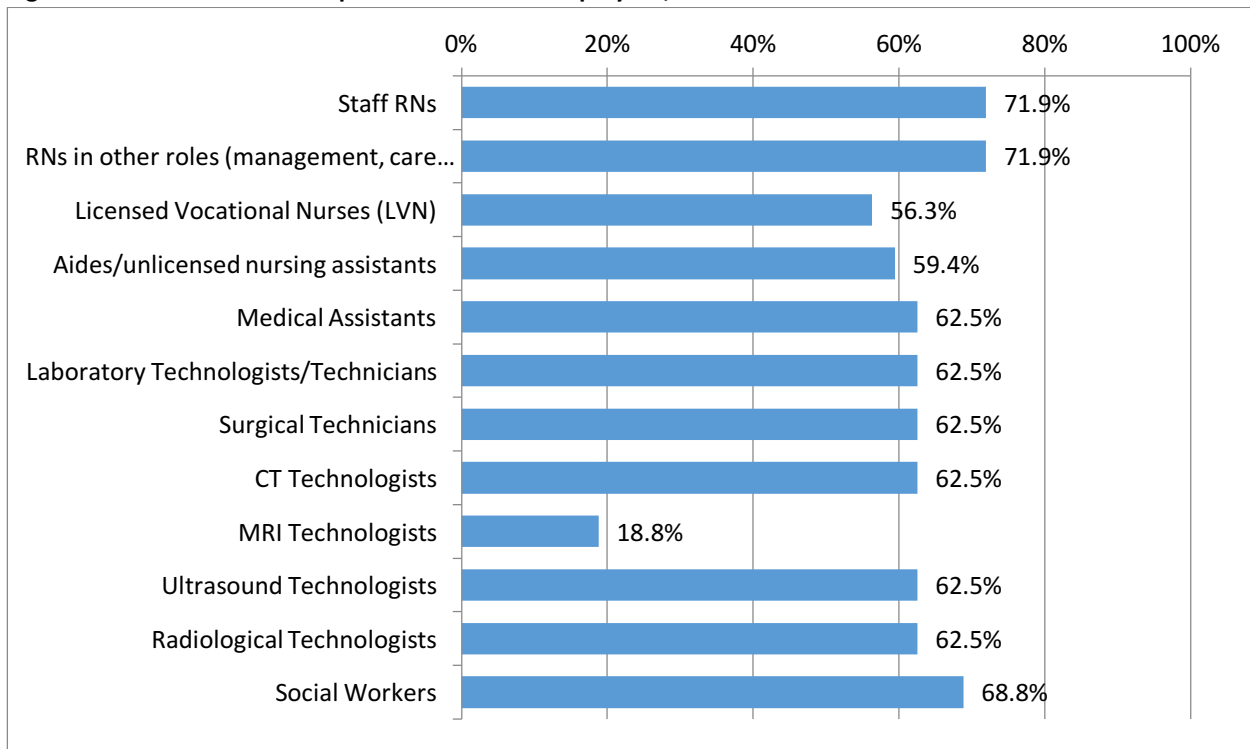
Description	Maximum per year		Maximum per completed program	
	#	%	#	%
\$1,500 - \$2,999	6	17.6	3	33.3
\$3,000 - \$4,499	1	2.9	0	0.0
\$4,500 - \$5,999	28	82.4	5	55.6
\$6,000+	0	0.0	1	11.1
Total	34	100.0	9	100.0

Note: No respondents reported \$0-\$1,499 tuition reimbursement.

Professional Development Programs

Hospitals were asked to describe the types of professional development programs offered to all personnel. Figure 27 shows that approximately 72 percent of hospitals reported offering professional development for staff RNs and other RNs. The next most common professions to receive training include Social Workers, Aides, Medical Assistants, Lab, CT, Ultrasound, and Radiological Technicians/Technologists. The least common type of training was for MRI Technologists. Of the hospitals that offered professional development, the most common form of training was in-house, and in-person.

Figure 27. Professional development offered for employees, 2015



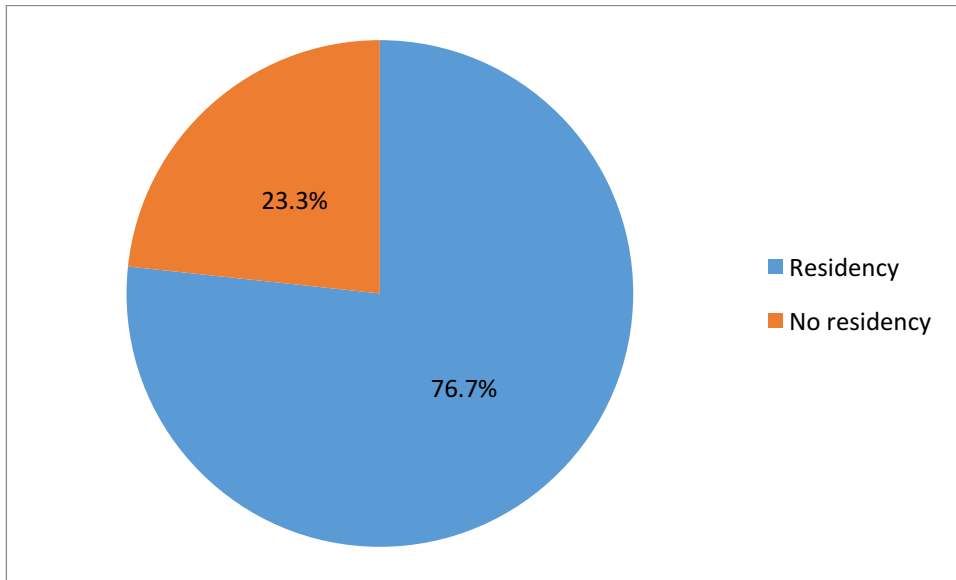
Note: Number of respondents = 32

Hospitals were asked to describe the most important competency gaps they encountered. The most common occupations with competency gaps include: critical care RNs, RN managers, and clinical providers. The competency gaps for these occupations include: lack of acute care experience, a completed BSN degree, and lack of familiarity with the EMR systems.

Clinical Residency Programs for New RN Graduates

Hospitals were asked whether they sponsor clinical residency programs for new graduates *who are not guaranteed to be hired* (Figure 28). These residency programs are distinct from typical orientation/onboarding programs for newly hired RNs. Nearly 77 percent of responding hospitals reported having such a program.

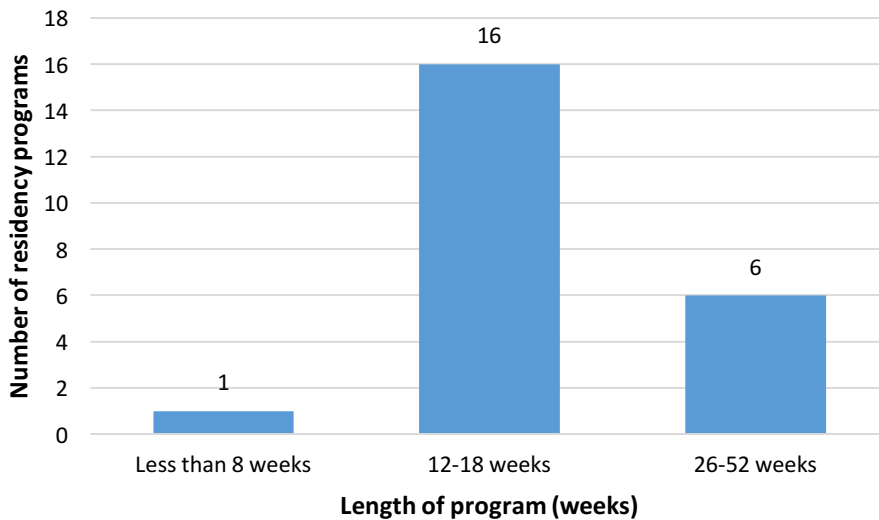
Figure 28. Clinical residency programs for new RN graduates, 2015



Note: Number of respondents = 30

Hospitals with residency programs for new RN graduates were asked to report the program's length of time to completion. The most frequently reported length of education was 12 to 18 weeks (Figure 29). Approximately one-quarter of all residency programs take 26 to 52 weeks.

Figure 29. Length of clinical residency program, 2015

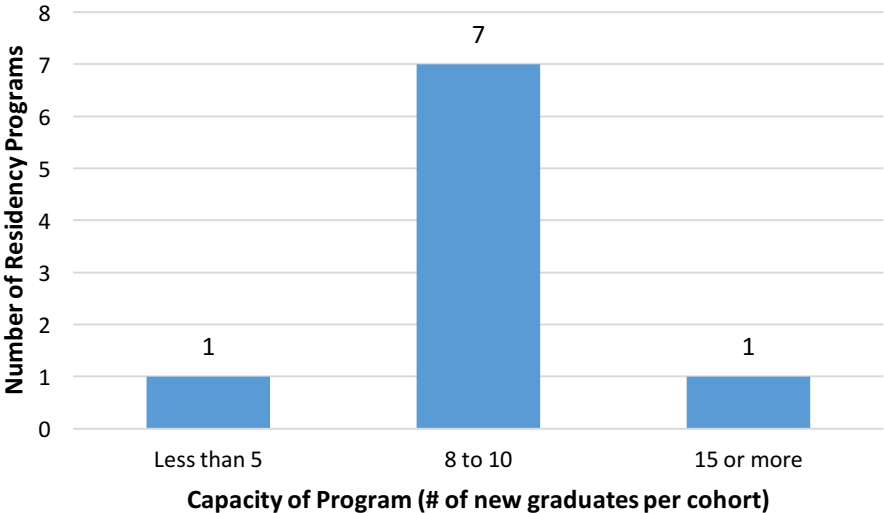


Hospitals with residency programs for new RN graduates were asked to report the capacity of their program (number of new RN graduates trained per cohort). Figure 30 shows that residency programs range in size from those that educate fewer than 5 new graduates per cohort to programs educating more than 15 new graduates per cohort. Programs were typically offered one to two times a year.

Hospitals with residency programs for new RN graduates were asked whether their program had been developed internally (home-grown), by an external organization (vendor), or in partnership with a school of nursing. One program reported that they used an externally-developed program, one had a partnership with a school of nursing, and the remaining 21 had an internally-developed program.

All of the hospitals with residency programs except one indicated they paid participants in the residency program. Programs were asked to report the share of people who completed their residency in the past year that had been hired. Seven of the 9 programs that responded said they hired at least 75 percent of program graduates. Two hired less than 50 percent of graduates.

Figure 30. Capacity of clinical residency program, 2015



Although comparatively few hospitals have formal residency programs in which new graduates are not guaranteed to be hired, all hospitals reported some kind of orientation program for newly hired RNs. Table 7 shows that a majority of these onboarding programs are fewer than 10 weeks in length, and over 96 percent last no longer than 19 weeks.

Table 7. Orientation/onboarding program for recent hires, 2015

Length of program (in weeks)	#	%
Less than 10 weeks	22	73.3
10-19 weeks	7	23.3
20 to 100 weeks	1	3.3
Total	30	100.0

Employment Expectations for the Next Year

Hospitals were asked to report on expectations for staff employment over the next three years. Figure 31 and Table 8 show that a majority of hospitals reported expectations of increased employment for all positions in the next three years. The most frequently reported reasons for the expected employment changes over the next three years include: increased patient acuity, increased hospital bed capacity, and increased patient census. To a lesser extent, respondents noted that budget constraints could be an issue.

Figure 31. Expectations for RN employment in the next three years, 2015

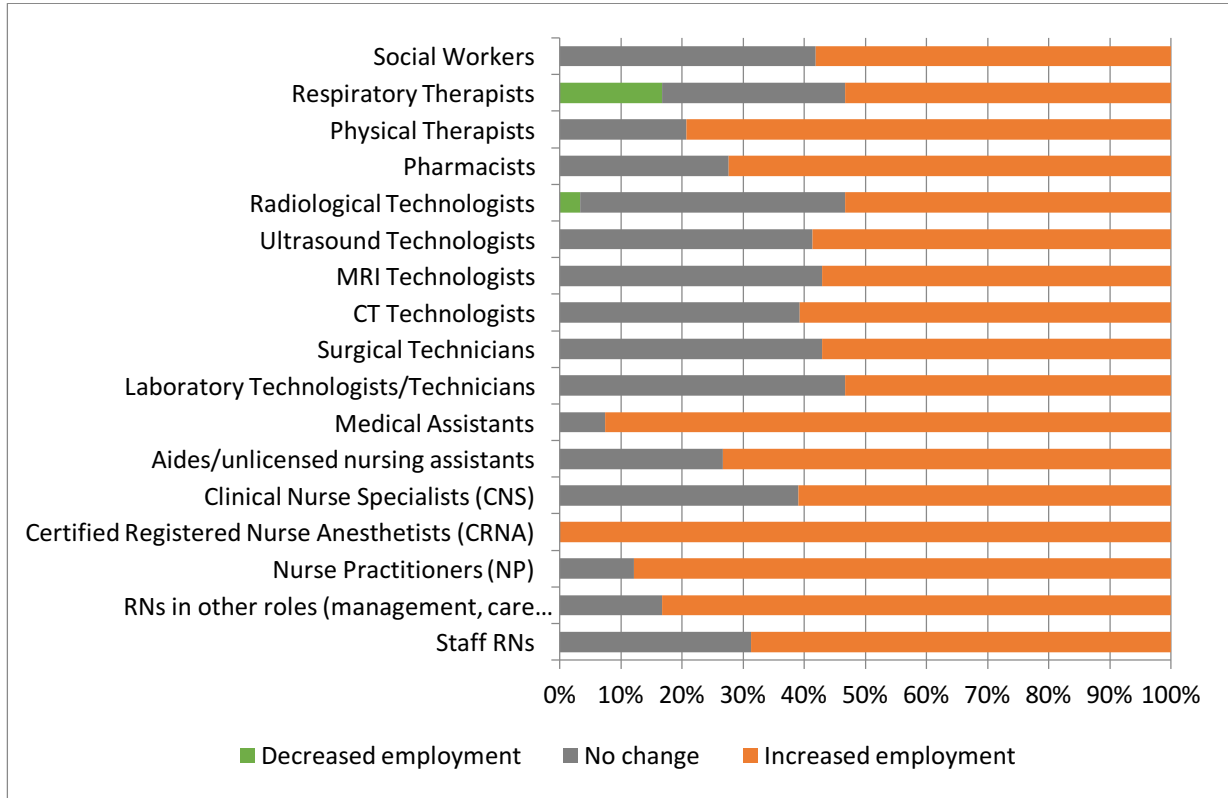
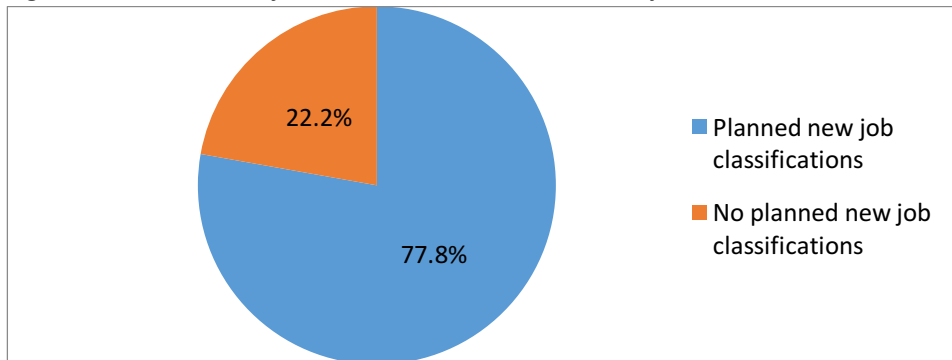


Table 8. Expectations for RN employment in the next three years, 2015

Position	Expectations for employment in the next 3 years						
	Decreased Employment		Increased Employment		No change		Responses
	#	%	#	%	#	%	#
Staff RNs	0	0.0	22	68.8	10	31.3	32
RNs in other roles (management, care coordination, utilization review, etc.)	0	0.0	30	83.3	6	16.7	36
Nurse Practitioners (NP)	0	0.0	29	87.9	4	12.1	33
Certified Registered Nurse Anesthetists (CRNA)	0	0.0	14	100.0	0	0.0	14
Clinical Nurse Specialists (CNS)	0	0.0	14	60.9	9	39.1	23
Aides/unlicensed nursing assistants	0	0.0	22	73.3	8	26.7	30
Medical Assistants	0	0.0	25	92.6	2	7.4	27
Laboratory Technologists/Technicians	0	0.0	16	53.3	14	46.7	30
Surgical Technicians	0	0.0	16	57.1	12	42.9	28
CT Technologists	0	0.0	17	60.7	11	39.3	28
MRI Technologists	0	0.0	16	57.1	12	42.9	28
Ultrasound Technologists	0	0.0	17	58.6	12	41.4	29
Radiological Technologists	1	3.3	16	53.3	13	43.3	30
Pharmacists	0	0.0	21	72.4	8	27.6	29
Physical Therapists	0	0.0	23	79.3	6	20.7	29
Respiratory Therapists	5	16.7	16	53.3	9	30.0	30
Social Workers	0	0.0	18	58.1	13	41.9	31

Figure 32 shows that approximately 78 percent of hospitals anticipate the creation of new RN-related job classes in the next two years. Note that 76 percent of hospitals reported that they created new RN job classifications over the past year. This suggests that hospitals believe that care demands require the continued creation of new job classifications in the coming years. Those that anticipate creating new RN job classes in the coming year expect them to be related to care coordination, case management, and specific areas of specialty care. Some hospitals are not sure what new job classifications may be created over the next two years, but believe some will be developed. Hospitals plan to develop these new roles through educational training programs, reimbursements of training, and certifications.

Figure 32. Planned new job classifications in the next two years, 2015

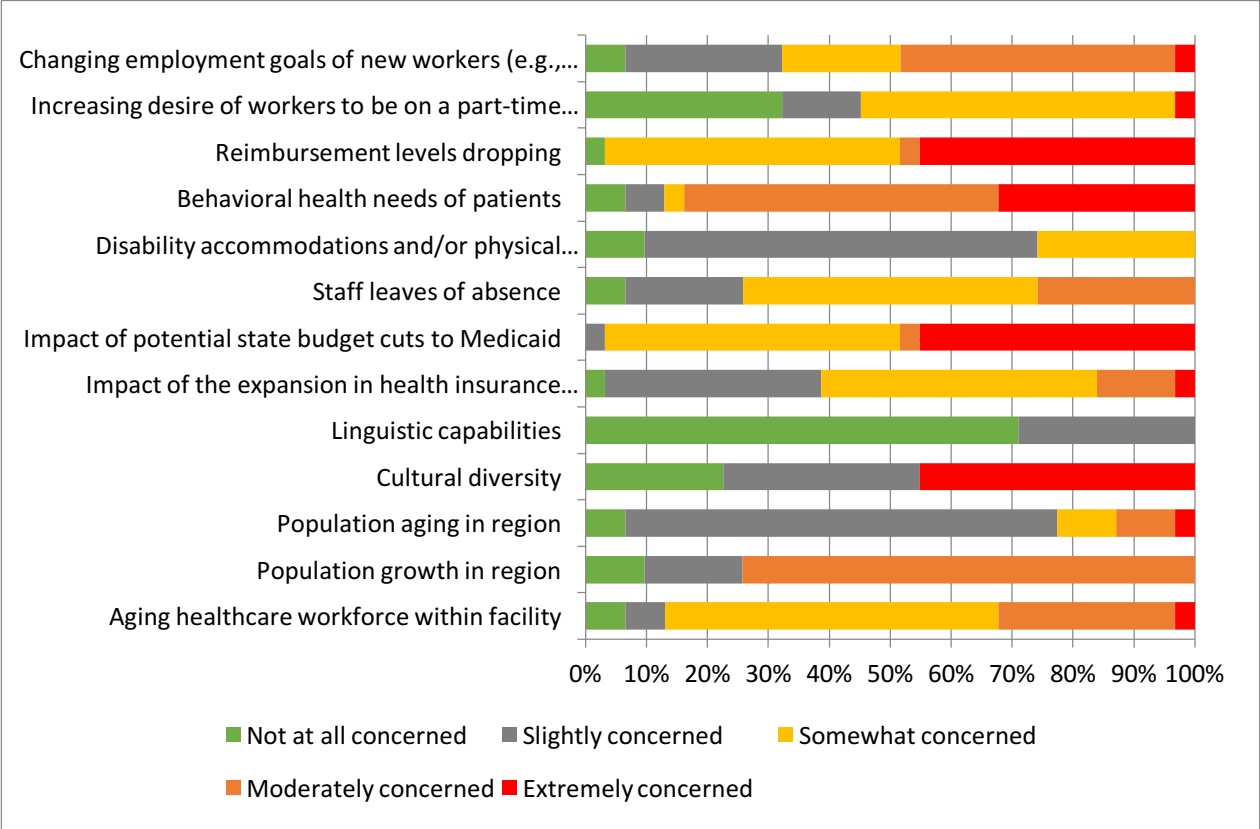


Note: Number of respondents = 36

Hospitals were asked to describe how concerned they felt about a series of statements on the adequacy of their hospital’s workforce (Figure 33 & Table 9). Hospitals most often reported that they are extremely concerned about the impact of cultural diversity (45.2%), potential state budget cuts to Medicaid (45.2%), and reimbursement levels dropping (45.2%) on the adequacy of their workforce. Many hospitals indicated that they are extremely concerned (32.3%) or moderately concerned (51.6%) about the behavioral health needs of their patients. Population growth in the region is a moderately concerning issue for over 74 percent of the hospitals that responded, but an extreme concern for none. Nearly half of hospitals were moderately concerned (45.2%) or extremely concerned (3.2%) about meeting the changing employment goals of new workers in their workforce (e.g., Millennials).

The impact of an aging workforce within a facility was reported as somewhat concerning to nearly 55 percent of hospitals, and moderately concerning to 29 percent. The positions with the highest percent of staff that may retire in the next three years were: staff RNs, directors/executives in leadership roles, and certified nursing assistants.

Figure 33. Impact on adequacy on hospital’s workforce, 2015



Note: Number of respondents = 31

Table 9. Impact on adequacy on hospital's workforce, 2015

Description	Impact on adequacy of hospital's workforce										Responses #
	Not at all concerned		Slightly concerned		Somewhat concerned		Moderately concerned		Extremely concerned		
	#	%	#	%	#	%	#	%	#	%	
Aging healthcare workforce within facility	2	6.5	2	6.5	17	54.8	9	29.0	1	3.2	31
Population growth in region	3	9.7	5	16.1	0	0.0	23	74.2	0	0.0	31
Population aging in region	2	6.5	22	71.0	3	9.7	3	9.7	1	3.2	31
Cultural diversity	7	22.6	10	32.3	0	0.0	0	0.0	14	45.2	31
Linguistic capabilities	22	71.0	9	29.0	0	0.0	0	0.0	0	0.0	31
Impact of the expansion in health insurance coverage	1	3.2	11	35.5	14	45.2	4	12.9	1	3.2	31
Impact of potential state budget cuts to Medicaid	0	0.0	1	3.2	15	48.4	1	3.2	14	45.2	31
Staff leaves of absence	2	6.5	6	19.4	15	48.4	8	25.8	0	0.0	31
Disability accommodations and/or physical limitations of staff	3	9.7	20	64.5	8	25.8	0	0.0	0	0.0	31
Behavioral health needs of patients	2	6.5	2	6.5	1	3.2	16	51.6	10	32.3	31
Reimbursement levels dropping	1	3.2	0	0.0	15	48.4	1	3.2	14	45.2	31
Increasing desire of workers to be on a part-time schedule	10	32.3	4	12.9	16	51.6	0	0.0	1	3.2	31
Changing employment goals of new workers (e.g., Millennials)	2	6.5	8	25.8	6	19.4	14	45.2	1	3.2	31

CONCLUSIONS

Labor market conditions faced by Arizona hospitals indicate shortages in many occupations, with shortages among the RN workforce being particularly notable due to RNs being the largest group within hospitals and there being widespread perceptions of shortages of RNs. In general, demand was more often reported as greater than supply in the Tucson and Northern Arizona region, and in urban than in rural settings.

Hospitals expect growth in nearly every occupation over the next three years, particularly for nurse anesthetists, nurse practitioners, medical assistants, and RNs in roles other than staff nursing. These other roles, many of which are new to hospitals, include care coordination and patient navigation.

Hospitals are investing in the development of the RN workforce. Although many require that RNs have a minimum amount of experience before being hired, some have established RN residency programs to develop the skills of RNs who are not yet employees. Nearly all of these programs offer pay for the newly-licensed RNs' participation. In addition, nearly all responding hospitals indicated they offer tuition reimbursement for employees who are working toward degrees or certifications.

The continuation of these workforce development strategies likely depends on continued growth in the demand for hospital services, and sufficient revenue to dedicate resources to such programs. Hospitals are concerned that cuts to Medicaid and to reimbursement levels might affect the adequacy of their workforce and their ability to invest in workforce development. They also noted that cultural diversity is an issue of great concern.

Hospital leaders should continue to work with local and state educational institutions, policymakers, and business leaders to support their efforts to develop and grow the workforce they will need for the future. While the need for RNs is particularly noteworthy, many occupations are in relatively short supply, and have substantial growth expected in the future. A broad approach to workforce development will serve the hospitals of Arizona, and their patients, well into the future.

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Appendix Table 1. Labor market demand by geographic region, 2015

Description:	Region			
	Phoenix	Tucson	Northern AZ	North-West AZ
Staff RNs	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	0.0	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	13.0	0.0	0.0	50.0
High demand: difficult to fill open positions	87.0	100.0	100.0	50.0
Total	23	3	3	2
RNs in other roles	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	0.0	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	8.7	0.0	100.0	50.0
High demand: difficult to fill open positions	91.3	100.0	0.0	50.0
Total	23	3	3	2
Nurse Practitioners	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	28.6	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	66.7	100.0	0.0	100.0
High demand: difficult to fill open positions	4.8	0.0	0.0	0.0
Total	21	2	0	2
CRNAs	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	0.0	0.0	100.0	0.0
Moderate demand: some difficulty filling open positions	100.0	0.0	0.0	0.0
High demand: difficult to fill open positions	0.0	0.0	0.0	0.0
Total	14	0	1	0
CNSs	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	26.3	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	0.0	100.0	100.0	0.0
High demand: difficult to fill open positions	73.7	0.0	0.0	0.0
Total	19	2	1	0
Aides/unlicensed nursing assistants	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	31.8	0.0	0.0	50.0
Demand is in balance with supply	63.6	100.0	33.3	0.0
Moderate demand: some difficulty filling open positions	4.5	0.0	66.7	50.0
High demand: difficult to fill open positions	0.0	0.0	0.0	0.0
Total	22	3	3	2
Medical Assistants	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	50.0
Demand is in balance with supply	70.0	100.0	33.3	50.0
Moderate demand: some difficulty filling open positions	30.0	0.0	0.0	0.0
High demand: difficult to fill open positions	0.0	0.0	66.7	0.0
Total	20	2	3	2
Laboratory Technologists/Technicians	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	9.1	0.0	33.3	0.0
Moderate demand: some difficulty filling open positions	68.2	100.0	66.7	0.0
High demand: difficult to fill open positions	22.7	0.0	0.0	100.0
Total	22	2	3	2

Description:	Region			
	Phoenix	Tucson	Northern AZ	North-West AZ
Surgical Technicians	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	9.1	100.0	0.0	50.0
Moderate demand: some difficulty filling open positions	90.9	0.0	33.3	0.0
High demand: difficult to fill open positions	0.0	0.0	66.7	50.0
Total	22	2	3	2
CT Technologists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	28.6	0.0	100.0	50.0
Moderate demand: some difficulty filling open positions	66.7	0.0	0.0	0.0
High demand: difficult to fill open positions	4.8	100.0	0.0	50.0
Total	21	2	3	2
MRI Technologists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	23.8	0.0	0.0	50.0
Moderate demand: some difficulty filling open positions	71.4	0.0	100.0	0.0
High demand: difficult to fill open positions	4.8	100.0	0.0	50.0
Total	21	2	3	2
Ultrasound Technologists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	23.8	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	66.7	0.0	100.0	50.0
High demand: difficult to fill open positions	9.5	100.0	0.0	50.0
Total	21	2	3	2
Radiological Technologists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	4.5	0.0	0.0	0.0
Demand is in balance with supply	31.8	0.0	0.0	50.0
Moderate demand: some difficulty filling open positions	63.6	100.0	100.0	50.0
High demand: difficult to fill open positions	0.0	0.0	0.0	0.0
Total	22	2	3	2
Pharmacists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	0.0	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	95.2	100.0	100.0	0.0
High demand: difficult to fill open positions	4.8	0.0	0.0	100.0
Total	21	2	3	2
Physical Therapists	%	%	%	%
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	71.4	0.0	0.0	0.0
Moderate demand: some difficulty filling open positions	0.0	0.0	66.7	0.0
High demand: difficult to fill open positions	28.6	100.0	33.3	100.0
Total	21	2	3	2
Respiratory Therapists	%	%	%	%
Demand is much less than supply available	4.5	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	4.5	0.0	0.0	50.0
Moderate demand: some difficulty filling open positions	90.9	100.0	100.0	50.0
High demand: difficult to fill open positions	0.0	0.0	0.0	0.0
Total	22	2	3	2
Social Workers	%	%	%	%

Description:	Region			
	Phoenix	Tucson	Northern AZ	North-West AZ
Demand is much less than supply available	0.0	0.0	0.0	0.0
Demand is less than supply available	0.0	0.0	0.0	0.0
Demand is in balance with supply	69.6	66.7	100.0	100.0
Moderate demand: some difficulty filling open positions	26.1	33.3	0.0	0.0
High demand: difficult to fill open positions	4.3	0.0	0.0	0.0
Total	23	3	1	2