University of California
San Francisco

UCSF Health Workforce Research Center on Long-Term Care

Research Report

Survey of Nurse Employers in California, Fall 2016

Prepared by:

Lela Chu, BA

Joanne Spetz, PhD

Tim Bates, MPP

July 13, 2017

This study was conducted in collaboration with the Hospital Association of Southern California and HealthImpact. Any views presented in this report do not necessarily reflect the opinions or positions of the Hospital Association or HealthImpact.

University of California
San Francisco

Survey of Nurse Employers in California, Fall 2016

Table of Contents

List of Tables

List of Figures

University of California
San Francisco

Survey of Nurse Employers in California, Fall 2016

Preface

Survey Background

This report summarizes the findings from a survey of general acute care hospital employers of registered nurses (RNs) in California conducted in fall 2016. This is the seventh annual survey of hospital RN employers; together these surveys provide an opportunity to evaluate overall demand for RNs in the state, and changes that have occurred as the economy in California has recovered from the economic recession that started in late 2007. The survey also collects information specific to the hiring of newly graduated nurses because they are at particular risk for unemployment during a weak labor market. The data obtained in this survey reveal very strong overall demand for RNs across California, a preference for hiring experienced nurses, and consequently a lack of positions available for newly graduated RNs.

Summary of Findings

The fall 2016 survey results indicate continuing improvement in labor market conditions faced by California's registered nurses (RNs). Approximately 34 percent of hospitals reported a perception of high demand for RNs, and the share of hospitals reporting such conditions has decreased slightly compared to the prior survey year. In addition, 89 percent of hospitals reported at least moderate demand for RNs, which is an increase of approximately three percentage points compared to the prior survey year, and a 48 percentage point increase compared to fall 2013. Only one in approximately 33 hospitals reported the perception that the supply of available RNs was greater than demand.

There continues to be a sharp divide in demand for experienced RNs versus new RN graduates. Most hospitals across the state reported moderate to high demand for experienced RNs, particularly for the clinical areas of labor & delivery, critical care (both adult and neonatal/pediatric), emergency department (ED), and operating room. Hospitals also reported strong demand for nurses to fill administrative/managerial roles. In contrast, demand for new RN graduates was described, on average, as less than the available supply. However, there are signs that labor market conditions for new graduates may be improving in parts of the state, including Central California, the San Francisco Bay Area, Los Angeles, and the Sacramento and

Northern California region. In fall 2016, the share of hospitals in each of these regions that reported demand for new RN graduates was either in balance with supply, or greater than the available supply, was substantially larger compared to fall 2014 and fall 2015.

Over sixty-six percent of responding hospitals reported that their employment of new RN graduates increased between fall 2015 and fall 2016, while over 35 percent of hospitals reported that employment of experienced staff RNs increased. This marks a decrease in comparison to the prior two survey years, where at least 50 percent of hospitals reported increased employment of experienced staff RNs.

The share of hospitals in the fall 2016 survey that reported increased employment over the past year of both temporary and traveler RNs was nearly twice as large as the share of hospitals reporting no change in employment. Hospitals cited growth in the patient census, high turnover of current staff in positions, difficulty in filling open positions, and increased patient acuity as reasons for the employment increases.

Over 89 percent of hospitals reported hiring new RN graduates in fall 2016. This is a slight decrease to the 90 percent of hospitals reporting hiring new graduates in the prior survey year. Only 5.8 percent of responding hospitals reported that they do not hire new RN graduates, which is a noticeable increase from fall 2015, and resembles the percentages reported in prior survey years. In fall 2016, over forty-eight percent of hospitals reported an expectation that hiring of new graduates would increase in 2017, which is 1.2 percentage points higher compared to fall 2015. The most frequently reported reason for an expected increase in new graduate hiring was the lack of available experienced RNs. Hospitals also cited expectations of increased retirements, and having developed relationships with schools to advance new graduates into staff positions, as well as training programs to mentor new graduates in 2017.

Nearly one-quarter of responding hospitals reported that new RN graduates are working non-RN positions; the share has increased each year since 2013, with 2016 marking a slight decrease. The most frequently reported scenario in which new graduates are working in a non-RN role involved incumbent employees who stay in their current non-RN jobs until they can be hired into a staff nursing position.

In fall 2016, 53.8 percent of hospitals reported a preference for hiring baccalaureate-trained RNs, which is lower than previous survey years. However, the share of hospitals reporting that they require a baccalaureate degree for employment remains comparatively small (between 4 and 10

percent of hospitals in each of the past six survey years). The fall 2016 survey indicates that BSN-prepared nurses represent a larger share of current staff compared to prior year. Thirty-nine percent of hospitals reported that BSN-educated RNs account for at least 51 percent of current staff and 67 percent of hospitals reported having goals or plans in place to increase the number of baccalaureate-educated RNs on staff.

A comparatively small number of hospitals reported having a formal clinical residency program open to new RN graduates who are not guaranteed to be hired (approximately 21 percent of responding hospitals). Most of these programs were developed by either the hospitals themselves (66.7 percent) or in partnership with a school of nursing (19 percent). They typically take between 12 and 18 weeks to complete and the most common clinical areas in which training was provided included emergency department, critical care, and medical-surgical. Approximately two-thirds of these programs paid participating new graduates, and over 77 percent of these programs hired between 75 and 100 percent of participants.

Approximately 60 percent of all hospitals reported expectations that RN employment would increase in 2016. This is a slight decrease from the prior year, with more hospitals reporting expectations of no change in employment of RNs in the coming year. Less than 2 percent of responding hospitals reported expectations that RN employment would decrease in 2017. The most frequently reported reason for the expected employment increase was continued growth in the patient census. Other frequently reported reasons included increased bed capacity, patient acuity, persistently high vacancy rates, an increasing number of retirements, expanded service lines, and a desire to replace traveler/agency positions with permanent positions.

As components of healthcare reform continue to be implemented, the population across the state grows older, and more nurses reach retirement age, the demand for RNs – including new graduates – will continue to rise. It is essential that programs be established and expanded through which new graduates can use and develop their knowledge and skills to ensure an adequate supply of RNs in the future. This may include expanded efforts by employers to develop the skills of new graduates and to fill positions that are normally reserved for experienced nurses. Without these efforts, California's strong investment in nursing education may be lost.

Availability of Data

All data presented in this report are shared through a dedicated website, which summarizes the data statewide and for each region of California. The goal of this project is to track changes in demand and supply over time and across regions, to better develop policy and employment strategies to ensure the state does not face serious nursing shortages in the future.

The project website is: **http://rnworkforce.ucsf.edu/demand-data/**

Background: Nurse Demand in California

In the late 1990s, forecasts of the supply and demand for the national registered nurse (RN) workforce pointed to a significant short-term and long-term shortage.[1] In California, the documented shortage was especially acute through most of the 2000s, with a ratio of employed RNs per capita among the lowest in the United States.[2] This spurred action to address the relatively low supply of RNs and, since 2002, the number of graduations from California nursing schools has more than doubled. Recent forecasts of long-term supply and demand for RNs in California indicate that the number of RN graduates per year is likely adequate to avert a statewide shortage through 2035.[3]

Although the California RN labor market appears to be balanced overall, there have been reports of both shortages and surpluses of RNs. During the economic recession that emerged in 2008, employment rates of older RNs in California rose while employment of younger RNs dropped.[4] The overall 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 and the financial losses in many retirement portfolios.[5] Additionally, the recession placed significant financial pressure on hospitals and other health care employers, with many cutting back on hiring new RN graduates due to the lack of vacant RN positions and limited financial resources to pay for new graduate orientation programs.

More recently, the implementation of the Affordable Care Act has spurred greater demand for health care services by the newly-insured. In addition, the growing number of older Americans is expected to increase demand for health care services. The RN workforce is aging and likely to transition to retirement soon, making it essential that new and recent RN graduates be

1 Buerhaus, Peter I., Staiger, Douglas O. and Auerbach, David I. "Implications of an Aging Registered Nursing Workforce." The Journal of the American Medical Association. 283 (2000):2948-2954.

2 U.S. Health Resources and Services Administration. Findings from the 2008 National Sample Survey of Registered Nurses. Rockville, MD: 2010.

3 Spetz J. Forecasts of the Registered Nurse Workforce in California. Sacramento, CA: California Board of Registered Nursing, 2015, in press.

4 Spetz, J, Keane, D, Herrera, C. 2010 Survey of Registered Nurses. Sacramento, CA: California Board of Registered Nursing,; 2011. http://www.rn.ca.gov/pdfs/forms/survey2010.pdf.

5 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.

retained in the workforce to meet the projected demand for nurses in the future.[6]

To better understand the impact of nursing labor market changes on new RN graduates' ability to find jobs in California, in 2009 The Gordon and Betty Moore Foundation commissioned HealthImpact (formerly the California Institute for Nursing and Health Care) to conduct a survey of healthcare facilities to identify their hiring plans for new RN graduates.[7] This survey revealed that approximately 40 percent of new California RN graduates may not find employment in California hospitals because only 65 percent of hospitals indicated they were hiring new graduates. Moreover, the hospitals that were hiring new graduates were doing so in smaller numbers compared with previous years. Subsequent surveys conducted by the University of California, San Francisco (UCSF), in collaboration with HealthImpact and the Hospital Association of Southern California, have tracked changes in the demand for RNs from 2010 through 2016. This report presents data from the most recent survey, conducted in fall 2016, to understand how the economic recovery, implementation of the Affordable Care Act, and retirements of Baby Boomer RNs are affecting the RN labor market in California.

6 Buerhaus, Auerbach, and Staiger, 2012.

7 Gordon and Betty Moore Foundation, Strategic Contribution to California Institute for Nursing and Health Care, Ref (#2239): New RN Job Survey. 17 Mar 2009.

Survey Method

Two survey instruments were used to provide data for this report, one fielded by UCSF and a second fielded by the Hospital Association of Southern California (HASC). The UCSF survey was structured to collect information from chief nursing officers (CNOs) and focused on their perceptions of the labor market, expectations for hiring, and the characteristics of new graduate residency programs. The HASC Healthcare Workforce Survey was oriented toward human resources directors and was used to collect staffing data, including current headcounts, new employee hires, separations, and vacancies.

A team of researchers from UCSF, HASC, the California Hospital Association (CHA), FutureSense, Inc., and HealthImpact designed the 2016 instruments to ensure consistency with prior surveys and optimize workforce planning and forecasting. The UCSF survey was posted online following approval by the UCSF Committee on Human Research. Pre-notification emails were sent to all CNOs using a mailing list updated from the 2015 survey. The invitation from UCSF included a link to the online version of the survey as well as fillable-PDF forms that could be completed by the respondent and returned to UCSF via email or fax. The HASC Healthcare Workforce Survey was administered online; the data were collected over a period of one month in September 2016 and describe staffing, turnover, and hiring patterns for the third quarter of the year (July 1 – September 31, 2016). For both surveys, facilities were contacted with follow-up emails and telephone calls to encourage participation.

Survey Participation and Data Analysis

The HASC Healthcare Workforce Survey elicited 188 unique responses, representing 231 general acute care (GAC) hospitals and 51,596 beds. The UCSF survey elicited 82 unique responses, representing 104 GAC hospitals and 18,692 beds.[8] Five additional facilities in the HASC survey and four additional facilities in the UCSF survey were focused on acute psychiatric and/or substance use treatment. Survey respondents represent approximately 57 percent (HASC) and 20.6 percent (UCSF) of the total

8 Some responding hospitals provided data that also described associated outpatient services, including behavioral health, as well as associated facilities including rehabilitation and long-term care sites. As a result, the number of facilities represented by the data may, in some cases, exceed the total number of general acute hospitals described here.

number of licensed beds at GAC hospitals in California. [9] In the UCSF survey, 14 respondents reported data for multiple hospital facilities; in the HASC Healthcare Workforce Survey, 19 respondents reported data for multiple facilities. A total of 50 facilities responded to both the UCSF and HASC surveys.

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

The multi-hospital data are included in regional analyses if they were reported for facilities that were all within the same region; if the facilities crossed regional boundaries the data were excluded. The geographic regions used to group survey responses are based on those used by the California Board of Registered Nursing. However, due to the small number of survey responses for certain parts of the state, some regions were combined. Table 1 lists the regions used in this report and the counties each region represents.

Table 1. Geographic regions and the counties they represent, 2016

Region	Counties
Sacramento & Northern California	Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Siskiyou, Sierra, Tehama, Trinity, El Dorado, Placer, Sacramento, Sutter, Yolo, Yuba
San Francisco Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma
Central California	Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, Tuolumne, Monterey, San Benito, San Luis Obispo, Santa Barbara
Los Angeles	Los Angeles, Ventura
Inland Empire	Orange, Riverside, San Bernardino
Southern Border	Imperial, San Diego

Table 2 compares the geographic distribution of GAC hospitals that responded to each survey, and both surveys, with the distribution of GAC

9 General acute care hospitals were identified using the California Office of Statewide Health and Planning hospital listing database, and data made available by the Veterans Administration through a FOIA request.

hospitals in California. Respondents from both surveys are generally representative of GAC hospitals in the state. In the UCSF survey, hospitals in the Bay Area region are overrepresented while hospitals in the Los Angeles and Southern Border regions are underrepresented. In the HASC survey, hospitals in the Los Angeles region are overrepresented, while hospitals in the Central California and Inland Empire regions are underrepresented.

Table 2. Distribution of responding general acute care hospitals vs. general acute care hospitals in California, by region, 2016

	General acute care hospitals in CA			UCSF survey			HASC survey			Both surveys	
Region	**#**	**%**		**#**	**%**		**#**	**%**		**#**	**%**
Sacramento & North CA	58	12.5		11	11.0		27	11.7		5	10.0
SF Bay Area	92	19.8		26	26.0		54	23.4		17	34.0
Central CA	81	17.5		20	20.0		35	15.2		9	18.0
Los Angeles	119	25.6		21	21.0		65	28.1		9	18.0
Inland Empire	84	18.1		19	19.0		37	16.0		8	16.0
Southern Border	30	6.5		3	3.0		13	5.6		2	4.0
Total	464	100		100	100		231	100		50	100

Note: Percentages may not sum to 100% due to rounding. Four additional facilities were in the UCSF survey for acute psychiatric care and substance use disorder treatment and are not included in this table.

Table 3 compares the distribution of survey respondents and GAC facilities by number of licensed beds. The UCSF survey respondents are generally representative of hospitals in the state, although hospitals with 300 – 399 beds are underrepresented. In the HASC survey, very small hospitals (fewer than 100 beds) are underrepresented, while hospitals with 300 – 399 beds are overrepresented.

Table 3. Distribution of responding general acute care hospitals vs. general acute care hospitals in California, by bed size, 2016

	GAC hospitals in CA			UCSF survey			HASC survey		
Total # of beds	**#**	**%**		**#**	**%**		**#**	**%**	
Less than 100 beds	155	33.4		36	36.0		48	20.8	
100 - 199 beds	133	28.7		29	29.0		64	27.7	
200 - 299 beds	74	15.9		16	16.0		51	22.1	
300 - 399 beds	49	10.6		7	7.0		39	16.9	
400 or more beds	53	11.4		12	12.0		29	12.6	
Total	464	100		100	100		231	100	

Table 4 compares the rural versus non-rural distribution of survey respondents with GAC facilities in the state.10 Hospitals in both surveys are generally representative of the rural versus non-rural distribution of GAC hospitals in California.

Table 4. Distribution of responding general acute care hospitals vs. general acute care hospitals in California, by rural/non-rural geographic location, 2016

	GAC hospitals in CA			UCSF survey			HASC survey	
Geographic location	**#**	**%**		**#**	**%**		**#**	**%**
Rural	39	8.4		5	5.0		10	4.3
Non-rural	425	91.6		95	95.0		221	95.7
Total	464	100		100	100		231	100

10 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 regional labor market conditions for all RNs, and then separately for *experienced RNs* and *new RN graduates*, using a rank order scale of 1 to 5. A score of 1 indicated that demand for RNs was "much less than the available supply", while a score of 5 indicated "high demand for RNs and difficulty filling open positions."[11] Figure 1 compares labor market conditions for all RNs, for all survey years.[12]

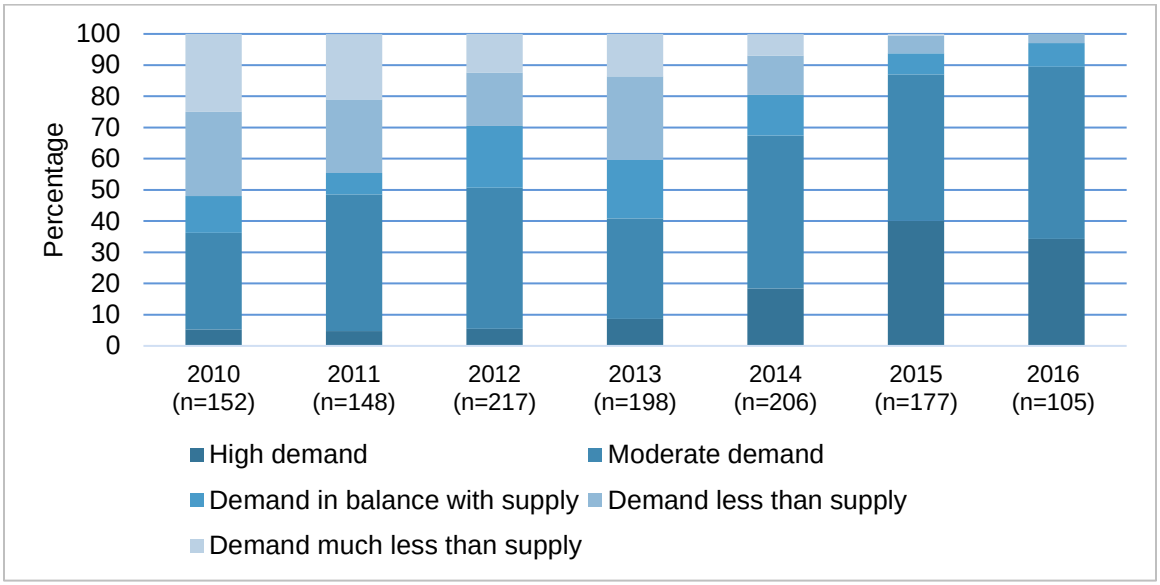
Approximately 34 percent of hospitals reported a perception of high demand for RNs (difficult to fill open positions). Although this represents a slight decrease in comparison to last year's survey, the general trend has been toward greater demand for RNs. More than 55 percent of hospitals reported moderate demand for RNs, surpassing the share reported in 2015. In combination, 89.5 percent of hospitals reported demand for RNs being greater than the available supply, which is a small increase in comparison to 2015, and more than 22 percentage points higher than the survey conducted in 2014.

The increase in the share of hospitals reporting high demand and moderate demand ("difficult to fill open positions" and "some difficulty filling open positions) reinforces the perception that labor market demand for registered nurses has been steady in recent years. Further evidence of this is illustrated by the declining share of facilities reporting that demand is "much less than supply" or "less than supply". In the first year the survey was conducted (2010), more than half of all respondents indicated that the supply of registered nurses exceeded demand; in 2016, the share was less than 3 percent.

11 Data collected between 2010 and 2012 were reported on a scale of 1 to 5, where 1 indicated high demand and 5 indicated low demand. These data have been recoded to match the rank order scale used in 2013, 2014, 2015, and 2016.

12 Surveys fielded between 2010 and 2012 gave respondents the option to report labor market conditions as "other" and write-in a description. This option was excluded beginning with the fall 2013 survey. The 2010 – 2012 survey data included in Figure 1 have been adjusted to exclude "other" response values to allow for comparison across survey years.

Figure 1. Overall RN labor market demand in California, 2010 – 2016

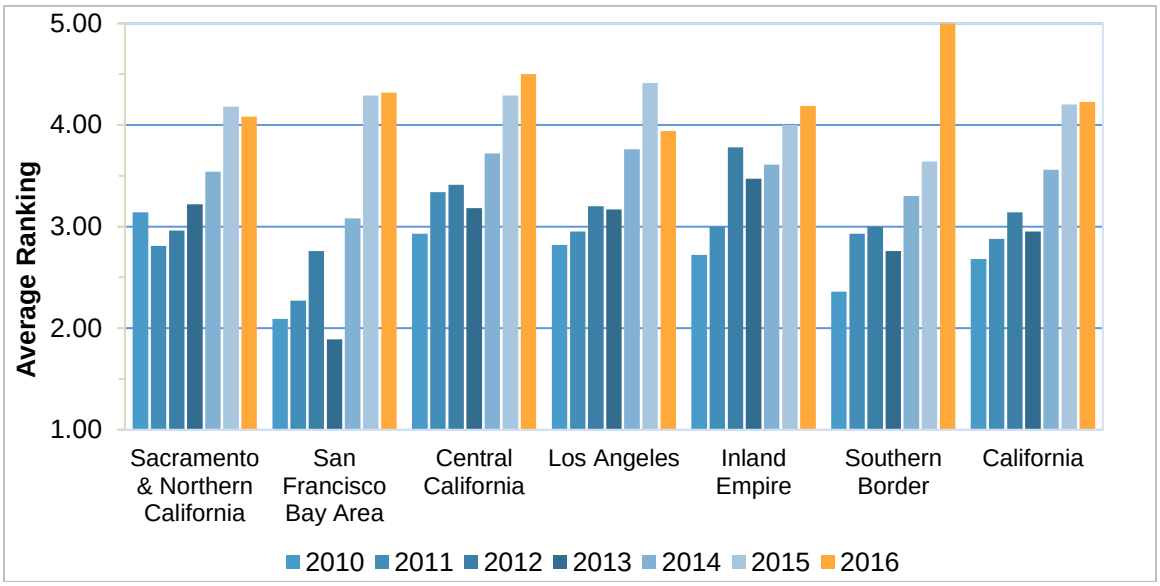


Note: Percentages may not sum to 100% due to rounding.

Hospitals were asked to describe the types of RN positions that have been difficult to fill. Respondents reported very strong demand for experienced RNs across numerous clinical practice areas, particularly the operating room, intensive care, emergency department, and labor and delivery. Survey respondents also reported strong demand for nurses to fill administrative/managerial roles.

Figure 2 shows the average ranking of demand for all registered nurses by region between 2010 and 2016. With the exception of the Los Angeles region, demand for RNs generally held steady or increased in comparison to the previous survey year. There was a substantial increase in demand reported by hospitals in the Southern Border region in comparison to previous years; however, this may be due to the small number of facilities in that region that responded to the survey.

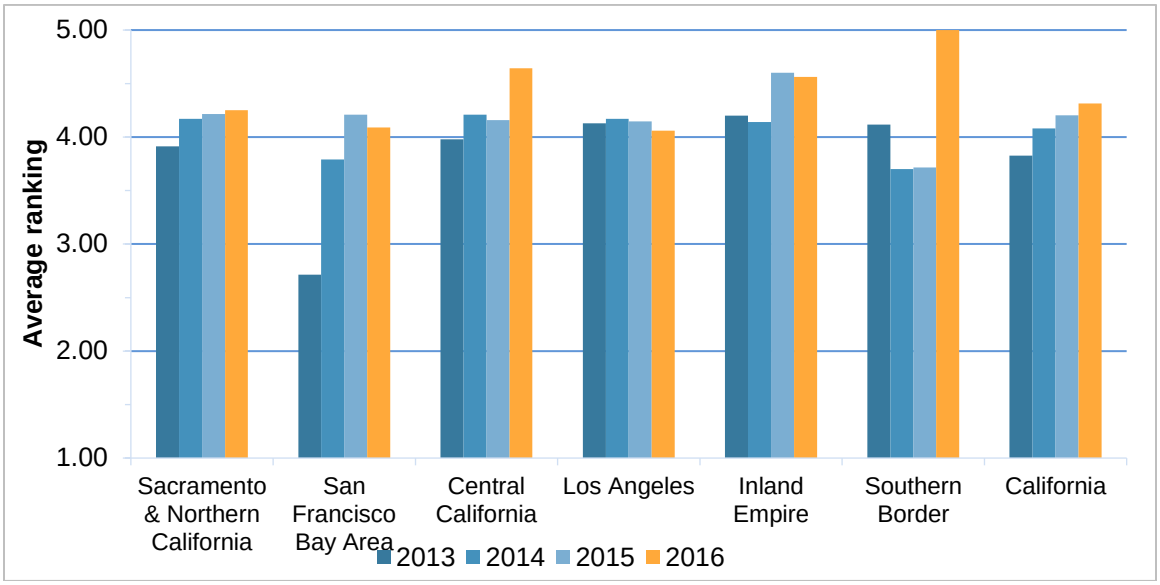
Figure 2. Average ranking of overall labor market demand by geographic region, 2010 – 2016



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 each of the past four survey years, hospitals were asked to distinguish the labor market for *experienced* RNs versus new RN graduates. Figure 3 shows that demand for experienced RNs has been consistently high across all regions in the state. In 2016, the biggest year over year changes in demand were reported by hospitals in the Central California region (moving from moderate demand closer to high demand), and the Southern Border region (which moved from balanced conditions/moderate demand to high demand).

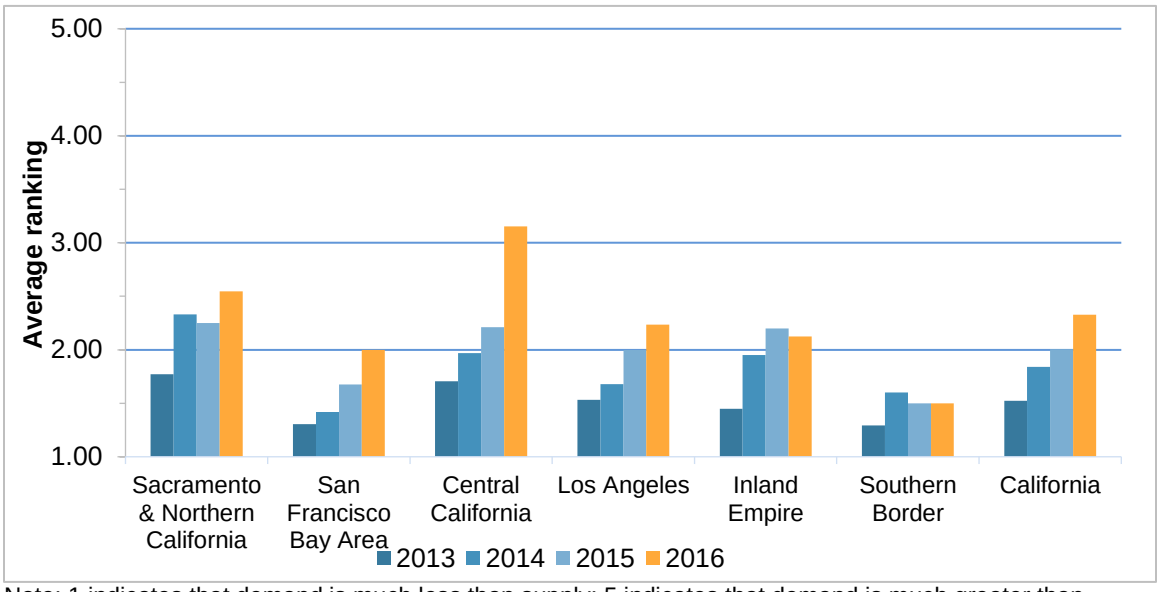
Figure 3. Average ranking of labor market demand for experienced RNs by geographic region, 2013 – 2016



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.)

Figure 4 compares differences in regional demand for *new RN graduates* from 2013 to 2016. With the exception of the Central California region, hospitals reported that demand for *new RN graduates* was less than the available supply. However, Figure 4 also indicates that, in some regions, the labor market for new graduates has improved in comparison with previous years, including Central California, the San Francisco Bay Area, Los Angeles, and the Sacramento and Northern California region. In addition, fall 2016 marks the first time since the survey began asking CNOs to report demand for new RN graduates that any region has had an average demand score greater than 3, indicating that shortages of new graduates may be emerging in some regions.

Figure 4. Average ranking of labor market demand for new RN graduates by geographic region, 2013 – 2016



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.)

Table 5 presents the distribution of hospitals in each region according to how they characterized the labor market for all RNs, for *experienced* RNs, and for *new RN graduates* in fall 2016. These data illustrate modest variation in perceptions of overall labor market conditions across regions of the state. A much smaller share of hospitals in the Los Angeles region reported overall demand for RNs being much greater than the available supply. A much larger share of hospitals in the Sacramento & Northern CA region indicated perceptions of a balanced labor market compared to other regions. However, hospitals across the different regions did not vary in their view of whether or not there were too many RNs relative to demand. Only a small number of hospitals in the Los Angeles and Inland Empire regions reported that demand was less than supply, and no hospitals in any region reported that demand was "much less than supply", signaling that overall demand for RNs is strong across the state.

Table 5 also shows slight regional variation in the demand for *experienced RNs*. Over 70 percent of hospitals in the Inland Empire region and 100 percent of responding hospitals in the Southern Border region reported demand for *experienced RNs* was much greater than the available supply. As with the RN labor market overall, very few hospitals indicated that demand for *experienced RNs* was less than the supply available (SF Bay Area and Los

Angeles regions). These data reinforce the perception that open positions requiring experience remain challenging to fill for hospitals across the state.

As noted in Figure 4, demand for *new RN graduates* is comparatively weak across the state. However, there are signs that labor market conditions may be improving in some regions. Although almost no hospitals in the survey reported "high demand" for new RN graduates, the share of hospitals in the Sacramento & Northern CA, San Francisco Bay Area, Central California, and Los Angeles regions reporting moderate demand for *new RN graduates* in fall 2016 was much larger in comparison with fall 2015.[13]

Table 5. RN labor market demand by geographic region, 2016

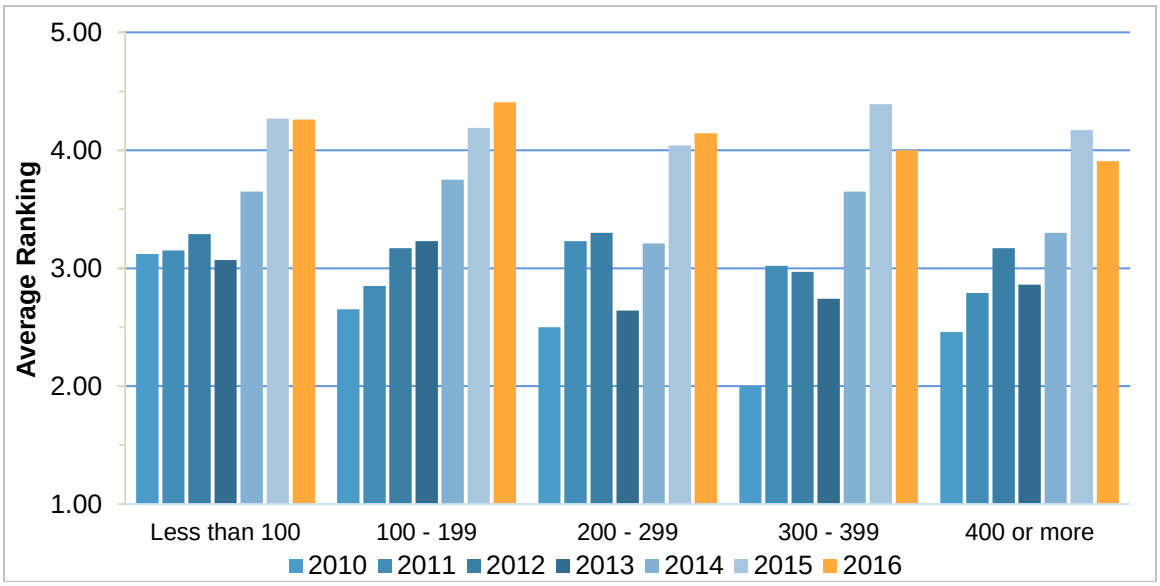
	Regions						
Overall RN labor market	**Sac/ North CA (%)**	**SF Bay Area (%)**	**Central CA (%)**	**LA (%)**	**Inland Empire (%)**	**Southern Border (%)**	
High demand	41.7	32.1	42.9	13.6	36.8	100.0	
Moderate demand	25.0	64.3	57.1	68.2	52.6	0.0	
Demand in balance with supply	33.3	3.6	0.0	9.1	5.3	0.0	
Demand less than supply	0.0	0.0	0.0	9.1	5.3	0.0	
Demand much less than supply	0.0	0.0	0.0	0.0	0.0	0.0	
Total facilities	**12**	**28**	**21**	**22**	**19**	**3**	
Experienced RN labor market							
High demand	41.7	28.6	61.9	18.2	73.7	100.0	
Moderate demand	41.7	60.7	38.1	77.3	15.8	0.0	
Demand in balance with supply	16.7	7.1	0.0	0.0	10.5	0.0	
Demand less than supply	0.0	0.0	0.0	0.0	0.0	0.0	
Demand much less than supply	0.0	3.6	0.0	4.5	0.0	0.0	
Total facilities	**12**	**28**	**21**	**22**	**19**	**3**	
New RN graduate labor market							
High demand	0.0	0.0	5.0	0.0	0.0	0.0	
Moderate demand	27.3	7.7	40.0	13.6	0.0	0.0	
Demand in balance with supply	27.3	19.2	25.0	36.4	31.6	0.0	
Demand less than supply	18.2	23.1	0.0	31.8	42.1	33.3	
Demand much less than supply	27.3	50.0	30.0	18.2	26.3	66.7	
Total facilities	**11**	**26**	**20**	**22**	**19**	**3**	

Figure 5 compares average demand for all RNs by hospital size (total number of licensed beds), for each of the seven years the survey has been conducted. Compared with the previous survey year, demand for RNs in fall 2016 remained the same or increased among hospitals with fewer than 300

13 The fall 2016 versus fall 2015 comparisons for share of hospitals in each region reporting demand for new RN graduates as being greater than supply are as follows: Sacramento & Northern CA (27.3 % vs 17.8%); SF Bay Area (7.7% vs. 2.7%); Central CA (45% vs. 5.4%); Los Angeles (13.6% vs. 3.1%); Inland Empire (0% vs. 12.5%); Southern Border (0% vs. 7.1%).

beds. These smaller hospitals reported demand for RNs as being moderate to high. In contrast, larger hospitals (300 or more beds) reported weaker demand in comparison to the previous year. On average, hospitals reported a perception of the RN labor market as being somewhere between balanced and moderate demand. The data indicate that despite the variation in demand scores, hospitals of all sizes report some difficulty in filling open positions.

Figure 5. Average ranking of overall labor market demand by hospital bed-size, 2010 – 2016

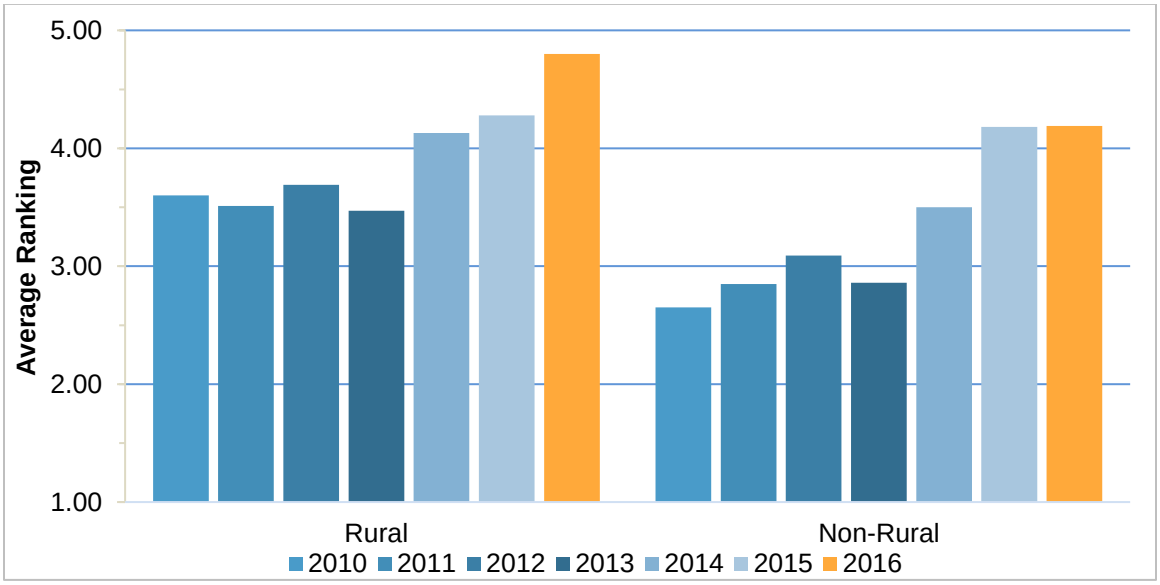


Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

Differences in demand for *experienced RNs* compared to *new RN graduates* among hospitals of differing size are consistent with data describing regional differences (Figures 3 and 4, and Table 5). For *experienced RNs*, the average demand scores ranged from 4.00 to 4.41, indicating moderate to high demand with some difficulty filling open positions. Hospitals with 100 to 199 beds and very large hospitals (400 or more beds) reported perceptions of slightly stronger demand in comparison with hospitals of other sizes. Demand for *new RN graduates* was comparatively weak among hospitals of all sizes, with average demand scores ranging from 1.50 to 3.00. This indicates a general perception of demand as being anywhere from less than (or much less than) the available supply to being in balance with supply. Hospitals with 100 to 199 beds and hospitals with 400 or more beds reported marginally stronger demand in comparison to hospitals of other sizes.

Figure 6 compares average demand for all RNs between 2010 and 2016 according to whether or not the hospital is located in a geographically rural area. Average demand among hospitals in non-rural locations did not change compared with the previous year. In contrast, rural hospitals reported an average demand score of 4.80 versus a demand score of 4.28 in fall 2015.

Figure 6. Average ranking of RN labor market demand by rural/non-rural geography, 2010 – 2016



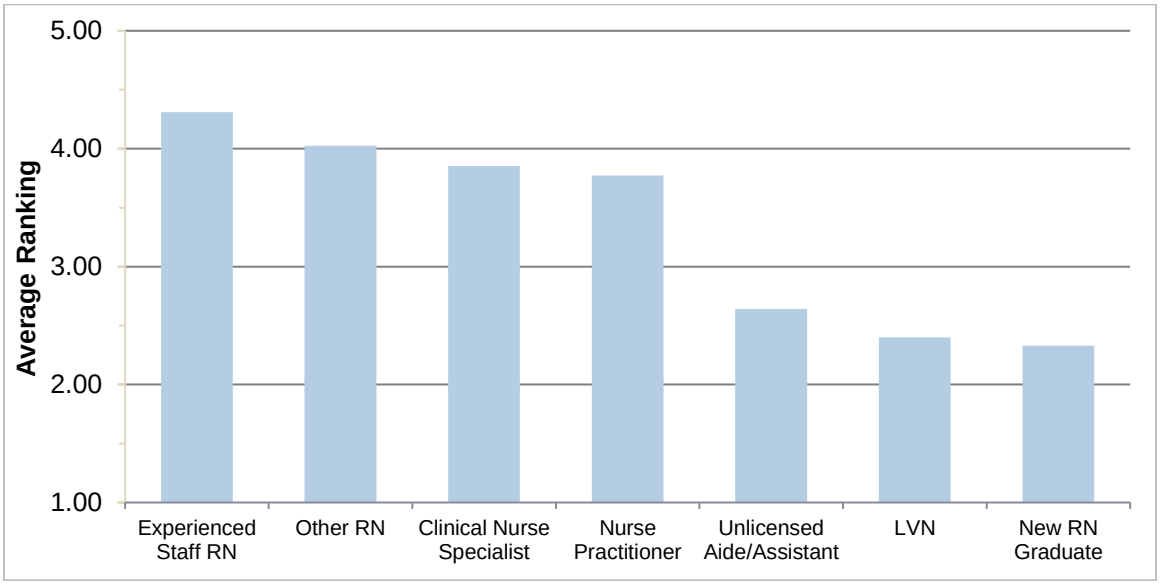
Note: 1 indicates that demand is much less than supply; 5 indicates that demand is much greater than supply. (Lower numbers indicate greater surplus of nurses.)

The rural and non-rural differences in demand for *experienced RNs* compared to *new RN graduates* are generally consistent with data presented previously. For *experienced RNs*, the average demand scores for both rural and non-rural hospitals indicated moderately high demand, with some difficulty filling open positions; the average score for non-rural hospitals (4.40) was slightly higher by comparison with non-rural hospitals (4.31). The rural versus non-rural difference in demand for *new RN graduates* is larger. The average demand score among non-rural hospitals (2.25) indicated a general perception of demand being less than the available supply of *new RN graduates*, while the average demand among rural hospitals (3.75) signaled a labor market where demand is somewhere between balanced and moderately greater than the supply available of *new RN graduates*.

Figure 7 compares the average demand in fall 2016 by type of nursing position. Survey respondents reported that demand is greater than the

available supply of *experienced staff RNs*, *other RNs*[14], *clinical nurse specialists* and *nurse practitioners*. Respondents indicated that demand for *unlicensed aides/assistants*, *LVNs,* and *new RN graduates* is less than the available supply.

Figure 7. Average ranking of RN labor market demand by position, 2016



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.)

Hospital Staffing Data

The following sections describe current employment levels, current vacancies, utilization of per diem, contract and agency staff, employee separations, and new employee hiring using data derived from the HASC quarterly turnover and vacancy survey. [15] The survey provides information about specific nursing positions:

- *Registered Nurse* – includes:
    - *Staff RN* – nurses engaged in direct patient care and not identified by one of the other types of nursing positions specified.

14 Non-staff RN positions include administrative roles, clinical directors and managers, clinical educators, researchers, quality improvement specialists, case managers, and a variety of other nursing positions.

15 Staffing data are derived from the HASC Healthcare Workforce Survey, which is conducted quarterly. The data used in this report refer to the period from July 1, 2016 to September 31, 2016.

  - *Specialty RN* – this includes nurses working in the following clinical areas: operating room, critical care, emergency department, labor and delivery, and the neonatal intensive care unit (NICU).
  - *Other RN* – this includes roles in nursing administration, clinical directors and managers, clinical educators, roles in quality assurance, research, and patient education, as well as other clinical specialty areas not represented by the *Specialty RN* group identified above.
  - *New RN graduates* – Staff RNs with less than six months of experience.
- *Case Manager*
- *Nurse Anesthetist*
- *Clinical Nurse Specialist*
- *Nurse Midwife*
- *Nurse Practitioner*
- *Licensed Vocational Nurse*
- *Certified Nurse Assistant*
- *Home Health Aide*
- *Unlicensed aide/assistant*

Current Employment of Nurses

Table 6 presents total employment by nursing position and the distribution of employment by full-time versus part-time status. Responding hospitals reported that 103,034 registered nurses were employed in fall 2016, which accounted for 82 percent of all nursing position employment. *Staff RNs* represented 73 percent of all registered nurses. Table 6 shows that hospitals employ comparatively few advanced practice nurses (*nurse anesthetists*, *clinical nurse specialists*, *nurse midwives and nurse practitioners*), accounting for only approximately 2 percent of total nursing employment. Among advanced practice nurses, only nurse practitioners are employed in significant numbers, accounting for 73 percent of all advanced practice nurses. Table 6 also shows there is wide variation in full-time versus part-time employment across the different types of nursing positions, ranging from a high of 97 percent (*new RN graduates*) to a low of 60 percent (*nurse midwives*).

Table 6. Number of current staff (headcount) by position, 2016

	Full-time			Part-time			
Description	**Headcount**	**% of total**		**Headcount**	**% of total**		**Total**
Registered Nurse	75,417	73.2		27,617	26.8		103,034
Staff RN	52,540	70.1		22,453	29.9		74,993
Specialty RN	14,792	76.9		4,453	23.1		19,245
Other RN	5,590	89.8		633	10.2		6,223
New RN Graduate	2,495	97.0		78	3.0		2,573
Case Manager	1,458	84.9		260	15.1		1,718
Nurse Anesthetist	127	92.0		11	8.0		138
Clinical Nurse Specialist	296	84.6		54	15.4		350
Nurse Midwife	14	60.9		9	39.1		23
Nurse Practitioner	1,200	80.5		290	19.5		1,490
Licensed Vocational Nurse	3,433	84.5		632	15.5		4,065
Certified Nurse Assistant	6,331	70.0		2,712	30.0		9,043
Home Health Aide	236	91.5		22	8.5		258
Unlicensed Aide/Assistant	4,471	80.5		1,080	19.5		5,551
Total	**92,983**	**74.0**		**32,687**	**26.0**		**125,670**

Table 7 compares the share of full-time employment by position in fall 2016 with fall 2015. Full-time employment of *staff RNs* was similar in both years, with approximately 70 percent of staff RNs working full-time in 2016, compared with 73 percent in 2015. The shares of *other RNs* and *new RN graduates* employed in full-time positions increased between 2015 and 2016. Full-time employment of nurse practitioners rose 6.5 percentage points, while it declined 10.8 percentage points for certified nurse assistants. *Nurse anesthetists*, *clinical nurse specialists*, *nurse midwives*, and *home health aides* also experienced large increases in the share of full-time employment between fall 2015 and fall 2016. However, the number of people employed in these positions is small, so these large percentage changes are not associated with large changes in absolute numbers.

Table 7. Share of employed nurses working full-time by position, 2016 vs. 2015

	Share of employed nurses working full-time	
Description	**2016**	**2015**
Registered Nurse	73.2	73.9
Staff RN	70.1	73.3
Specialty RN	76.9	*
Other RN	89.8	85.6
New RN Graduate	97.0	93.6
Case Manager	84.9	82.2
Nurse Anesthetist	92.0	83.1
Clinical Nurse Specialist	84.6	79.5
Nurse Midwife	60.9	47.6
Nurse Practitioner	80.5	74.0
Licensed Vocational Nurse	84.5	82.6
Certified Nurse Assistant	70.0	80.8
Home Health Aide	91.5	79.7
Unlicensed Aide/Assistant	80.5	80.4
Total	**74.0**	**75.6**

*Data not collected.

Current Vacancies

Table 8 presents vacancy rates by nursing position for the third quarter of 2016.[16] The total vacancy rate for registered nurses was 4.9 percent, however, there were differences in the rate among the different RN position types. The total vacancy rates for *new RN graduates*, *specialty RNs*, and *other RNs* were all considerably higher than for *staff RNs*. Table 8 also shows that *certified nurse assistants*, *home health aides*, and *unlicensed aides/assistants* had a lower total vacancy rate in comparison to *staff RNs*. Note that hospitals do not employ many *nurse anesthetists*, *clinical nurse specialists*, or *nurse midwives*, which means that a small number of vacant positions can result in a high vacancy rate. Nurse practitioners' vacancy rate of 6 percent indicates comparatively strong demand for them among hospitals in California.

As seen in Table 8, full-time vacancy rates are generally higher than part-time vacancy rates. Exceptions to this include the rate for part-time *new RN graduates, clinical nurse specialists*, *unlicensed aide/assistants*, and *licensed*

16 Vacancy data are derived from the quarterly HASC Healthcare Workforce Survey and represent openings as of the pay period closest to September 31, 2016.

vocational nurses (LVN). *New RN graduates* are hired almost exclusively into full-time positions, so a small number of part-time vacancies results in a high part-time vacancy rate. Variation in the ratio of full-time to part-time vacancies indicates differences in the availability of full-time versus part-time positions. *Staff RNs* have the lowest ratio (3.5), with three-and-a-half full-time vacancies for every one part-time vacancy, whereas *specialty RNs* have a ratio of almost 5, indicating five full-time vacancies for every 1 part-time vacancy. *Case managers* (8.1) and *other RNs* (9.3) have much higher ratios, indicating that openings for full-time positions are much more prevalent than are part-time positions.

Table 8. Current vacancy rates by position, 2016[17]

	Full-time		Part-time		Total		FT:PT ratio
Description	**No.**	**Rate (%)**	**No.**	**Rate (%)**	**No.**	**Rate (%)**	
Registered Nurse	4,263	4.6	1,056	4.0	5,319	4.9	4.0
Staff RN	2,807	5.1	792	3.4	3,599	4.6	3.5
Specialty RN	957	6.1	194	4.2	1,151	5.6	4.9
Other RN	354	6.0	38	5.7	392	5.9	9.3
New RN Graduate	145	5.5	32	29.1	177	6.4	4.5
Case Manager	105	6.7	13	4.8	118	6.4	8.1
Nurse Anesthetist	11	8.0	1	8.3	12	8.0	11.0
Clinical Nurse Specialist	21	6.6	7	11.5	28	7.4	3.0
Nurse Midwife	2	12.5	0	0.0	2	8.0	--
Nurse Practitioner	79	6.2	16	5.2	95	6.0	4.9
Licensed Vocational Nurse	189	5.2	41	6.1	230	5.4	4.6
Certified Nurse Assistant	228	3.5	104	3.7	332	3.5	2.2
Home Health Aide	12	4.8	0	0.0	12	4.4	--
Unlicensed Aide/Assistant	173	3.7	79	6.8	252	4.3	2.2

Table 9 shows that the 2016 average quarterly vacancy rate for registered nurses was slightly higher than in fall 2015, continuing the upward trend that began in 2012. This underscores findings that overall demand for RNs has increased.

17 Vacancy rate is calculated as follows: (number of vacancies reported as of the pay period closest to September 31, 2016)/((headcount as of the pay period closest to September 31, 2016) + (number of vacancies reported as of the pay period closest to September 31, 2016))

Table 9. Average quarterly vacancy rate for registered nurses, 2010 – 2016

	Average Quarterly Vacancy Rate (%)						
Description	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Registered Nurse	3.4	4	3.7	4.2	4.6	5.8	5.9

Per Diem, Contract & Agency Employment

Table 10 presents data describing hospitals' use of per diem, contract, and agency employees, by position type, from 2014 to 2016. The data show that utilization of per diem employees varies considerably depending on the position. In fall 2016, per diem staff accounted for approximately 18 percent of all *specialty RNs*. In contrast, the share of per diem staff for other s*taff RNs* (12.8 percent), *other RNs* (11.5 percent), and *new RN graduates* (4 percent) was much smaller. More than 20 percent of *case managers*, more than 30 percent of *nurse anesthetists*, and 65 percent of *nurse midwives* employed by surveyed hospitals were reported as per diem staff.

Table 10 also indicates that use of per diem staff has been generally stable in recent years for most nursing positions, fluctuating within narrow ranges, with the exception of *nurse midwives* and *home health aides*. The dramatic year-over-year changes in the share of per diem *nurse midwives* most likely reflects the low numbers of nurse-midwives employed directly, which makes percentage changes relatively larger. The issue regarding small changes in absolute number having a big impact on relative changes may explain the dramatic year-over-year change in share of per diem *home health aides*.

Utilization of per diem nurses is far more common than the use of either contract or agency employees; per diem RNs outnumbered contract RNs by a ratio of approximately 6 to 1 in fall 2016, and outnumbered agency RNs by a ratio of approximately 12 to 1. Per diem LVNs and *unlicensed aides/assistants* also were used in far greater number in comparison to contract and agency staff.

Table 10. Per Diem, contract, and agency staff as share of current staff, 2016[18]

	# of positions		Share of current staff (%)					
Per Diem Employees	**2016**		**2016**		**2015**		**2014**	
Registered Nurse	13,849		13.4		14.7		12.2	
Staff RN	9,611		12.8		14.8		12.5	
Other RN	713		11.5		10.3		9.5	
New RN Graduate	103		4.0		2.1		5.8	
Specialty RN	3,422		17.8		*		*	
Case Manager	399		23.2		21.3		*	
Nurse Anesthetist	43		31.2		33.8		36.5	
Clinical Nurse Specialist	12		3.4		3.8		2.5	
Nurse Midwife	15		65.2		52.4		94.4	
Nurse Practitioner	218		14.6		14.6		13.3	
Licensed Vocational Nurse	708		17.4		20.1		16.5	
Certified Nurse Assistant	1,822		20.1		15.0		17.9	
Home Health Aide	48		18.6		31.8		73.6	
Unlicensed Aide/Assistant	908		16.4		16.3		14.9	
Contract Employees								
Registered Nurse	1,731		1.7		2.1		1.8	
Licensed Vocational Nurse	4		0.1		0.1		0.6	
Unlicensed Aide/Assistant	99		1.8		0.5		0.7	
Agency Employees								
Registered Nurse	848		0.8		1.5		1.1	
Licensed Vocational Nurse	27		0.7		3.2		8.7	
Unlicensed Aide/Assistant	240		4.3		8.9		4.6	

*Data not collected.

Table 11 shows that the share of current staff represented by per diem RNs, LVNs, and *unlicensed aides/assistants* has been relatively consistent over the past seven years, each fluctuating within a range of approximately 5 percentage points.[19] The utilization of contract and agency RNs has also been relatively consistent over the past seven years. With the exception of 2011, the share of current staff represented by contract RNs has ranged from 1 to 2 percent; with the exception of 2015, the share of current staff represented by agency RNs has ranged from 0.2 to 1 percent. The data describing use of contract LVNs and *unlicensed aides/assistants* show a similar pattern: the share fluctuates within a relatively narrow range, with the exception of one

18 The per diem, contract, and agency share of current staff is calculated as follows: (number of per diem/full-time contract/full-time agency positions as of the pay period closest to September 31, 2016) / (number of regular staff positions as of the pay period closest to September 31, 2016)

19 The one exception to this trend is the 2011 share of per diem LVNs; given subsequent years' data, this appears to be an anomaly.

outlier year. Use of agency LVNs and *unlicensed aides/assistants* has been less consistent over time, although in the three most recent years of survey data hospitals have reported use of a comparatively large share of agency-based *unlicensed aides/assistants*.

Table 11. Per diem, contract, and agency staff as share of current staff, 2010 – 2016

	Share of Current Staff (%)						
Per Diem Employees	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Registered Nurse	12.8	12.4	14.7	13.6	12.2	14.7	13.4
Licensed Vocational Nurse	16.9	8.6	15.2	19.5	16.5	20.1	17.4
Unlicensed Aide/Assistant	17.1	14.0	18.1	20.0	14.9	16.3	16.4
Contract Employees							
Registered Nurse	1.6	2.7	0.8	1.3	1.8	2.1	1.7
Licensed Vocational Nurse	0.4	0.1	1.2	3.6	0.6	0.1	0.1
Unlicensed Aide/Assistant	0.3	0.0	0.1	0.7	0.7	0.5	1.8
Agency Employees							
Registered Nurse	1.0	0.2	0.6	0.6	1.1	1.5	0.8
Licensed Vocational Nurse	1.0	0.3	0.1	3.3	8.7	3.2	0.7
Unlicensed Aide/Assistant	1.5	0.3	1.5	2.0	4.6	8.9	4.3

Staff Separations by Position

Table 12 describes nurses who left their positions in the third quarter of 2016. Among RNs, the total separation rate was higher for *specialty RNs* than for *staff RNs* (including new RN graduates) and *other RNs*. *Case managers*, *nurse practitioners*, and LVNs also had comparatively high separation rates, as did *nurse midwives* (keeping in mind the fact that hospitals employ very few *nurse midwives*). A comparison of full-time versus part-time separation rates indicates that, among the nursing positions that hospitals employ in significant numbers, full-time separation rates are consistently higher (*unlicensed aides/assistants* are the exception).

Table 12. Separations (turnover) as a share of current staff, by position, 2016[20]

	Full-time		Part-time		Total	
Description	**Number**	**Rate (%)**	**Number**	**Rate (%)**	**Number**	**Rate (%)**
Registered Nurse	2,288	3.1	596	2.2	2,884	2.8
*Staff RN**	1,558	2.8	416	1.8	1,974	2.5
Specialty RN	548	4.0	160	3.8	708	4.0
Other RN	182	3.3	20	3.3	202	3.3
Case Manager	59	4.4	8	3.1	67	4.2
Nurse Anesthetist	2	1.6	1	6.3	3	2.1
Clinical Nurse Specialist	4	1.8	1	1.9	5	1.8
Nurse Midwife	1	7.1	0	0.0	1	4.3
Nurse Practitioner	42	3.9	8	2.7	50	3.7
Licensed Vocational Nurse	124	3.8	15	2.5	139	3.6
Certified Nurse Assistant	166	2.7	66	2.5	232	2.6
Home Health Aide	4	1.8	2	9.1	6	2.5
Unlicensed Aide/Assistant	136	3.4	54	4.8	190	3.7

*Staff RNs include new RN graduates.[21]

Table 13 presents annualized RN separation rates for RNs. Although the 2016 separation rate is slightly lower in comparison with 2015, the rate has generally increased over time.

Table 13. RN separations (turnover) as a share of current staff, 2010 – 2016

	Annual Separation Rate (%)						
Description	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Registered Nurse	8.2	8.5	8.6	8.8	9.2	11.2	10.8

New Employee Hiring by Position

Table 14 presents the numbers of nursing personnel who were hired as new employees in the third quarter of 2016. Overall hiring rates were highest for *case managers*, *nurse practitioners*, and *other RNs*. Full-time hiring rates were higher than part-time hiring rates for every type nursing position. None

20 The separation rate was calculated as follows: (number of separations occurring during the quarter July 1, 2016 – September 31, 2016) / (number of positions at the start of the quarter beginning July 1, 2016).

21 New RN graduates are included with staff RNs in this table because they account for a comparatively small share of registered nurses. Since new RN graduates have less than six months experience, a quarterly separations rate isn't a useful measure of the labor market conditions they face.

of the surveyed hospitals reported new hires for either nurse anesthetist or nurse midwife positions in the fall 2016 quarter.

Table 14. Reported new employees as a share of current staff, by position, 2016

	Full-time		Part-time		Total	
Description	**Number**	**Rate (%)**	**Number**	**Rate (%)**	**Number**	**Rate (%)**
Registered Nurse	4,074	5.5	613	2.2	4,687	4.6
Staff RN*	3,069	5.8	525	2.3	3,594	4.7
Specialty RN	700	5.2	72	1.7	772	4.3
Other RN	305	5.6	16	2.7	321	5.3
Case Manager	86	6.5	7	2.7	93	5.9
Nurse Anesthetist	0	0.0	0	0.0	0	0.0
Clinical Nurse Specialist	9	4.0	0	0.0	9	3.2
Nurse Midwife	0	0.0	0	0.0	0	0.0
Nurse Practitioner	60	5.6	13	4.3	73	5.3
Licensed Vocational Nurse	156	4.8	23	3.9	179	4.7
Certified Nurse Assistant	278	4.5	63	2.3	341	3.9
Home Health Aide	11	5.0	0	0.0	11	4.6
Unlicensed Aide/Assistant	160	4.0	39	3.4	199	3.9

*Staff RNs include new RN graduates.[22]

Table 15 presents annualized hiring rates for RNs from 2010 to 2016. The 2016 hiring rate was slightly lower in comparison with 2015. However, hiring rates have been generally increasing since 2012.

22 New RN graduates are included with staff RNs in this table because they account for a comparatively small share of registered nurses. Since new RN graduates have less than six months experience, a quarterly hiring rate isn't a useful measure of the labor market conditions they face.

Table 15. Reported new employees as a share of current staff, by position, 2010 – 2016

	Annual Hiring Rate (%)							
Description	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Registered Nurse	9.1	10.8	9.8	10.2	11.0	16.5	16.0

Taken together, the separation and hiring rate data presented in Tables 12 through 15 indicate that total hiring rates were higher than separation rates with only two exceptions: *nurse anesthetists* and *nurse midwives* (both of which had a zero hiring rate).[23] Historically, the annual hiring rate for all registered nurses has been higher than the annual separation rate, but the difference has been much larger in each of the past two years in comparison to previous years (over 5 percent difference in 2015 and 2016, compared to a 1 to 2 percent difference from 2010 to 2014).

Employment Changes Experienced In the Past Year

Hospitals were asked about changes in employment levels during the past year and Figure 8 shows that hospitals predominantly reported no change in employment between fall 2015 and fall 2016 for the various nursing positions. Exceptions included *new RN graduates* and, to a lesser extent, *nurse practitioners*. Two-thirds of responding hospitals reported increased employment of *new RN graduates* between 2015 and 2016, which is the largest share of hospitals to report an increase in employment for any nursing position over the seven-year period this survey has been conducted. In contrast, only 35 percent of responding hospitals reported that employment of *experienced staff RNs* increased over the past year, marking the first time in the past three survey years that fewer than half of responding hospitals reported an increase in the employment of *experienced staff RNs*.

23 The hiring and separation rates for staff RNs are unaffected by the addition of new RN graduates; because of the small total number of employees considered to be new RN graduates, these rates are the same whether or not they are included.

Figure 8. Employment of RNs in the past year, by position, 2016

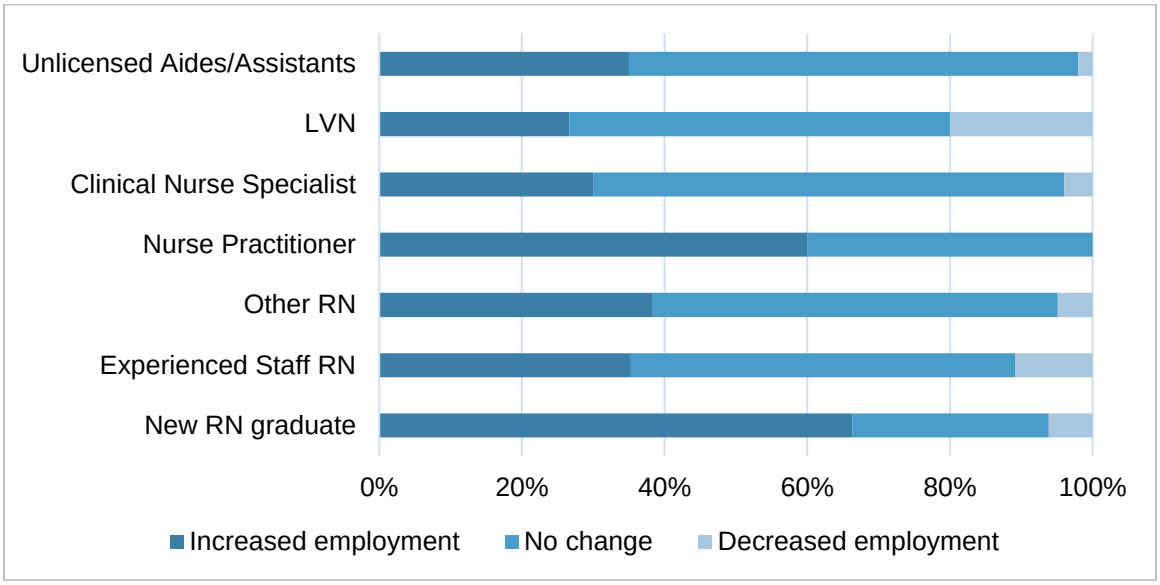


Figure 9 shows that hospitals reported increased employment of both agency RNs and traveling RNs over the past year. The share of hospitals reporting increased employment of traveling RNs was more than four times as large as the share reporting decreased employment. Hospitals indicated that increased utilization of temporary and traveling RNs was driven by patient census growth, higher turnover of current staff in positions, difficulty filling open positions, staff leaves of absence, and increased patient acuity. Many of the hospitals that reported decreased utilization over the past year reported that high demand for both agency RNs and traveler RNs made them difficult to hire. Some hospital reported that they have increased their focus on recruitment and retention of current staff to manage rising demand for RNs.

Figure 9. Employment of temporary and traveling nurses, 2016

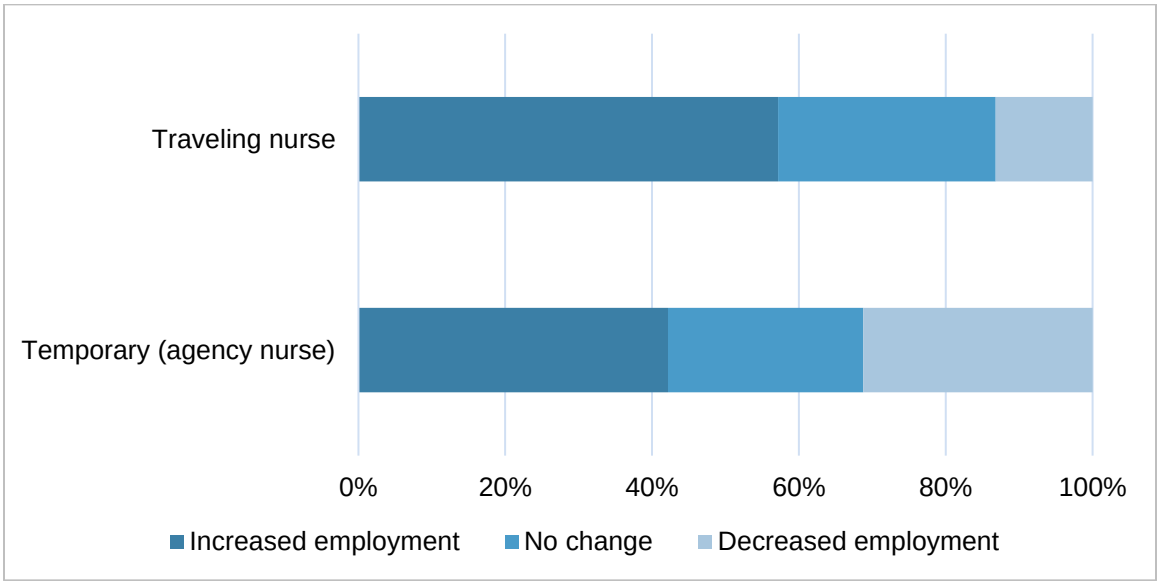
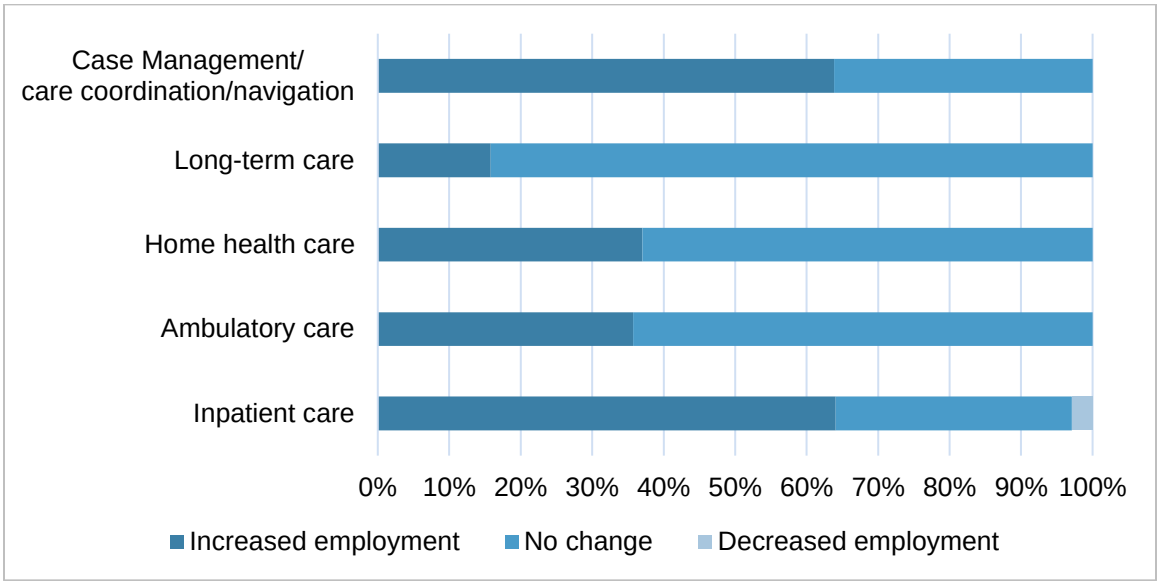


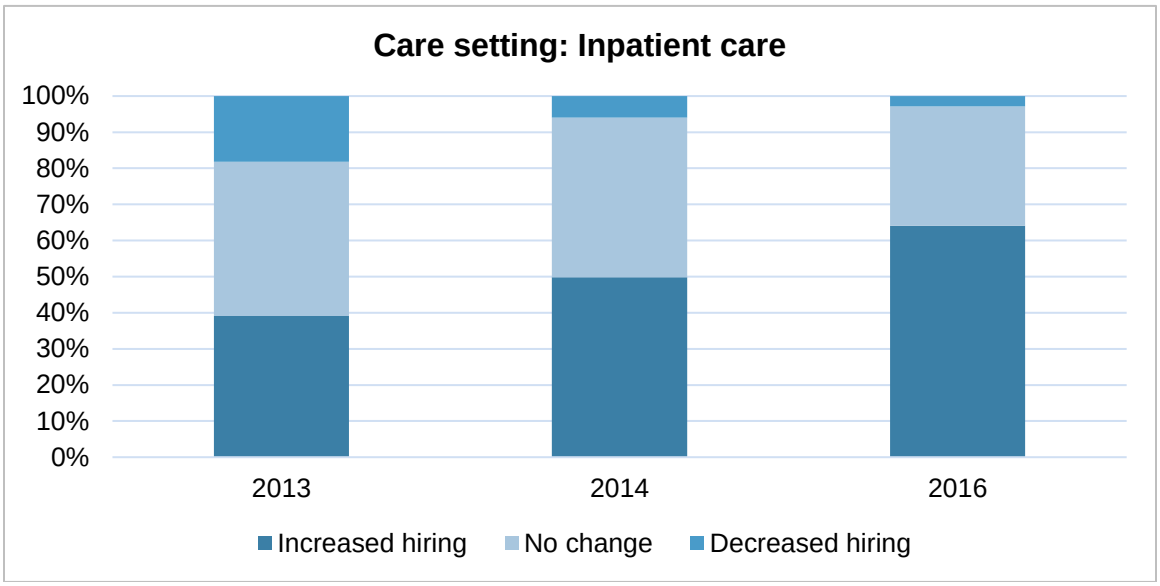
Figure 10 presents hospital responses describing shifts in hiring over the past year for RNs who work in inpatient care, ambulatory care, home health care, long-term care, and case management positions (which includes care navigation and care coordination). Two-thirds of all respondents reported increased hiring for inpatient care and case management positions in the past year. In contrast, just 16 percent of hospitals reported increased hiring for long-term care. Across all types of positions, only three hospitals reported that hiring decreased in any department (inpatient care) between fall 2015 and fall 2016.

Figure 10. Change in RN hiring in the past year, by care setting, 2016



Figures 11 through 15 compare hospital responses describing shifts in hiring for positions by type of care for the past four survey years. Hiring for ambulatory care, home health care, and long-term care declined substantially in 2016 compared with 2015, slowing the trend of increased hiring. The share of hospitals reporting increased hiring for case management positions also declined compared to the previous year, but the difference was smaller. Figures 11 through 15 also show that over the past four survey years, the number of hospitals reporting decreased year-over-year hiring has declined to almost zero across all areas.

Figure 11. Change in RN hiring in the past year, by care setting: Inpatient care, 2013 – 2016



**Data not collected in 2015

Figure 12. Change in RN hiring in the past year, by care setting: Ambulatory care, 2013 – 2016

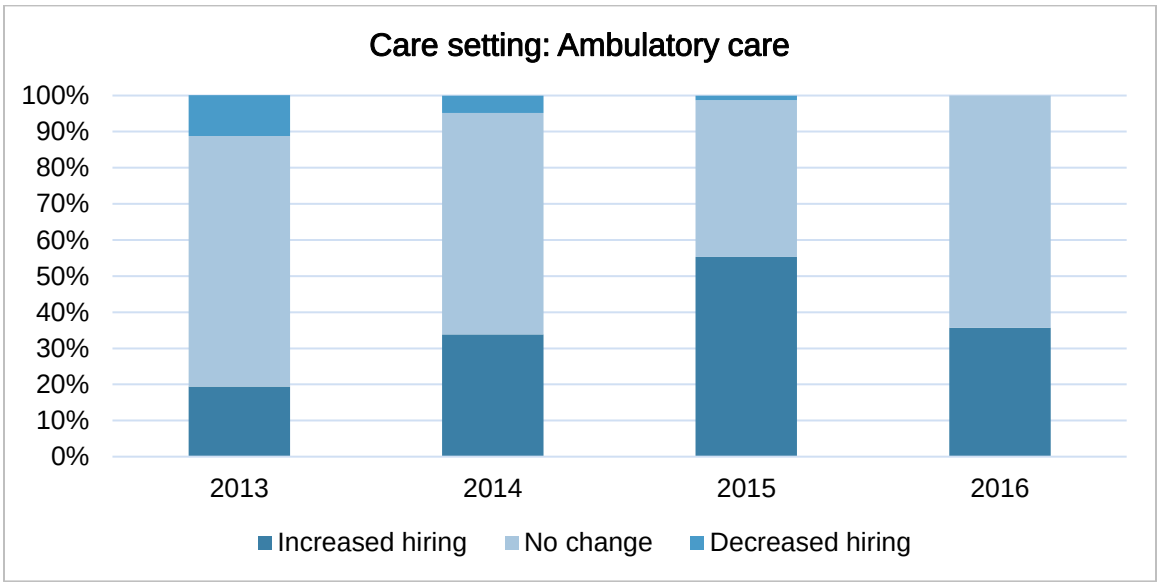


Figure 13. Change in RN hiring in the past year, by care setting: Home health care, 2013 – 2016

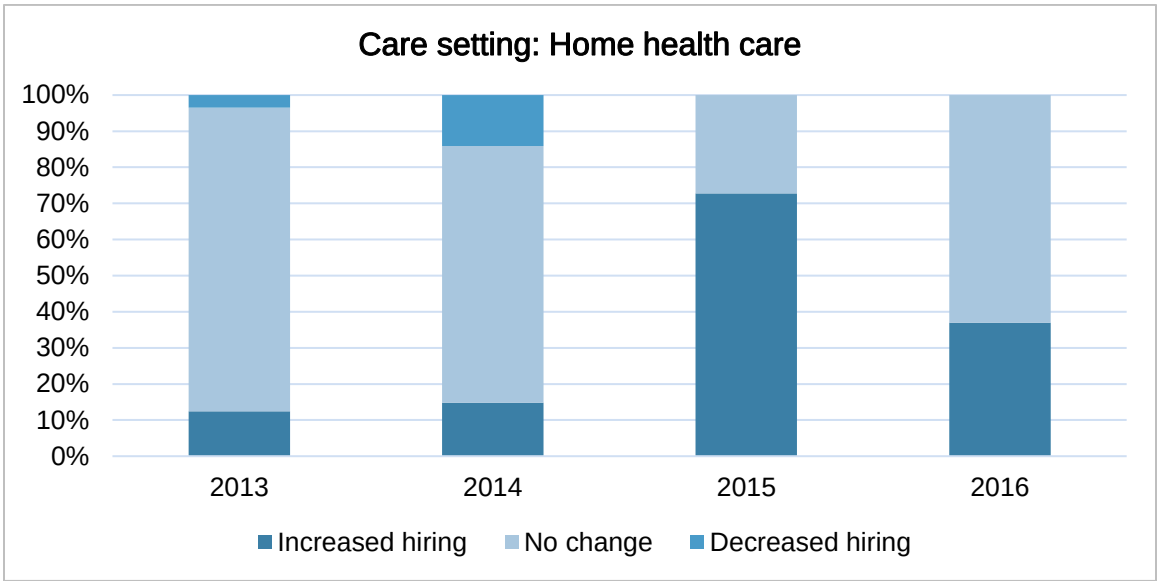


Figure 14. Change in RN hiring in the past year, by care setting: Long-term care care, 2013 – 2016

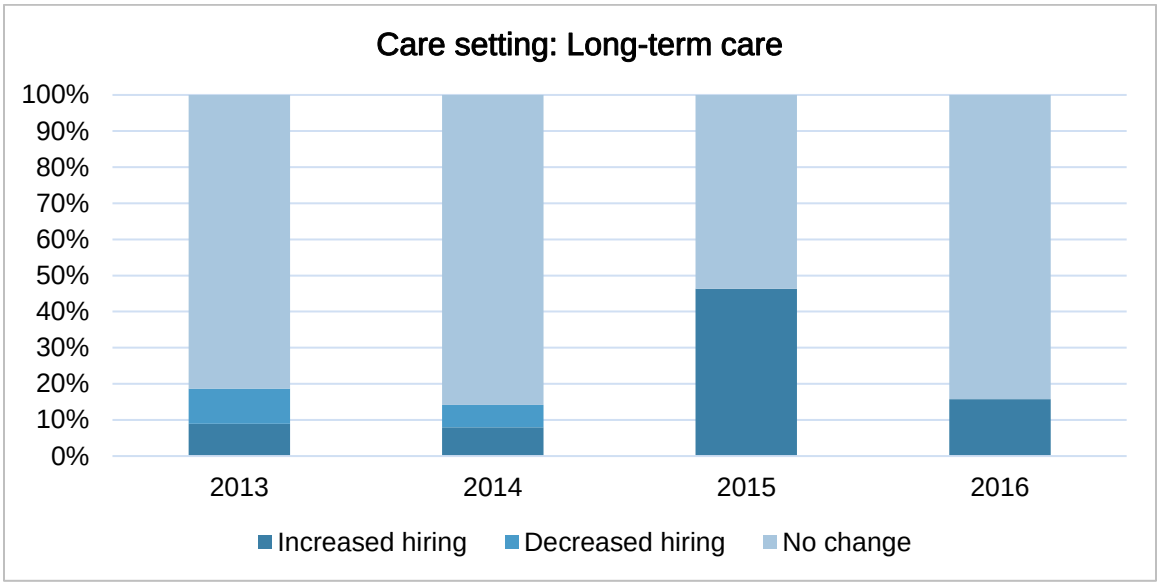
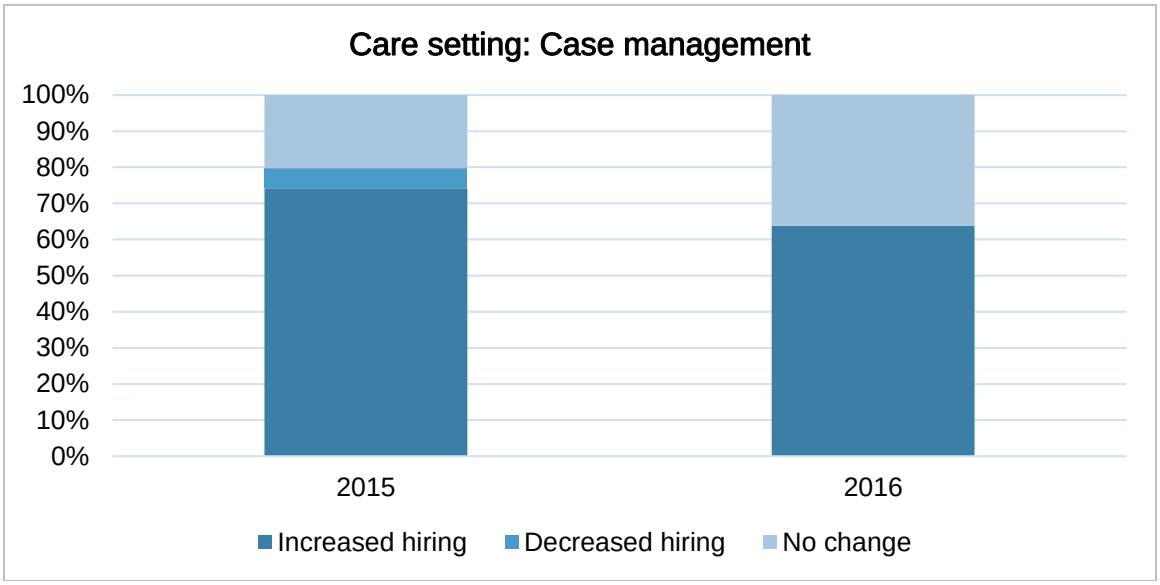


Figure 15. Change in RN hiring in the past year, by care setting: Case management, 2013 – 2016



**Data not collected in 2013 and 2014.

Hospitals were asked about environmental changes experienced over the past year. More than 47 percent reported an increase in the use of traveler/contract nurses; 42 percent reported an increase in patient census, and 39 percent reported increased patient acuity. In addition, approximately 36 percent of hospitals reported greater turnover of staff compared to prior years, and nearly 14 percent of responding hospitals indicated that more RNs had retired than expected. Finally, the share of hospitals reporting they faced budget constraints in fall 2016 was approximately 26 percent, compared to 20 percent of hospitals in fall 2015.

Recruitment of Foreign-trained RNs

Table 16 shows that 5.7 percent of hospitals reported they were recruiting foreign-educated RNs to fill open staff positions in fall 2016. This is slightly higher compared with the previous year, and the share has increased slightly in each of the past three years. However, it is still below the 6.7 percent that reported foreign recruitment in 2010, which was the highest in the seven years this survey has been conducted.

Table 16. Current recruitment of foreign-trained registered nurses, 2010 – 2016

Description	2010	2011	2012	2013	2014	2015	2016
Recruiting foreign-trained RNs	6.7%	4.0%	1.9%	2.6%	4.2%	5.3%	5.7%
Not recruiting foreign-trained RNs	93.3 %	96.0 %	98.1 %	97.4 %	95.8 %	94.7 %	94.3 %
Number of hospitals	104	149	215	190	214	208	105

New RN Graduates

Almost 90 percent of hospitals reported hiring *new RN graduates* in fall 2016. Figure 16 shows that in each year between 2010 and 2013 the share of hospitals that reported they hired *new RN graduates* in the previous year declined. During this same period, the share of hospitals that reported they do not ever hire *new RN graduates* increased. Fall 2014 marked a reversal of these trends, which continued into fall 2015. However, the fall 2016 data indicate a very small decline in the share of hospitals that reported having hired *new RN graduates*, and a small increase in the share of hospitals reporting that they do not hire *new RN graduates*. The small number of hospitals that do not hire *new RN graduates* indicated that they prefer to hire RNs who have already developed strong clinical skills and critical thinking.

Figure 16. Hiring of new RN graduates, 2010 – 2016

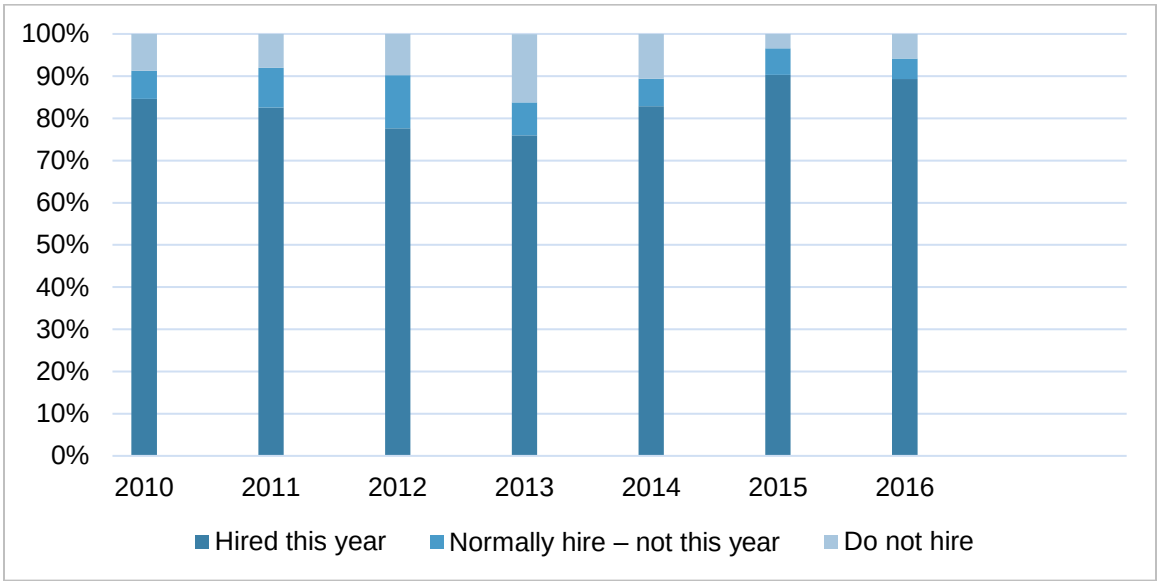


Table 17 shows that *new RN graduates* were far more likely to be hired into full-time rather than part-time positions. Including both full-time and part-time positions, hospitals hired approximately one *new RN graduate* for every three *staff RNs* in the third quarter of 2016.

Table 17. Ratio of new RN graduates hired to staff RNs hired, 2016

	Full-time	Part-time	Total
Description	**Ratio**	**Ratio**	**Ratio**
New RN graduate to staff RN hiring ratio	0.32	0.08	0.28

Table 18 indicates that full-time new RN graduates have represented approximately one in three new full-time staff RNs hired in each of the past five survey years.

Table 18. New RN graduates hires as a share of staff RN hires (full-time), 2012 – 2016[24]

Description	2012	2013	2014	2015	2016
New RN graduate hires as a share of staff RN hires	32%	34%	29%	33%	32%

Hospitals were asked whether they employ *new RN graduates* in non-RN roles. Figure 17 shows that in fall 2016 approximately one-quarter of responding hospitals reported hiring *new RN graduates* into non-RN positions, which is a much smaller proportion in comparison to the previous year and suggests a reversal of the prior upward trend.[25] The most frequently reported scenario in which *new graduate RNs* work in a non-RN role involved incumbent employees who recently completed RN education and stay in their non-RN job until an RN staff nursing position becomes available.

24 These are hiring ratios for the quarter in which data were reported: the third quarter of 2012, the fourth quarter of 2013, the third quarter of 2014, the third quarter of 2015, and the fourth quarter of 2016.

25 It's important to acknowledge that the number of hospitals that responded to the fall 2016 survey was much smaller in comparison to recent survey years, which could influence the survey results. Any conclusions drawn regarding trends in RN hiring must be qualified by this caveat.

Figure 17. Hiring of new graduates into non-RN roles, 2013 – 2016

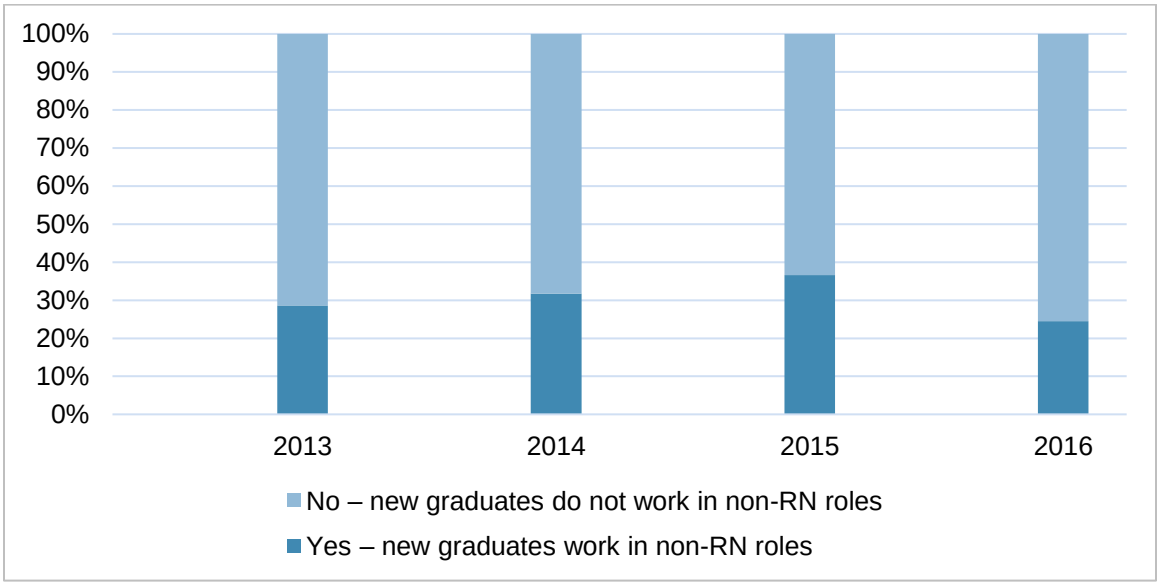
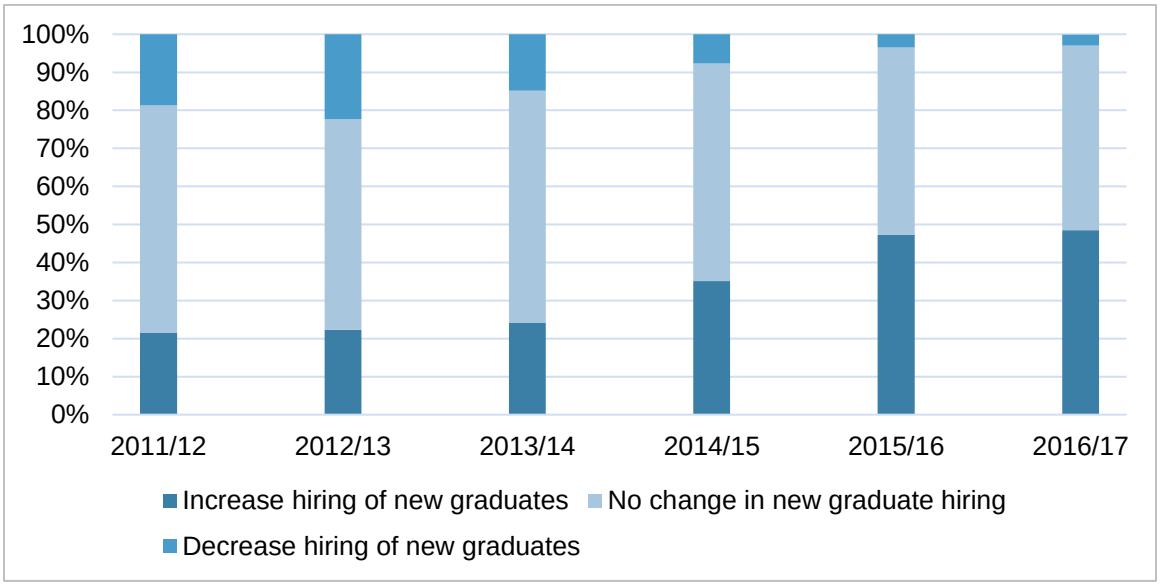


Figure 18 outlines expectations for *new RN graduate* hiring in the upcoming year. Results of the fall 2016 survey indicate that the share of hospitals reporting they expect to increase hiring of *new RN graduates* was equal to that of hospitals anticipating no change in hiring. In each survey year between 2011 and 2015, the share of facilities reporting an expectation of increased hiring of *new RN graduates* grew; in both 2014 and 2015, the share has increased by more than 10 percentage points. Fall 2016 suggests this upward trend has leveled off. Very few hospitals reported an expectation that *new RN graduate* hiring would decrease in 2017.

Figure 18. Expectations for new graduate hiring in the next year, 2011/12 – 2016/17



Hospitals were asked to cite reasons for why they expected hiring of *new graduate RNs* in 2017 to be different from 2016. The most frequently reported reason for an expected increase in hiring was a lack of available experienced RNs. Some hospitals reported that they anticipated a larger number of retirements and expected to hire more *new RN graduates* as a result. Other reasons for increased hiring included having developed more relationships with schools to advance new graduates into staff positions, as well as developing programs to mentor new graduates.

Requirements for RN Employment

Table 19 compares survey responses between 2011 and 2016 regarding requirements for an RN to be hired into a general staff nursing position. A substantially smaller share of hospitals reported having a minimum experience requirement in fall 2016 in comparison to recent survey years; the share of hospitals reporting such a requirement had been increasing since 2011 but sharply declined in fall 2016. Among hospitals that reported a minimum experience requirement, approximately 65 percent indicated that they required 12 months of experience to be hired into a *staff RN* position.

In addition, a much smaller share of hospitals reported a preference for hiring RNs educated at the baccalaureate level in fall 2016 compared to previous survey years. There was a general upward trend toward preference

for RNs with a bachelor's degree between 2011 and 2015, but in fall 2016 there was a nearly 27 percentage point decline. As in prior survey years, very few hospitals reported that a bachelor's degree in nursing is required for employment.

Table 19. Requirements for registered nursing employment, 2011 – 2016

Description	2011	2012	2013	2014	2015	2016
Minimum experience requirement	52.3%	53.7%	63.9%	60.5%	67.6%	51.9%
Baccalaureate degree preferred	69.5%	67.9%	72.2%	70.7%	80.5%	53.8%
Baccalaureate degree required	4.6%	7.3%	8.2%	9.8%	4.8%	3.8%
Second language preferred	*	*	*	40.0%	25.2%	23.1%
Second language required	*	*	*	0.0	0.0	1.0%
Other requirements for employment	*	*	*	35.8%	44.3%	28.8%
No specific requirements	21.2%	21.6%	12.4%	14.9%	19.5%	31.7%
Number of hospitals	151	218	194	215	210	104

*These questions were added in 2014

Other requirements for employment as a *staff RN* can include second language capability. In fall 2016, approximately one-quarter of responding hospitals reported a preference for RNs who speak a second language, which is consistent with the previous survey year. Very few hospitals reported requiring RNs speak a second language as a condition for employment. Of the hospitals that reported a preference for second language capability, nearly all of them reported Spanish as the preferred language. Other preferred languages included Chinese dialects, including Cantonese and Mandarin.

Hospitals were given the opportunity to report other types of requirements or preferences for employment in a staff RN position. Most of these write-in responses referenced a requirement that RNs possess BLS, ACLS, and PALS certification, a technical certification related to a specialty clinical practice area, or specific professional experience in a specialty clinical practice area. A small number of hospitals reported that newly hired RNs without a BSN are required to complete a baccalaureate degree within a specific period of time; this is discussed in more detail below. Approximately 32 percent of hospitals reported no specific requirements for employment in a staff nursing position. A small number of hospitals specifically mentioned a preference for hiring RNs with local roots (i.e. strong ties to the community), perhaps in response to turnover rates.

Baccalaureate-prepared Nurses

Respondents were asked to report the share of currently-employed RNs who are educated at the BSN level. Figure 19 shows that a plurality of hospitals in the fall 2016 survey indicated that BSN-prepared RNs represent between 26 and 50 percent of current nursing staff, which is consistent with previous survey years. However, the fall 2016 data also show an increase in the share of hospitals reporting that BSN-prepared RNs represent between 76 and 100 percent of nursing staff, which is approximately double the share of respondents in each of the previous two survey years.

Figure 19. Currently employed BSN-prepared registered nurses, 2014 – 2016

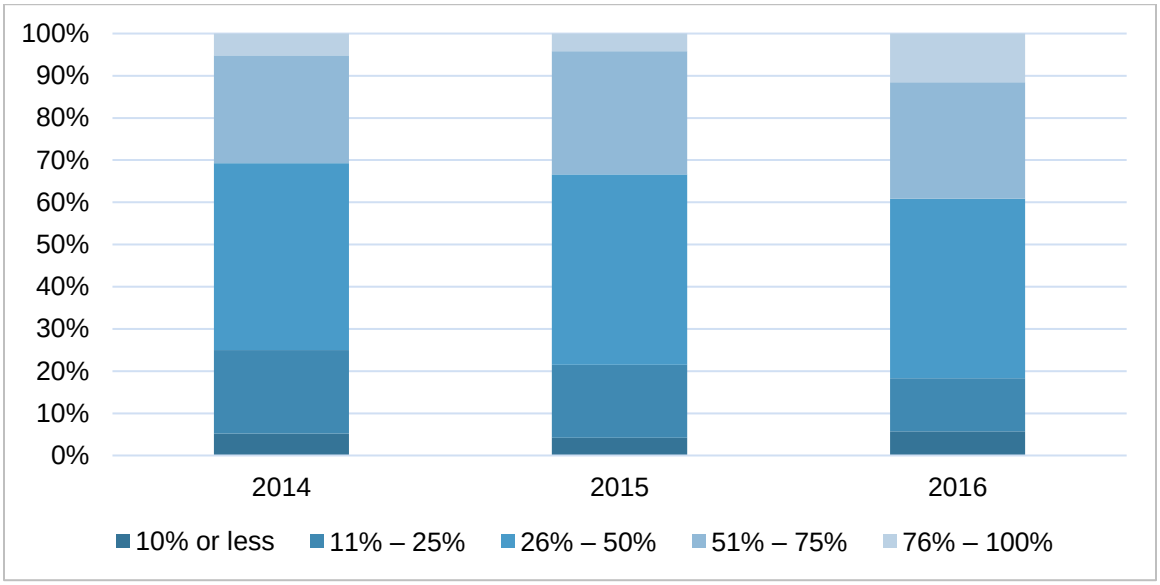
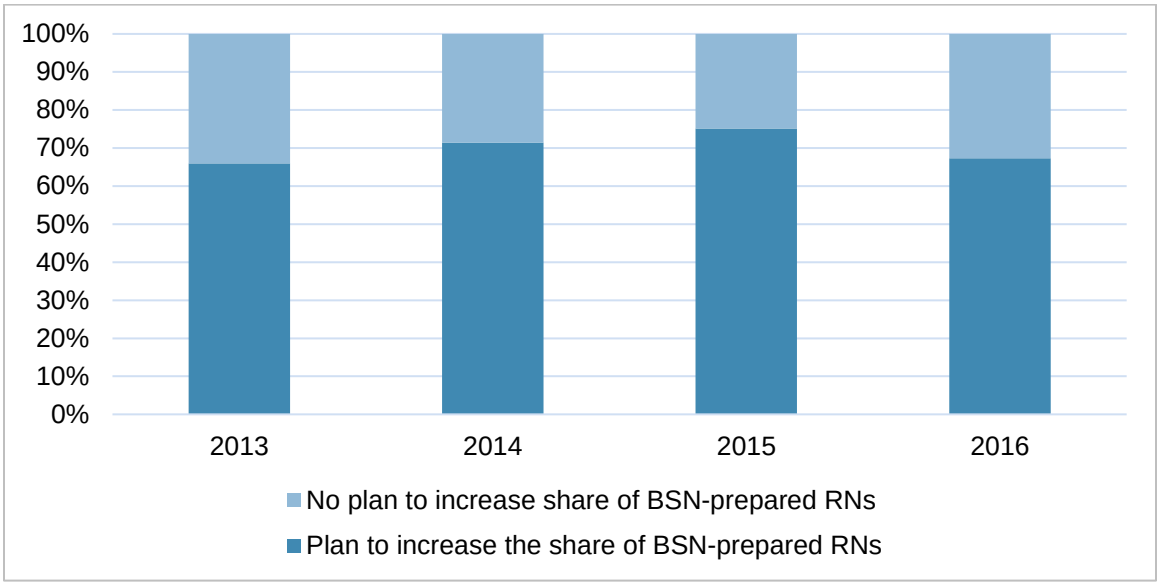


Figure 20 shows that in fall 2016, 67 percent of hospitals reported plans to increase the share of baccalaureate-trained nurses on staff, which represents a decline in comparison with previous survey years.

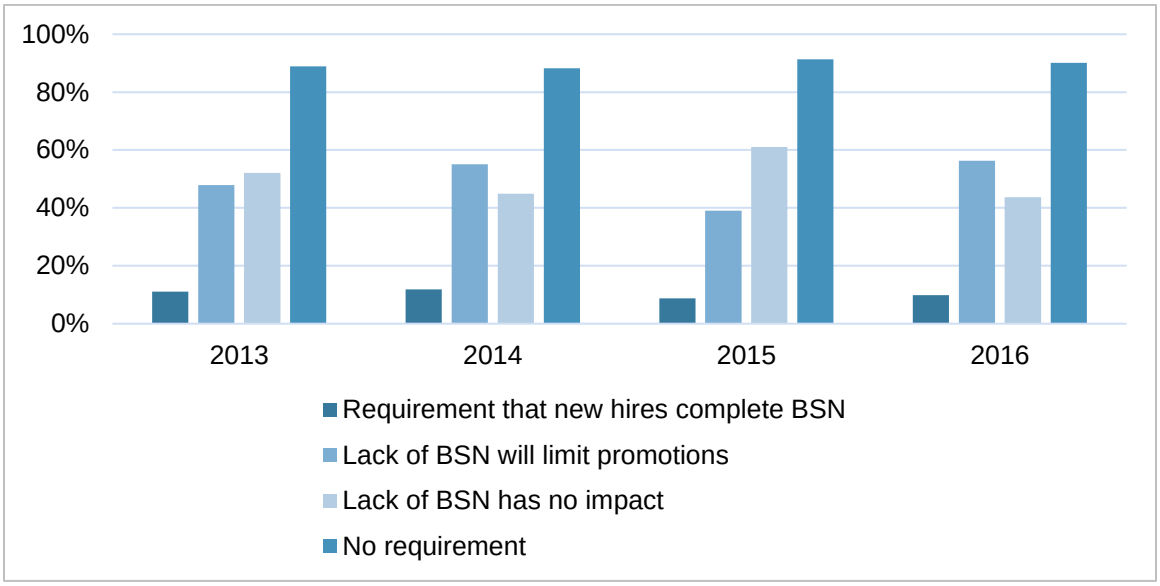
Figure 20. Plans to increase BSN-prepared nurses, 2013 – 2016



RNs educated below the baccalaureate level represent a substantial share of California's nursing workforce. Hospitals were asked whether new hires without a bachelor's degree are required to complete one and, if so, how much time they have to complete it. Figure 20 shows that in fall 2016 approximately 10 percent of hospitals reported having a requirement that newly hired RNs who don't already possess a BSN obtain one; this is consistent with previous survey years. For the small number of hospitals that indicated having the requirement, it was commonly reported that new hires have 2 to 4 years to obtain the BSN degree.

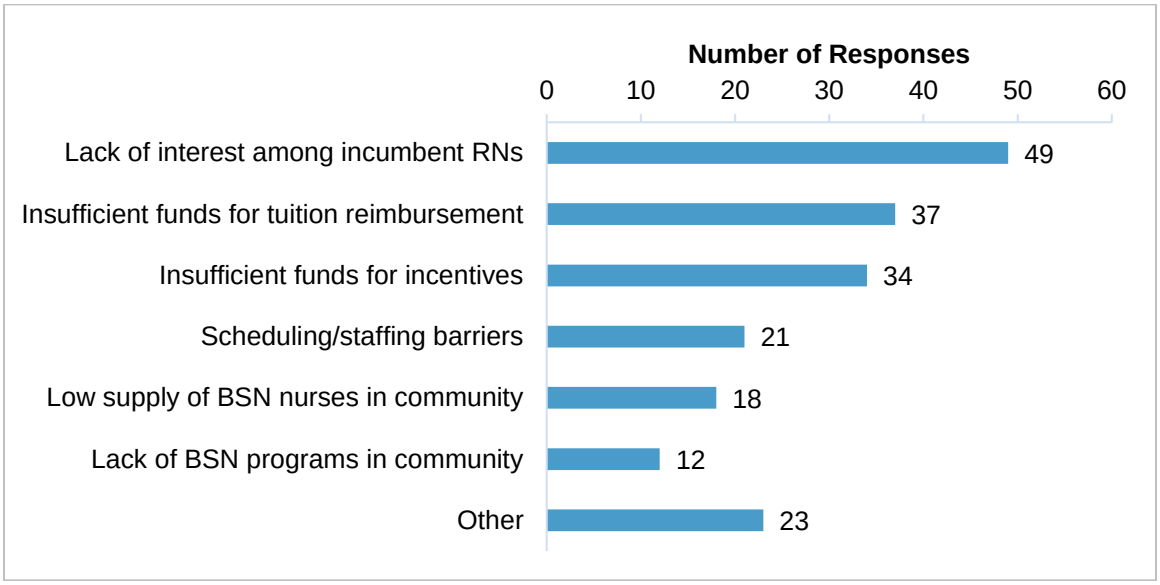
Hospitals were also asked whether RNs who do not have a BSN degree face limitations to being promoted beyond the level of a *staff RN*. Figure 20 shows that the share of hospitals reporting that a lack of a BSN degree limits professional advancement has fluctuated over the past four survey years. The 56 percent of hospitals indicating that the lack of a BSN will limit promotions in fall 2016 is the largest share of hospitals since this question has been part of the annual survey.

Figure 20. Requirements for BSN and Impact of BSN on promotion, 2013 – 2016



Approximately 96 percent of respondents reported facing at least one barrier to increasing the number of baccalaureate-trained nurses (Figure 21). The most frequently reported barriers were a lack of interest in BSN education on the part of incumbent RNs, insufficient funding to offer tuition reimbursement, and insufficient funds to incentivize incumbent RNs to complete a baccalaureate degree program with promotions, pay differentials, or bonuses.

Figure 21. Barriers to increasing the number of BSN-prepared nurses, 2016



Note: 101 hospitals reported at least one barrier to increasing number of BSN-prepared nurses.

Figure 22 shows that in fall 2016 approximately 39 percent of hospitals reported that they differentiate RN salaries based on the type of nursing degree (e.g. ADN vs BSN vs MSN); this represents an increase in comparison with the previous two survey years.

Figure 22. Organization differentiates RN salaries by degree, 2014 – 2016

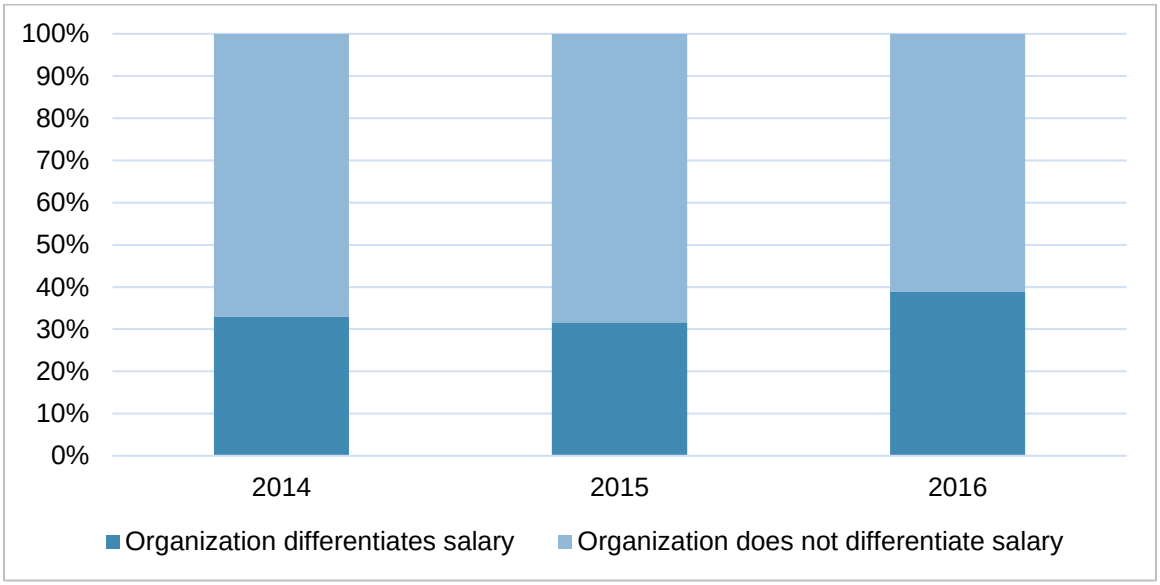


Table 20 details the types of support that hospitals reported they provide to incumbent RNs who are enrolled in a degree program or working toward advanced certification. In fall 2016, nearly 77 percent of hospitals reported offering tuition reimbursement in support of employed RNs seeking an additional degree, which is a small increase (4 percentage points) in comparison with one year ago. Approximately 56 percent of hospitals reported offering tuition reimbursement to RNs working toward advanced certification, which is 6 percentage points higher compared to fall 2015.

One-quarter of hospitals indicated they provide paid time off for RNs enrolled in a degree program, while 33 percent reported providing paid time off for pursuit of advanced certification. The share of hospitals providing paid time off for these activities has fluctuated over the past three years. Offering unpaid time off in support of post-licensure education is about as common as the provision of paid time off. Approximately 16 percent of responding hospitals reported some other form of support for the pursuit of post-licensure education (nearly 6 percentage points higher in comparison to fall 2015), most commonly a program completion bonus or flexible scheduling.

Table 20. Support for RNs working toward post-licensure degrees or certification, 2014 – 2016

	2014			2015			2016		
Description	**#**	**%**		**#**	**%**		**#**	**%**	
Tuition reimbursement									
Post-licensure degree(s)	182	85.0		151	72.6		79	76.7	
Certification(s)	125	58.4		104	50.0		58	56.3	
Paid time off for coursework									
Post-licensure degree(s)	54	25.2		80	38.5		26	25.2	
Certification(s)	59	27.6		75	36.1		34	33.0	
Approved use of unpaid time off for coursework									
Post-licensure degree(s)	99	46.3		89	42.8		36	35.0	
Certification(s)	83	38.8		76	36.5		29	28.2	
None	12	5.6		17	8.2		9	8.7	
Other	41	19.2		20	9.6		16	15.5	
Total responses	**214**	**--**		**208**	**--**		**103**	**--**	

Hospitals were asked to report the types of on-site nursing education programs they offer (other than continuing education). Table 21 indicates a substantial decline in the availability of on-site RN-to-BSN programs. The RN-to-BSN program was offered by 54 percent of hospitals that reported some type of on-site education program in fall 2015, but just 37.5 percent in fall

2016. Unlike previous years, specialty certifications were cited as the most frequently offered type of on-site education.

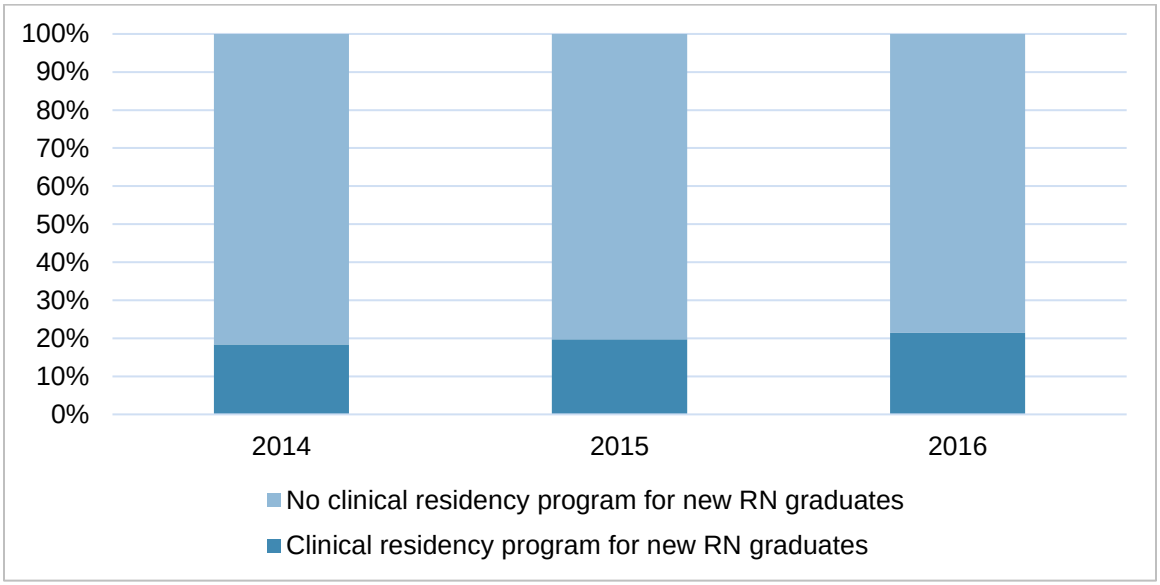
Table 21. Programs available for on-site education, 2014 – 2016

	2014			2015			2016		
Description	**#**	**%**		**#**	**%**		**#**	**%**	
LVN to RN	17	25.4		4	6.3		3	9.4	
RN to BSN	41	61.2		34	54.0		12	37.5	
MSN	20	29.9		19	30.2		8	25.0	
Specialty certification	19	28.4		15	23.8		19	59.4	
Other	6	9.0		11	17.5		5	15.6	
Total responses	**67**	**--**		**63**	**--**		**32**	**--**	

Clinical Residency Programs for New RN Graduates

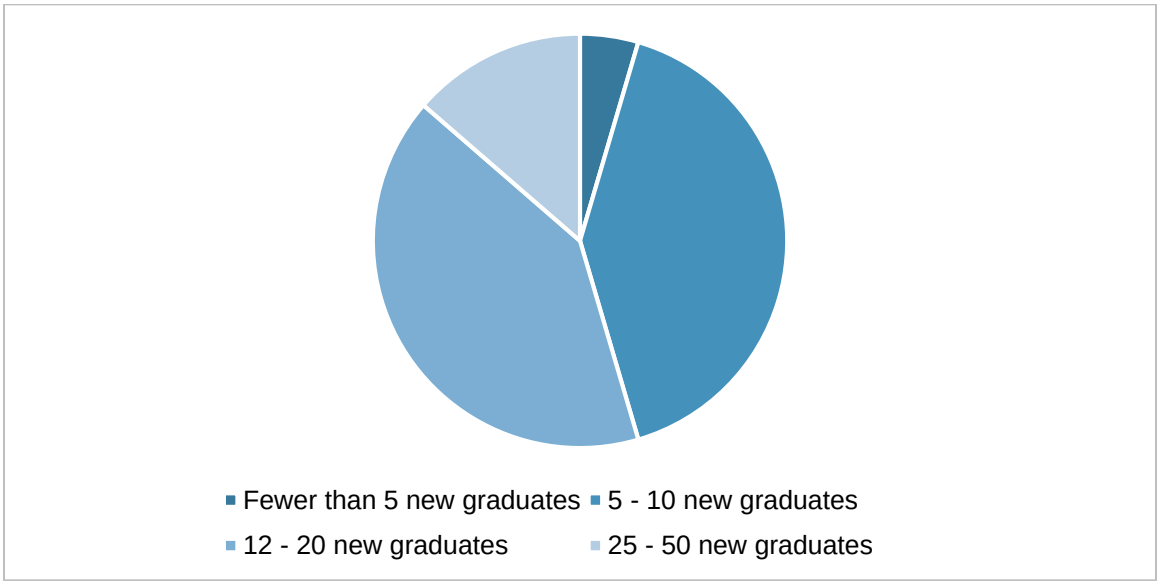
Hospitals were asked whether they sponsor clinical residency programs for new graduates *who are not guaranteed to be hired*. These residency programs are distinct from typical onboarding programs for newly hired RNs. Figure 23 shows that approximately 20 percent of hospitals in fall 2016 reported that they sponsor a residency program for *new RN graduates*; this share has been consistent over the past three years.

Figure 23. Clinical residency programs for new RN graduates, 2014 – 2016



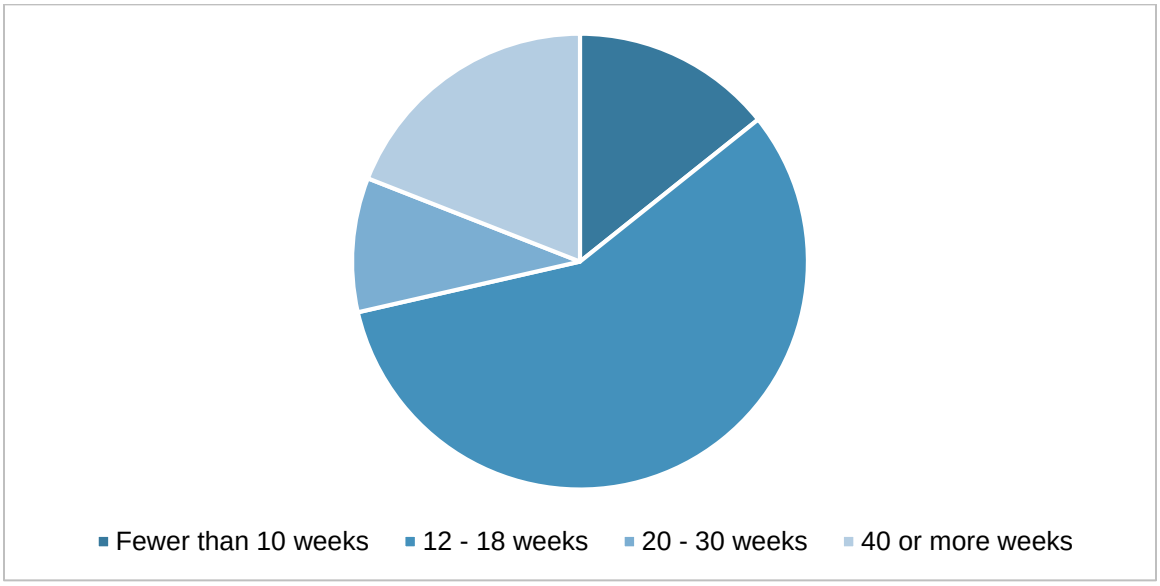
Hospitals with residency programs for *new RN graduates* were asked to report the capacity of their program. Figure 24 shows that residency programs ranged in size from those that educate fewer than 5 new graduates per cohort to programs educating as many as 50 new graduates per cohort.

Figure 24. Capacity of clinical residency program, 2016



Hospitals with residency programs for *new RN graduates* were asked to report the program's length of time to completion. The most frequently reported program length was 12 – 18 weeks (Figure 25), and over 70 percent of all residency programs took fewer than 18 weeks to complete. Approximately 82 percent of all reported residency programs were offered once or twice per year; the other 18 percent of hospitals reported offering programs on a quarterly basis.

Figure 25. Length of clinical residency program, 2016



Hospitals with residency programs for *new RN graduates* were asked whether their program had been developed internally, by an external organization, or in partnership with a school of nursing. Figure 26 shows that in each of the past three years the most common arrangement has been for a hospital to develop its own residency program.

Figure 26. Clinical residency programs for new graduates by type of design, 2014 – 2016

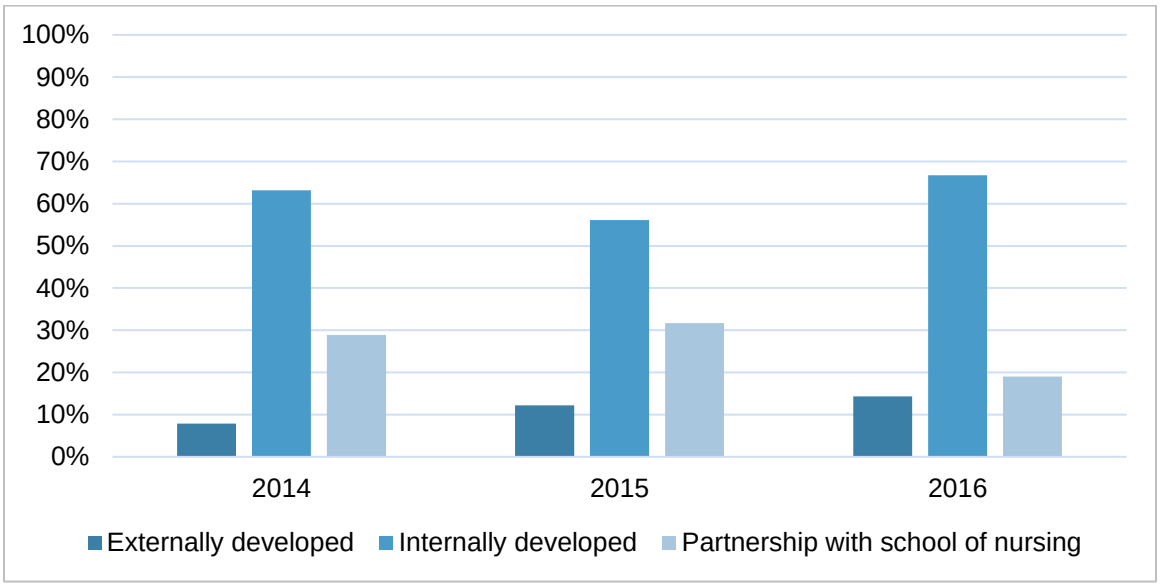
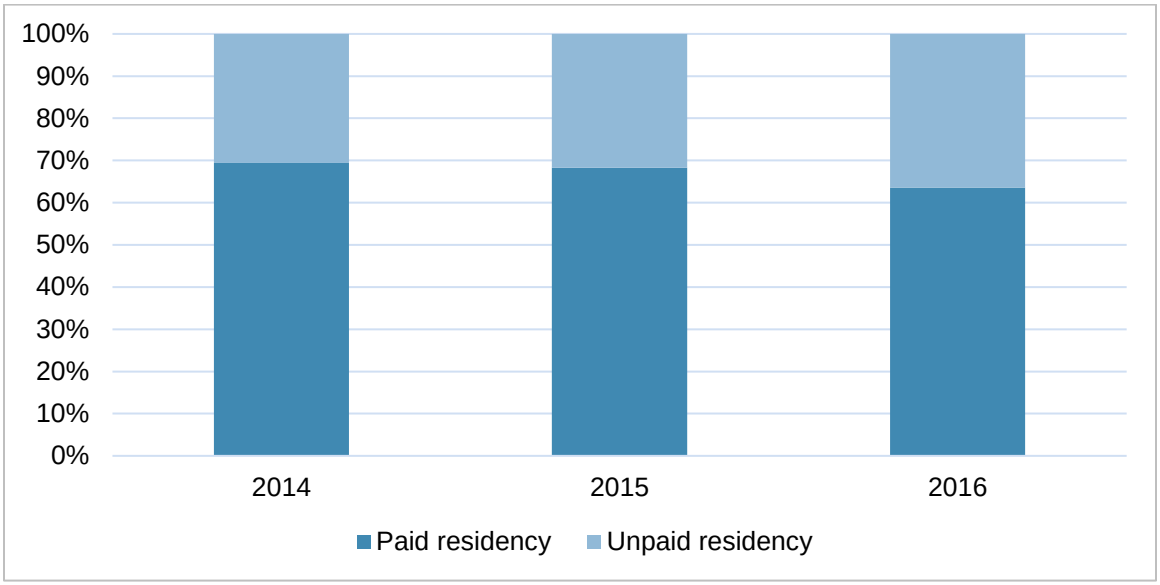


Figure 27 shows that in each of the past three survey years approximately two-thirds of hospitals that sponsor clinical residency programs reported that participating *new RN graduates* are paid for their time.

Figure 27. Paid versus unpaid residency programs, 2014 – 2016



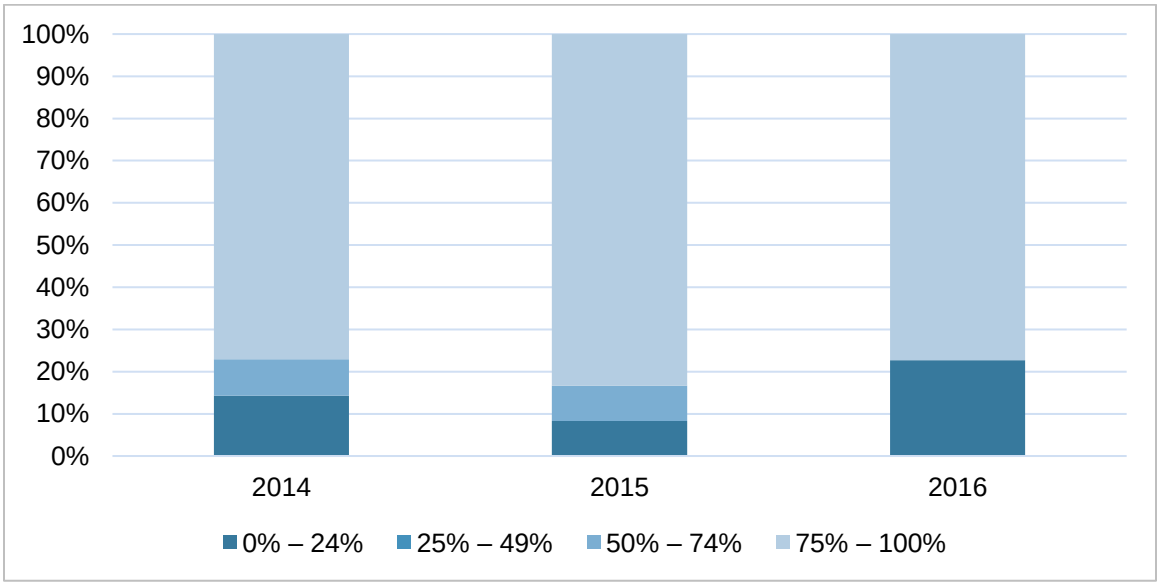
Hospitals with residency programs for *new RN graduates* were asked to report the different clinical practice areas the programs cover. As seen in Table 22, the three most common clinical practice areas covered by residency programs have consistently been medical-surgical, the emergency department, and critical care. A greater share of hospitals offered emergency department and critical care-based training in 2016 compared with previous survey years. In addition, the 31 percent of hospitals reporting that their clinical residency program covers psychiatry is a much larger share than in prior years.

Table 22. Reported clinical practice areas for new graduate residency programs, 2014 – 2016

	2014			2015			2016		
Clinical Practice Area	**#**	**%**		**#**	**%**		**#**	**%**	
Medical-Surgical	39	100.0		40	97.6		19	82.6	
Emergency Department	28	71.7		28	68.3		22	95.7	
Critical Care	24	61.5		23	56.1		20	87.0	
Delivery Room/Postpartum/Newborn Nursery	21	53.8		18	43.9		11	47.8	
OR/Peri-operative	17	43.6		15	36.6		11	47.8	
Pediatrics/Neonatal	8	20.5		8	19.5		6	26.1	
Ambulatory Care	6	15.4		6	14.6		4	17.4	
Rehabilitation	3	7.7		6	14.6		3	13.0	
Psychiatry	2	5.1		5	12.2		7	30.4	
Skilled Nursing	1	2.6		4	9.8		1	4.3	
Home Health	0	0.0		1	2.4		1	4.3	
Other	5	12.8		4	9.8		0	0.0	
Total responses	**39**	**--**		**41**	**--**		**22**	**--**	

Figure 28 indicates that most *new RN graduates* who are accepted into a formal residency program are hired by the hospital. In each the past three survey years, approximately 80 percent of responding hospitals reported that they hired between 75 and 100 percent of the graduates in their residency programs.

Figure 28 Percentage of graduates in residency program hired last year, 2014 – 2016



Although comparatively few hospitals reported formal residency programs (in which new graduates are not guaranteed to be hired), almost all hospitals had some kind of orientation program for newly hired RNs. Table 23 shows variation in the length of program orientations over the past three survey years. In fall 2016, approximately one-third of responding hospitals reported onboarding programs that lasted 4 weeks or less, a larger share in comparison with fall 2014, but considerably smaller than the share in comparison to fall 2015. It is not known if the variation over time is due to changes in programmatic needs of hospitals or due to changes in which hospitals responded year-to-year.

Table 23. Orientation/onboarding program for recent hires, 2014 – 2016

	2014			2015			2016		
Description	**#**	**%**		**#**	**%**		**#**	**%**	
Have an onboarding program	207	96.7		202	96.2		98	95.1	
Don't have an onboarding program	7	3.3		8	3.8		5	4.9	
Total	**214**	**100**		**210**	**100**		**103**	**100**	
Length of program (in weeks)	#	%		#	%		#	%	
4 weeks or fewer	50	28.1		71	47.0		35	33.7	
5 – 8 weeks	33	18.5		39	25.8		26	25.0	
10 – 15 weeks	69	38.8		36	23.8		30	28.8	
16 – 24 weeks	22	12.4		5	3.3		13	12.5	
24 weeks or more	4	2.2		0	0.0		0	0.0	
Total	**178**	**100**		**151**	**100**		**104**	**100**	

Employment Expectations for the Next Year

Hospitals were asked to report their expectations for RN employment in the coming year. Figure 29 compares hospitals' expectations for each year the survey has been conducted. The share of hospitals reporting expectations of increased RN employment has increased each year beginning with the fall 2012 survey. Fall 2015 marked the first survey year in which most hospitals reported expectations of increased employment of RNs in the coming year, compared to either "no change" or "decreased" employment. A similar distribution was reported in fall 2016, with most facilities reporting expectations of increased employment, though the share was smaller in comparison to the previous survey year. Less than 2 percent of responding hospitals in 2016 reported expectations that RN employment would decrease over the next year. The most frequently reported reasons for the expected increase in RN employment included patient census growth, increased

hospital bed capacity, and increased patient acuity. Other reasons reported for anticipated growth in RN employment included persistently high vacancy rates, an increasing number of retirements, expanded service lines, and a desire to replace traveler/agency positions with permanent positions.

Figure 29. Expectations for RN employment in the next year, 2010/11 – 2016/17

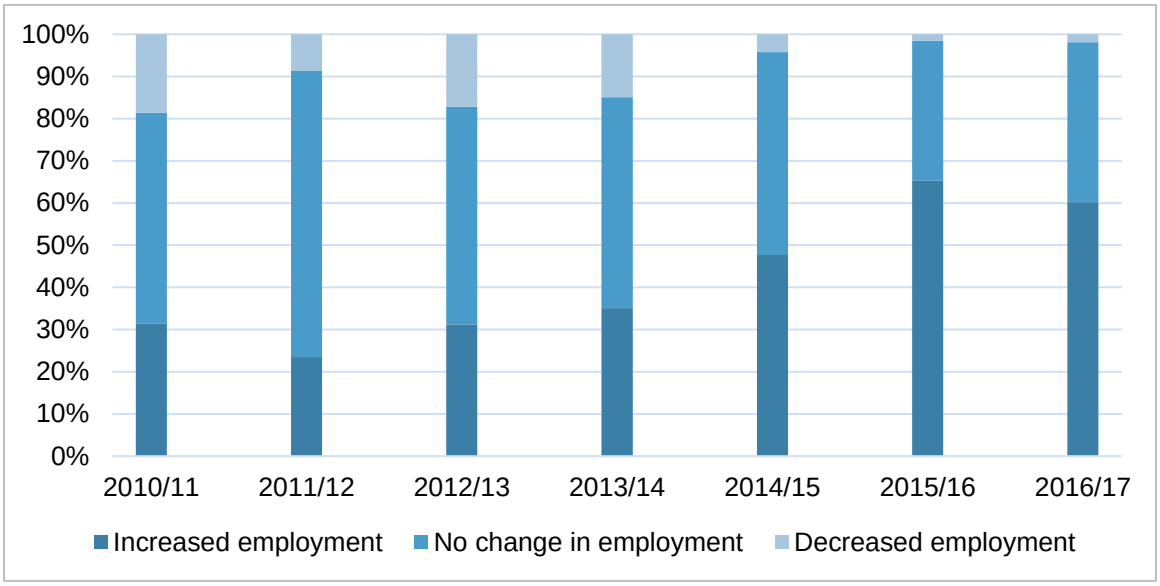
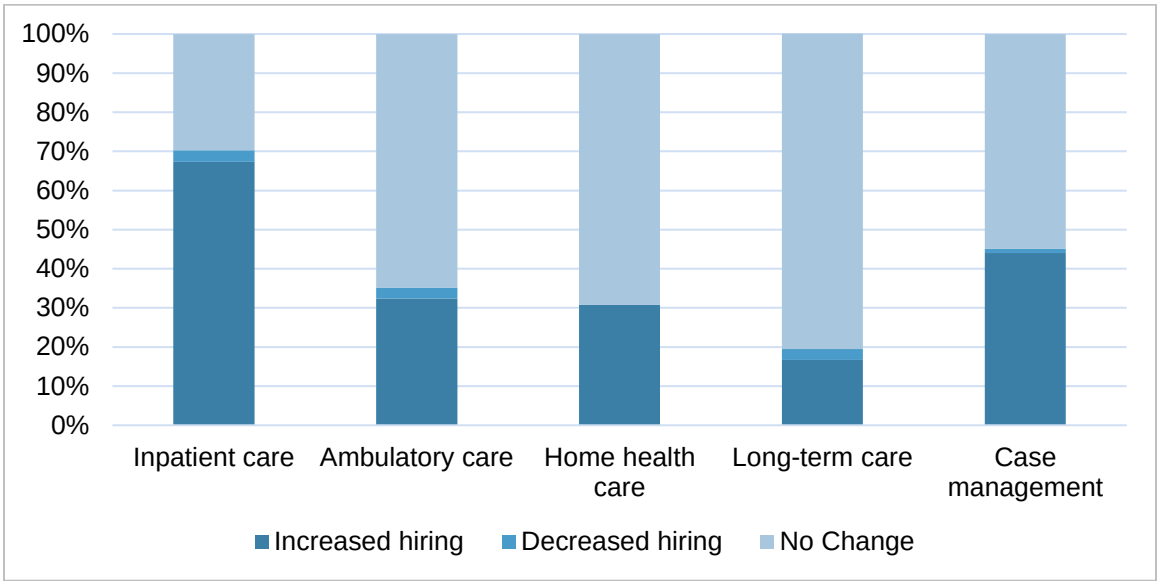


Figure 30 presents hospital responses about anticipated shifts in hiring over the coming year by care setting. As with past-year hiring (Figure 10), inpatient care is the setting in which the largest share of hospitals reported expectations of increased employment (67.3 percent), followed by hiring for case management positions (44 percent of reported hospitals). A comparison of Figure 30 with Figure 10 (past-year hiring by care setting) indicates consistency over time, which suggests that the hiring patterns seen over the past year will continue over the coming year. The exception to this is case management; 64 percent of hospitals reported increased hiring in the past year for roles related to case management, compared to 44 percent of hospitals reporting expectations that hiring for case management positions will increase over the next year.

Figure 30. Expectations for RN hiring in the next year, by care setting, 2016/17



CONCLUSIONS

Labor market conditions faced by registered nurses have recovered from the recession that began in late 2007; the fall 2016 survey data indicate that overall demand for registered nurses is very strong. Many hospitals report they are facing shortages of experienced RNs, particularly for the clinical areas of labor and delivery, critical care (both adult and neonatal/pediatric), emergency department (ED), and operating room. The labor market for newly-graduated nurses has improved across the state, with some indication that a shortage could emerge in the Central California region.

Although job availability of new graduates has improved, the continuing lack of jobs for newly graduated nurses is concerning. They cannot easily obtain the experience needed to fill vacancies opened by retiring RNs if they are unable to find entry-level positions or participate in a residency program. New graduates often have student loan debt and need to begin paid work as soon as possible to meet their financial obligations. Many returned to school to pursue a nursing career and have families to support.

Several potential solutions to this problem have been proposed, including the expansion of residency programs. Employers need to invest in the hiring and training of new graduates to ensure they have sufficient well-prepared RNs to fill specialized roles as Baby Boomer RNs retire. Fortunately, most hospitals reported hiring new RN graduates in fall 2016, marking the third consecutive year in which the share of hospitals that reported hiring new graduates has increased. In addition, nearly 49 percent of hospitals reported an expectation that hiring of new graduates would increase in 2017, which continues a trend toward growth in anticipated hiring. Increased employment will be driven by continued growth in the patient census, as well as by persistently high vacancy rates, an increasing number of retirements, and expanded service lines.

At some point the perceived surplus of new graduate RNs may vanish as employers implement strategies to rapidly transition them into specialized roles. The alternative is for employers to engaged in expensive inter-state recruitment, international recruitment, and wage competition between each other. It will be a far better investment for employers to invest in programs for new graduates to use and develop their knowledge and skills to ensure an adequate supply of RNs in the future.

ACKNOWLEDGEMENTS

The collaboration of the HealthImpact, the Hospital Association of Southern California, FutureSense, Inc., and the California Hospital Association was important to the development of the survey questionnaire and conducting of the survey. We specifically thank Judith Berg, Cathy Martin, Teri Hollingsworth, Jim Finkelstein, Ben Teichman and Patrick Dobrowolski for their work.

This study benefitted from the work of Amy Shinoki who assisted with making telephone calls to increase response rates, reviewing data, and finding contact information of Chief Nursing Officers.

APPENDIX

Appendix Table A1. Overall demand scores by region, 2010 – 2016

Region	2010	2011	2012	2013	2014	2015	2016
Sacramento & Northern California	3.14	2.81	2.96	3.22	3.54	4.18	4.08
San Francisco Bay Area	2.09	2.27	2.76	1.89	3.08	4.29	4.32
Central California	2.93	3.34	3.41	3.18	3.72	4.29	4.50
Los Angeles	2.82	2.95	3.20	3.17	3.76	4.41	3.94
Inland Empire	2.72	3.00	3.78	3.47	3.61	4.00	4.19
Southern Border	2.36	2.93	3.00	2.76	3.30	3.64	5.00
California	2.68	2.88	3.14	2.95	3.56	4.20	4.23

Appendix Table A2. Experienced RN demand scores by region, 2013 – 2016

Region	2013	2014	2015	2016
Sacramento & Northern California	3.91	4.17	4.21	4.25
San Francisco Bay Area	2.71	3.79	4.21	4.09
Central California	3.98	4.21	4.16	4.64
Los Angeles	4.13	4.17	4.15	4.06
Inland Empire	4.20	4.14	4.60	4.56
Southern Border	4.12	3.70	3.71	5.00
California	3.83	4.08	4.20	4.31

Appendix Table A3. New RN graduate demand scores by region, 2013 – 2016

Region	2013	2014	2015	2016
Sacramento & Northern California	1.77	2.33	2.25	2.55
San Francisco Bay Area	1.31	1.42	1.68	2.00
Central California	1.70	1.97	2.21	3.15
Los Angeles	1.53	1.68	2.00	2.24
Inland Empire	1.45	1.95	2.20	2.13
Southern Border	1.29	1.60	1.50	1.50
California	1.52	1.84	2.01	2.33

Appendix Table A4. Overall demand scores by hospital bed-size, 2010 – 2016

Number of beds	2010	2011	2012	2013	2014	2015	2016
Less than 100 beds	3.12	3.15	3.29	3.07	3.65	4.27	4.26
100 – 199 beds	2.65	2.85	3.17	3.23	3.75	4.19	4.41
200 – 299 beds	2.50	3.23	3.30	2.64	3.21	4.04	4.14
300 – 399 beds	2.00	3.02	2.97	2.74	3.65	4.39	4.00
400 beds or more	2.46	2.79	3.17	2.86	3.30	4.17	3.91

Appendix Table A5. Overall demand scores by geography, 2010 – 2016

Geographic location	2010	2011	2012	2013	2014	2015	2016
Rural	3.60	3.51	3.69	3.47	4.13	4.28	4.80
Non-rural	2.65	2.85	3.09	2.86	3.50	4.18	4.19

Appendix Table A6. Overall demand scores by position, 2016

Geographic location	2015	2016
Experienced Staff RN	4.23	4.31
Other RN	3.95	4.02
Clinical Nurse Specialist	3.91	3.85
Nurse Practitioner	3.57	3.77
Unlicensed Aide/Assistant	2.75	2.64
LVN	2.22	2.40
New RN Graduate	2.01	2.33

Appendix Table A7. Number of facilities, 2010 – 2016

Region	2010	2011	2012	2013	2014	2015	2016
Sacramento & Northern California	22	17	28	23	24	28	11
San Francisco Bay Area	34	30	45	36	31	38	26
Central California	28	30	39	45	44	38	20
Los Angeles	33	40	65	47	58	34	21
Inland Empire	28	19	18	30	46	25	19
Southern Border	12	15	22	17	16	14	3
California	157	151	217	198	219	177	100
Hospital bed-size							
Less than 100 beds	43	40	55	45	49	52	36
100 – 199 beds	46	46	55	56	66	47	29
200 – 299 beds	19	21	28	36	37	23	16
300 – 399 beds	19	25	33	27	22	23	7
400 beds or more	30	19	36	37	32	18	12
Geographic location							
Rural	30	28	38	32	16	29	5
Non-rural	127	123	179	166	203	147	95