# California Board of Registered Nursing 2015-2016 Annual School Report

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

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#### **PREFACE**

# Nursing Education Survey Background

Development of the 2015-2016 Board of Registered Nursing (BRN) School Survey was the work of the Board's Education Issues Workgroup, which consists of nursing education stakeholders across California. A list of workgroup members is included in Appendix B. The University of California, San Francisco was commissioned by the BRN to develop the online survey instrument, administer the survey, and report data collected from the survey.

Funding for this project was provided by the California Board of Registered Nursing.

## Organization of Report

The survey collects data about nursing programs and their students and faculty. Annual data presented in this report represent August 1, 2015 through July 31, 2016. Census and associated demographic data were requested for October 15, 2016.

Data from pre- and post-licensure nursing education programs are presented in separate reports and will be available on the BRN website. Data are presented in aggregate form and describe overall trends in the areas and over the times specified and, therefore, may not be applicable to individual nursing education programs.

Statistics for enrollments and completions represent two separate student populations. Therefore, it is not possible to directly compare enrollment and completion data.

# Availability of Data

The BRN Annual School Survey was designed to meet the data needs of the BRN as well as other interested organizations and agencies. A database with aggregate data derived from the last ten years of BRN School Surveys will be available for public access on the BRN website. Parties interested in accessing data not available on the website should contact Julie Campbell-Warnock at the BRN at Julie.Campbell-Warnock@dca.ca.gov.

# Value of the Survey

This survey has been developed to support nursing, nursing education, and workforce planning in California. The Board of Registered Nursing believes that the results of this survey will provide data-driven evidence to influence policy at the local, state, federal, and institutional levels.

The BRN extends appreciation to the Education Issues Workgroup and all survey respondents. Your participation has been vital to the success of this project.

# Survey Participation<sup>1</sup>

All California nursing schools were invited to participate in the survey. In 2015-2016, 132 nursing schools offering 141 BRN-approved pre-licensure programs responded to the survey. A list of the participating nursing schools is provided in Appendix A.

**Table 1. RN Program Response Rate** 

Program Type	# Programs Responded	Total # Programs	Response Rate
ADN	82	82	100%
LVN to ADN	7	7	100%
BSN	38	38	100%
ELM	14	14	100%
Total Programs	141	141	100%

University of California, San Francisco

<sup>&</sup>lt;sup>1</sup> In this 2016 report there are 132 schools in California that offer a pre-licensure nursing program. Some schools offer more than one nursing program, which is why the number of programs (n=141) is greater than the number of schools. Since last year's report, one ADN, one BSN, and one ELM program/school closed. There was one new BSN program/school, two conversions of ELM programs to BSN programs and one new ELM program/school opened.

#### DATA SUMMARY AND HISTORICAL TREND ANALYSIS

This analysis presents pre-licensure program data from the 2015-2016 BRN School Survey in comparison with data from previous years of the survey. Data items addressed include the number of nursing programs, enrollments, completions, retention rates, NCLEX pass rates, new graduate employment, student and faculty census data, the use of clinical simulation, availability of clinical space, and student clinical practice restrictions.

## Trends in Pre-Licensure Nursing Programs

## Number of Nursing Programs

In 2015-2016, a total of 141 pre-licensure nursing programs reported students enrolled in their programs. In the past year, one ADN, one BSN and one ELM program closed, while one BSN program opened, two ELM programs converted to BSN programs and one new ELM program opened.

Most pre-licensure nursing programs in California are public. The share of public programs has shown an overall decrease in the last ten years and currently represents 74% of all nursing programs compared to 81% in 2006-2007. The number of private programs has increased by 48% during this time while the number of public programs has stayed virtually the same.

Table 2. Number of Nursing Programs\* by Academic Year

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016**
Total nursing programs	130	132	138	139	145	142	143	141	142	141
ADN	82	84	86	86	89	87	88	89	90	89
BSN	32	32	36	37	39	39	40	36	36	38
ELM	16	16	16	16	17	16	15	16	16	14
Public	105	105	105	105	107	106	107	106	106	104
Private	25	27	33	34	38	36	36	35	36	37
Total number of schools	117	119	125	125	131	132	133	131	132	132

<sup>\*</sup>Since some nursing schools admit students in more than one program, the number of nursing programs is greater than the number of nursing schools.

<sup>\*\*</sup>From 2012-2013 through 2014-2015, one ADN private program was being included as a public program which has now been corrected in the 2015-2016 data.

The share of nursing programs partnering with another nursing school that offers a higher degree has been increasing since 2007-2008. In 2015-2016, 57% (n=80) of the 141 nursing programs that reported collaborating with another program that offered a higher degree than offered at their own program. This is a 16% increase over the prior year.

**Table 3. Partnerships by Academic Year** 

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Programs that partner with another program leading to a higher degree	9	9	19	35	44	50	64	67	69	80
Formal collaboration							45.3%	52.2%	53.6%	
Informal collaboration							67.2%	68.7%	73.9%	
Total number of programs that reported	130	132	138	139	145	142	141	141	142	141

Note: Blank cells indicate the applicable information was not requested in the given year.

#### Admission Spaces and New Student Enrollments

The number of spaces available for new students in nursing programs has fluctuated over the past ten years, reaching a high of 12,812 in 2008-2009, when 13,988 students enrolled. In 2015-2016 11,928 spaces were reported as available for new students and these spaces were filled with a total of 13,152 students. The share of nursing programs that reported filling more admission spaces than were available stayed steady between 2013-2014 (39%; n=55) and 2014-2015 (39%; n=56), but increased in 2015-2016 (44%, n=62).

Table 4. Availability and Utilization of Admission Spaces by Academic Year

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Spaces available	11,475	11,773	12,812	12,797	12,643	12,391	12,739	12,394	11,976	11,928
New student enrollments	12,709	12,961	13,988	14,228	13,939	13,677	13,181	13,226	13,318	13,152
% Spaces filled with new student	110.8%	110.1%	109.2%	111.2%	110.3%	110.4%	103.5%	106.7%	111.2%	110.3%

The overall number of qualified applications received by California nursing programs has shown a slight decline since 2006-2007 (2%, n=465) and even more since its ten-year high of 41,634 (13,593, n=33%) in 2009-2010. 2015-2016 marks the lowest overall number of qualified applications received in the past ten years (28,041). Over the past ten years, the number of applications to ADN programs increased 46% from 2006-2007 through 2009-2010 and then declined steadily each year until the current year when it has increased slightly. BSN applications, over the same period, increased steadily through 2013-2014 but have declined the last two years. However, 2015-2016 still shows an increase in BSN applications since 2006-2007 (39%, n=2,731). ELM programs have experienced more fluctuation in applications over the past ten years, with no steady trend.

Even with the declines, nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. Since these data represent applications and an individual can apply to multiple nursing programs, the number of applications is likely greater than the number of individuals applying for admission to nursing programs in California.

Table 5. Student Admission Application\* by Academic Year

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Qualified applications	28,506	34,074	36,954	41,634	37,847	38,665	35,041	31,575	28,335	28,041
ADN	19,559	25,021	26,185	28,555	24,722	23,913	19,979	16,682	15,988	16,332
BSN	7,004	7,515	8,585	10,680	11,098	12,387	12,476	12,695	10,196	9,735
ELM	1,943	1,538	2,184	2,399	2,027	2,365	2,586	2,198	2,151	1,974
% Qualified applications <i>not</i> enrolled	55.4%	62.0%	62.1%	65.8%	63.2%	64.6%	62.4%	58.1%	53.0%	53.1%

<sup>\*</sup>These data represent applications, not individuals. A change in the number of applications may not represent an equivalent change in the number of individuals applying to nursing school.

In 2015-2016, 13,152 new students enrolled in registered nursing programs, which is a slight decrease from the previous year (1%, n=166). Over the last year, ADN and ELM programs saw a slight enrollment decline, while BSN programs had a small increase in enrollments. Private programs had a decrease, while public programs stayed about the same. Public programs have seen their enrollments decline by 23% (n=-2,337) in the last ten years, while new enrollments in private programs have gone up by 117% in the same period (n=2,780).

Table 6. New Student Enrollment by Program Type by Academic Year

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	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016		
New student enrollment	12,709	12,961	13,988	14,228	13,939	13,677	13,181	13,226	13,318	13,152		
ADN	8,899	8,847	9,412	8,594	7,688	7,411	7,146	7,135	6,914	6,794		
BSN	3,110	3,404	3,821	4,842	5,342	5,445	5,185	5,284	5,510	5,594		
ELM	700	710	755	792	909	821	850	807	894	764		
Private	2,384	2,704	3,774	4,607	4,773	4,795	4,642	4,920	5,249	5,164		
Public	10,325	10,257	10,214	9,621	9,166	8,882	8,539	8,306	8,069	7,988		

In 2015-2016, 21% of programs (n=29) reported enrolling fewer students than the previous year, which is about the same as reported in 2014-2015. The most common reasons programs gave for enrolling fewer students in 2015-2016 were "accepted students did not enroll" and "college/university / BRN requirement to reduce enrollment".

Table 7. Percent of Programs that Enrolled Fewer Students by Academic Year

Type of Program	2014	-2015	2015	5-2016
	Enrolled fewer	#of programs reporting	Enrolled fewer	#of programs reporting
ADN	23.0%	87	21.9%	89
BSN	13.9%	36	18.4%	38
ELM	37.5%	16	28.6%	14
Total	22.3%	139	20.6%	141

Table 8. Reasons for Enrolling Fewer Students by Academic Year

	2014- 2015	2015- 2016
Accepted students did not enroll	45.2%	41.4%
College/university / BRN requirement to reduce enrollment	16.1%	27.6%
Lost funding	19.4%	17.2%
Other	12.9%	17.2%
Insufficient faculty	16.1%	13.8%
Unable to secure clinical placements for all students	16.1%	10.3%
To reduce costs	16.1%	3.4%
Program discontinued	9.7%	3.4%
Lack of qualified applicants	9.7%	0.0%
Number of programs that reported	31	29

#### Student Census Data

The total number of students enrolled in California pre-licensure nursing programs (25,671) remained about the same as that reported the previous year (-1%; n=143). BSN programs increased slightly (4%, n=514), ELM programs decreased (-9%; n=-138), as did ADN programs (-4%, n=-519). Of the total number of students enrolled on October 15, 2016, 45% were in ADN programs, 50% were in BSN programs and 5% were in ELM programs.

In the past ten years, the proportion of students in each type of program has shifted. ADN students made up almost two-thirds of all students in 2007, but that share slipped below 50% in 2011 as the number of BSN students continued to grow. 2016 marks the first year that BSN students make up half of all students in California pre-licensure programs.

Table 9. Student Census Data\* by Program Type, by Year

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADN	14,191	14,304	14,987	14,011	13,041	11,860	12,070	11,502	12,027	11,508
BSN	7,059	7,956	9,288	10,242	11,712	12,248	12,453	12,008	12,332	12,846
ELM	1,274	1,290	1,405	1,466	1,778	1,682	1,808	1,473	1,455	1,317
Total nursing students	22,524	23,550	25,680	25,719	26,531	25,790	26,331	24,983	25,814	25,671

<sup>\*</sup>Census data represent the number of students on October 15th of the given year.

#### Student Completions

The number of students graduating from California nursing programs has increased by 35% (n=2,874) over the last ten years and peaked at 11,512 graduates in 2009-2010. BSN and ELM programs have had overall increases in the number of students completing their programs over the last ten years, but ADN programs have declined since a peak of 7,690 completions in 2009-2010, when they comprised 67% of all graduates. ADN graduates still represent over half (51%) of all students completing a pre-licensure nursing program in California.

Table 10. Student Completions by Program Type by Academic Year

		•								
	2006-	2007-	2008-	2009-	2010-	2011-	2012-	2013-	2014-	2015-
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADN	5,885	6,527	7,075	7,690	6,606	6,162	6,164	5,916	5,542	5,671
BSN	2,074	2,481	2,788	3,157	3,330	3,896	4,364	4,606	4,860	4,868
ELM	358	572	663	665	717	756	764	769	717	652
Total student completions	8,317	9,580	10,526	11,512	10,653	10,814	11,292	11,291	11,119	11,191

#### Retention and Attrition Rates

While the attrition rate among nursing programs has fluctuated over the past eight years, it has declined since 2006-2007 with the lowest in 2012-2013 at 12%. The attrition rate was reported at 13% in 2015-2016. Of the 11,338 students scheduled to complete a nursing program in the 2015-2016 academic year, 80% (n=9,026) completed the program on-time, 8% (n=885) are still enrolled in the program, and 13% (n=1,427) left the program, with more than half of those students (61%) having been dismissed, and 44% having dropped out.

Beginning with the 2015-2016 survey, data for both traditional and accelerated programs was reported together, thus data will no longer be reported separately for the different tracks. Tables 11 and 12 below reflect the combined data by academic year.

Table 11. Student Retention and Attrition by Academic Year

Table 11. Oldden Retention and Attrition by Academic Tear										
	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Students scheduled to complete the program	8,852	10,454	11,414	11,340	11,123	10,800	12,493	11,791	11,692	11,338
Completed on time	6,437	7,823	8,664	8,904	8,776	8,752	10,280	9,743	9,587	9,026
Still enrolled	996	978	1,105	957	721	590	758	651	563	885
Total attrition	1,419	1,653	1,645	1,479	1,626	1,458	1,455	1,397	1,542	1,427
Attrition-dropped out									821	612
Attrition-dismissed									721	815
Completed late <sup>‡</sup>				684	509	432	578	1,003	820	409
Retention rate*	72.7%	74.8%	75.9%	78.5%	78.9%	81.0%	82.3%	82.6%	82.0%	79.6%
Attrition rate**	16.0%	15.8%	14.4%	13.0%	14.6%	13.5%	11.6%	11.8%	13.2%	12.6%
% Still enrolled	11.3%	9.4%	9.7%	8.4%	6.5%	5.5%	6.1%	5.5%	4.8%	7.8%

<sup>&</sup>lt;sup>‡</sup>These completions are not included in the calculation of either retention or attrition rates.

<sup>\*</sup>Retention rate = (students completing the program on-time) / (students scheduled to complete)

<sup>\*\*</sup>Attrition rate = (students dropped or dismissed\_who were scheduled to complete) / (students scheduled to complete the program)

Note: Blank cells indicate that the applicable information was not requested in the given year.

In 2015-2016 data for traditional and accelerated programs was combined beginning with 2010-2011. Since historical data was used for data prior to 2015-2016, there may be some slight discrepancies between reporting sources in data reported in years 2010-2011 to 2014-2015.

Attrition rates vary by program type and continue to be lowest among ELM programs and highest among ADN programs. Over the last ten years, ADN programs have seen overall improvement in their average attrition rates, with 14% in 2015-2016 being one of the lowest attrition rate in the last ten years. BSN & ELM programs have seen fluctuations in their attrition rates, although BSN attrition rates have trended up more significantly in the last three years. Historically, attrition rates in public programs have been higher than those in private programs over most of the past ten years. However, this gap has narrowed in the past three years as average private program attrition rates have increased and average public program attrition rates have decreased. In 2015-2016, the private school attrition rate (14%) was higher than that of the public schools (12%).

Table 12. Attrition Rates by Program Type\* by Academic Year

	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
ADN	19.0%	19.5%	17.6%	16.1%	18.0%	17.6%	14.4%	15.6%	16.2%	14.3%
BSN	8.7%	8.3%	8.6%	7.6%	9.7%	8.1%	8.3%	8.7%	10.6%	11.4%
ELM	7.2%	5.6%	5.2%	5.6%	7.9%	6.7%	4.1%	3.4%	7.7%	4.4%
Private	7.9%	9.1%	9.6%	8.3%	11.4%	8.9%	9.3%	9.4%	12.3%	13.6%
Public	17.7%	17.4%	15.9%	14.5%	15.7%	15.2%	12.6%	13.2%	13.7%	12.0%

Data for traditional and accelerated program tracks is now combined and reported here.

#### NCLEX Pass Rates

Prior to 2011-2012, NCLEX (National Council Licensure Examination) pass rates were higher for ELM graduates than for ADN or BSN program graduates. Improved pass rates for ADN and BSN graduates and lower pass rates for ELM students have narrowed this gap in recent years, and ELM programs have had the lowest pass rates since 2013-2014. All program types had higher 2015-2016 NCLEX pass rates in comparison to the previous two years. The NCLEX passing standard was increased in April 2013, which may have impacted the NCLEX pass rates for the subsequent years

Table 13. First Time NCLEX Pass Rates\* by Program Type, by Academic Year

	2006- 2007	2007- 2008	2008- 2009	2009- 2010		2011- 2012		2013- 2014	2014- 2015	2015- 2016
ADN	87.8%	85.4%	87.5%	88.6%	87.4%	89.8%	88.8%	83.1%	84.3%	86.0%
BSN	89.4%	85.9%	88.7%	89.2%	87.9%	88.7%	87.1%	82.3%	84.4%	88.2%
ELM	89.6%	92.3%	90.6%	89.6%	88.2%	88.9%	91.8%	81.9%	80.7%	84.1%

<sup>\*</sup>NCLEX pass rates for students who took the exam for the first time in the given year.

NCLEX pass rates for students graduated from accelerated nursing programs are generally comparable to pass rates of students who completed traditional programs, although the pass rates have fluctuated over time. In 2015-2016, students who graduated from accelerated ADN and ELM programs had *lower* average pass rates, and students from accelerated BSN programs had *higher* average pass rates than their traditional counterparts.

Table 14. First Time NCLEX Pass Rates\* for Accelerated Programs by Program Type, by Academic Year

	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013		2014- 2015	2015- 2016
ADN	86.7%	93.7%	89.0%	83.9%	85.8%	93.5%	68.8%	95.5%	73.0%
BSN	89.4%	92.1%	88.5%	90.0%	95.9%	83.9%	81.9%	95.2%	91.4%
ELM								90.0%	83.6%

Note: Blank cells indicate that the applicable information was not requested in the given year.

<sup>\*</sup>NCLEX pass rates for students who took the exam for the first time in the given year.

## Employment of Recent Nursing Program Graduates<sup>2</sup>

The largest share of RN program graduates work in hospitals, even though this share has been decreasing from a high of 88% in 2007-2008. In 2015-2016, programs reported that 59% of graduates were employed in hospitals. The share of new graduates working in nursing in California had been declining, from a high of 92% in 2007-2008 to a low of 64% in 2012-2013. In 2015-2016, there was an increase in the share of graduates working in California from 73% the prior year up to 76% in 2015-2016. Nursing programs reported that 11% each of their graduates were either pursuing additional education or were not yet licensed. Only 6% of their graduates were unable to find employment by October 2016, a figure which has steadily declined since 2009-2010.

Table 15. Employment Location of Recent Nursing Program Graduates by Academic Year

	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Hospital	88.0%	71.4%	59.0%	54.4%	61.1%	56.7%	56.0%	58.4%	59.2%
Pursuing additional nursing education	2.7%	8.4%	9.7%	7.8%	8.3%	7.9%	7.1%	11.5%	11.0%
Not yet licensed									10.6%
Unable to find employment			27.5%	21.8%	17.6%	18.3%	13.7%	9.4%	5.5%
Other setting	4.0%	15.6%	14.8%	6.5%	4.2%	1.7%	3.4%	4.9%	3.2%
Long-term care facilities	2.2%	5.4%	3.9%	4.5%	3.6%	3.6%	3.7%	7.9%	4.6%
Other healthcare facilities						7.1%	10.5%	4.4%	3.5%
Community/public health facilities	3.1%	5.6%	6.0%	5.0%	5.2%	4.7%	6.0%	4.2%	2.6%
Employed in California	91.5%	83.4%	81.1%	68.0%	69.6%	63.7%	68.8%	73.1%	76.0%

Note: Blank cells indicate that the applicable information was not requested in the given year.

In 2015-2016, ADN graduates were most likely working in hospitals (55%), pursuing additional education (13%) or not yet licensed (10%). BSN graduates were much more likely to be working in a hospital (72%) than ADN or ELM graduates. ELM graduates were working in hospitals (53%) or pursuing additional education (30%). This data is similar to that reported in 2014-2015.

Table 16. Employment Location for Recent Nursing Program Graduates by Program Type by Academic Year

Adductifio Tour								
	ADN		В	SN	EL	_M	А	
	2014-	2015-	2014-	2015-	2014-	2015-	2014-	2015-
	2015	2016	2015	2016	2015	2016	2015	2016
Hospital	51.4%	54.7%	79.4%	72.2%	55.6%	53.3%	58.4%	59.2%
Long-term care facilities	10.3%	5.6%	4.4%	2.4%	1.5%	1.8%	7.9%	4.6%
Community/public health facilities	4.1%	2.4%	3.4%	2.9%	6.0%	3.8%	4.2%	2.6%
Other healthcare facilities	4.9%	4.2%	2.5%	2.1%	5.5%	0.9%	4.4%	3.5%
Pursuing additional nursing education	13.0%	12.6%	2.0%	2.4%	21.8%	29.7%	11.5%	11.0%
Unable to find employment	11.6%	6.0%	3.8%	4.8%	8.2%	3.7%	9.4%	5.5%
Not yet licensed		10.1%		13.0%		5.2%		10.6%
Other	5.6%	4.6%	4.7%	0.1%	1.4%	1.9%	4.9%	4.9%

Note: Statistics on the percent of graduates employed in California were collected at the school level only.

Note: Blank cells indicate that the applicable information was not requested in the given year.

<sup>&</sup>lt;sup>2</sup>Graduates whose employment setting was reported as "unknown" (15% in 2015-2016) have been excluded from this table.

## Clinical Training in Nursing Education

Questions regarding clinical simulation<sup>3</sup> were revised in the 2014-2015 survey to collect data on the average amount of hours students spend in clinical areas including simulation in various content areas and plans for future use. One-hundred and thirty-six (96%) of 141 nursing programs reported using clinical simulation in 2015-2016.<sup>4</sup>

In 2015-2016, programs allocate the largest proportion of clinical hours to direct patient care (80%), followed by skills labs (13%) and simulation (7%). The content areas using the largest number of hours of clinical simulation on average are Medical/Surgical (24.3) and Fundamentals (9.6). The largest number of clinical training hours by content area was reported for Medical/Surgical (344) followed by Fundamentals (143.4).

In 2015-2016, the largest *proportion* of clinical training hours for simulation were reported by Obstetrics and Pediatrics (9% each); for skills labs was reported by Fundamentals (38%); and the largest proportion of direct patient care hours was reported by Leadership and Management (93%), Psychiatry/Mental Health (89%) and Geriatrics (87%).

These numbers and proportions were very similar to those reported in 2014-2015.

Table 17. Average Hours Spent in Clinical Training by Content Area and Academic Year\*

Table 17. Average nours Spent in Clinical Training by Content Area and Academic Tear										
Content Area		Direct Patient Care		Labs	Clin Simul		All Clinical Hours			
	2014- 2015	2015- 2016	2014- 2015	2015- 2016	2014- 2015	2015- 2016	2014- 2015	2015- 2016		
Medical/Surgical	273.6	285.2	29.2	34.7	27.2	24.3	329.8	344.0		
Fundamentals	82.0	78.8	44.9	55.2	9.7	9.6	136.5	143.4		
Obstetrics	73.1	74.8	8.0	8.8	11.5	8.8	92.6	92.3		
Pediatrics	71.4	73.5	7.6	7.6	7.7	7.6	86.6	88.6		
Geriatrics	65.2	77.0	4.8	5.2	4.8	6.4	73.7	88.6		
Psychiatry/Mental Health	76.5	79.5	5.2	5.1	5.3	4.7	87.0	89.2		
Leadership/Management	62.8	62.7	5.5	2.1	3.9	3.0	71.6	67.7		
Other	36.2	32.5	1.7	1.7	2.5	1.9	40.1	36.2		
Total average clinical hours	738.6	764.0	106.6	119.9	72.4	66.0	917.5	949.9		
Percent of clinical hours	80.5%	80.4%	11.6%	12.6%	7.9%	6.9%	100.0%	100.0%		
Number of programs that reported hours	130	136	130	136	130	136	130	136		

<sup>\*</sup>Schools that did not report clinical training hours were excluded from this analysis

<sup>&</sup>lt;sup>3</sup> Clinical simulation provides a simulated real-time nursing care experience which allows students to integrate, apply, and refine specific skills and abilities that are based on theoretical concepts and scientific knowledge. It may include videotaping, de-briefing and dialogue as part of the learning process.

<sup>&</sup>lt;sup>4</sup> 139 programs reported. 3 of these programs reported not using clinical simulation and 2 programs did not answer the question.

The largest proportion of clinical hours in all programs is in direct patient care, and BSN and ELM programs allot the largest percentage of clinical hours (91% vs. 81% for ADN) to direct patient care activities. ADN and BSN programs allocate a proportionally higher percentage of time to skills labs (13% vs. 10% for ELM programs). BSN and ELM programs allocate more of their clinical training time to simulation activities than do ADN programs (8 & 9%, respectively, vs. 6%).

- 136 of 140 nursing programs (97%) reported using clinical simulation in 2015-2016.5
- More than a third (38%, n=53) of the 140 programs have plans to increase staff dedicated to administering clinical simulation at their school in the next 12 months.
- Medical/surgical is the content area in which programs use the most hours of clinical simulation.

Table 18. Average Hours Spent in Clinical Training by Program Type and Content Area, 2015-2016

Content Area	Direc	t Patient	Care	S	kills Lab		Clinica	al Simul	ation		tal Avera	
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Medical/ surgical	333.2	193.2	209.4	40.8	23.2	25.0	24.4	21.9	31.0	397.9	238.4	265.4
Fundamentals	89.2	54.9	69.3	59.6	49.4	35.5	8.9	9.7	15.5	157.6	116.7	119.1
Obstetrics	73.2	75.2	85.8	8.0	10.5	9.6	8.4	9.3	10.1	89.5	94.6	105.4
Pediatrics	71.9	74.2	82.8	6.4	10.5	8.3	7.8	7.0	7.6	86.7	91.5	98.7
Geriatrics	80.5	69.9	73.3	4.8	7.2	1.9	5.4	9.9	4.0	86.1	86.7	78.9
Psychiatry/ mental health	78.0	79.2	91.3	4.5	6.7	4.3	4.2	5.5	5.3	90.6	91.4	100.5
Leadership/ management	61.5	65.3	63.3	1.7	2.1	4.3	2.7	4.1	2.3	65.9	71.4	69.7
Other	11.1	82.4	39.9	1.8	2.2	0.0	0.8	4.9	1.6	13.6	89.4	41.5
Total average clinical hours	798.5	695.8	715.1	127.1	112.7	89.0	62.4	71.7	75.1	988.1	880.1	879.2
Number of programs that reported	88	36	12	88	36	12	88	36	12	88	36	12

<sup>&</sup>lt;sup>5</sup> 3 programs of those reporting did not use simulation, and 1 program did not answer this question.

In 2016, programs were asked to report whether over the next 12 months they planned to increase, decrease, or maintain the number of hours in direct patient care, skills labs, and clinical simulation for each of eight content areas.

In each content area and clinical experience, the majority planned to maintain the current balance of hours. If programs were changing anything, they were slightly more likely to report plans to decrease rather than increase overall clinical hours.

In most content areas, respondents were more likely to report a planned decrease in clinical training hours in direct patient care and an increase in clinical training hours in clinical simulation.

Table 19. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type\*, 2015-2016

Medical/Surgical	Decrease hours	Maintain hours	Increase hours
Direct patient care	13.0%	77.9%	6.1%
Non-direct patient care	8.2%	79.5%	5.7%
Clinical simulation	2.4%	75.6%	18.9%
All clinical hours	8.5%	81.5%	7.7%
Fundamentals	Decrease hours	Maintain hours	Increase hours
Direct patient care	4.6%	83.9%	3.9%
Non-direct patient care	4.0%	86.4%	3.2%
Clinical simulation	2.4%	75.6%	15.8%
All clinical hours	2.3%	89.2%	4.7%
Obstetrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	11.5%	81.7%	3.8%
Non-direct patient care	3.3%	88.5%	1.6%
Clinical simulation	3.2%	81.1%	10.2%
All clinical hours	9.2%	82.3%	5.4%
Pediatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	12.2%	81.7%	3.1%
Non-direct patient care	4.9%	85.3%	1.6%
Clinical simulation	4.7%	78.0%	11.0%
All clinical hours	8.5%	85.4%	3.9%
Geriatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	4.7%	84.5%	4.7%
Non-direct patient care	0.0%	85.0%	4.2%
Clinical simulation	0.0%	82.1%	11.4%
All clinical hours	2.3%	87.6%	3.9%

Table 19. Planned Increase or Decrease in Clinical Hours by Content Area and Type of Clinical Experience\*, (Continued)

Psychiatry/Mental Health	Decrease hours	Maintain hours	Increase hours
Direct patient care	11.4%	84.9%	1.5%
Non-direct patient care	3.3%	84.4%	1.6%
Clinical simulation	3.2%	80.2%	11.9%
All clinical hours	5.4%	92.3%	0.0%
Leadership/Management	Decrease hours	Maintain hours	Increase hours
Direct patient care	6.3%	79.5%	3.9%
Non-direct patient care	2.5%	77.1%	2.5%
Clinical simulation	0.8%	74.0%	10.1%
All clinical hours	3.2%	84.8%	2.4%
Other	Decrease hours	Maintain hours	Increase hours
Direct patient care	11.4%	84.9%	1.5%
Non-direct patient care	3.3%	84.4%	1.6%
Clinical simulation	3.2%	80.2%	11.9%
All clinical hours	5.4%	92.3%	0.0%

<sup>\*</sup>Totals do not always sum to 100% because some programs answered "not applicable" or "unknown".

Respondents were asked why they were reducing the clinical hours in their program if they indicated in the prior questions that they were decreasing clinical hours in any content area or clinical experience type. Twenty programs (15%) of the 136 that responded to the questions reported they have plans to decrease their overall clinical hours in some area. The most commonly provided reason for decreasing clinical hours was students can meet learning objectives in less time" followed by "unable to find sufficient clinical space". Respondents provided additional categories, such as curriculum redesign and a requirement to reduce units, as reasons for reducing clinical hours.

Table 20. Why Program is Reducing Clinical Hours by Academic Year

Passan	2014-	2015-
Reason	2015	2016
Students can meet learning objectives in less time	13.5%	55.0%
Unable to find sufficient clinical space	24.3%	25.0%
Curriculum redesign or change		20.0%
Other	21.6%	20.0%
Insufficient clinical faculty	8.1%	15.0%
Need to reduce units	2.7%	10.0%
Funding issues or unavailable funding	0.0%	0.0%
Number of programs that reported	37	20

#### Clinical Space & Clinical Practice Restrictions<sup>6</sup>

The number of California nursing programs reporting they were denied access to a clinical placement, unit, or shift decreased to 60 programs, the lowest in six years. Forty-five percent (27) of the 60 programs reported being offered an alternative by the site. The lack of access to clinical space resulted in a loss of 213 clinical placements, units, or shifts, which affected 1,278 students.

Table 21. RN Programs Denied Clinical Space by Academic Year

	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Number of programs denied a clinical placement, unit or shift	93	85	90	81	70	60
Programs offered alternative by site*	_	-	_	_	24	26
Placements, units or shifts lost*	-	-	-	-	272	213
Number of programs that reported	142	140	143	141	135	138
Total number of students affected	2,190	1,006	2,368	2,195	2,145	1,278

<sup>\*</sup>Significant changes to these questions beginning with the 2014-2015 administration prevent comparison of the data to prior years.

In the 2015-2016 survey, 65 programs (47%) reported that there were fewer students allowed for a clinical placement, unit, or shift in this year than in the prior year. These numbers were similar to those reported in 2014-2015.

Table 22. RN Programs That Reported Fewer Students Allowed for a Clinical Space by Academic Year

	2014- 2015	2015- 2016
ADN	31	37
BSN	18	22
ELM	9	6
All Programs	58	65

University of California, San Francisco

<sup>&</sup>lt;sup>6</sup>Some of these data were collected for the first time in 2009-2010. However, changes in these questions for 2010-2011 and later administrations of the survey prevent comparability of some of the data. Therefore, data prior to 2010-2011 may not be shown

Competition for space arising from an increase in the number of nursing students continued to be the most frequently reported reason why programs were denied clinical space, though the share of programs citing it as a reason has been declining since 2009-2010.

Overall, 3 programs (1%) reported providing financial support to secure a clinical placement, but only one reported being denied a space due to another RN program offering to pay a fee for the placement.

Table 23. Reasons for Clinical Space Being Unavailable by Academic Year

Tubio 201 (Cucono for Official Opaco Boilig O	2009-	2010-	2011-	2012-	2013-	2014-	2015-
	2019	2010-	2011-	2012-	2013-	2014-	2015-
Competition for clinical space due to increase in number of nursing students in region	71.4%	64.5%	58.8%	54.5%	46.9%	48.7%	48.3%
Displaced by another program	62.3%	40.9%	44.7%	42.2%	43.2%	39.5%	35.0%
Staff nurse overload or insufficient qualified staff	54.5%	46.2%	54.1%	41.1%	45.7%	38.2%	33.3%
Closure, or partial closure, of clinical facility		23.7%	25.9%	26.7%	25.9%	18.4%	28.3%
Nurse residency programs	28.6%	18.3%	29.4%	17.8%	18.5%	17.1%	26.7%
No longer accepting ADN students*	26.0%	16.1%	21.2%	20.0%	23.5%	21.1%	23.3%
Visit from Joint Commission or other accrediting agency				21.1%	21.0%	26.3%	23.3%
Decrease in patient census	35.1%	30.1%	31.8%	30.0%	28.4%	25.0%	21.7%
Change in facility ownership/management		11.8%	12.9%	21.1%	14.8%	21.1%	18.3%
Clinical facility seeking magnet status	36.4%	12.9%	18.8%	15.5%	11.1%	17.1%	18.3%
Implementation of Electronic Health Records system			3.5%	32.3%	22.2%	13.2%	10.0%
Other	20.8%	9.7%	10.6%	11.1%	11.1%	17.1%	10.0%
Facility moving to a new location					6.2%		
The facility began charging a fee (or other RN program offered to pay a fee) for the placement and the RN program would not pay					4.9%	1.3%	1.7%
Number of programs that reported	77	93	85	90	81	76	60

Note: Blank cells indicate that the applicable information was not requested in the given year.

<sup>\*</sup>Not asked of BSN or ELM programs but data from these programs may be included from text comments received.

Competition from the increased number of nursing students was the primary reason for clinical space being unavailable for both ADN and BSN programs. The second most common reason for ADN programs was being displaced by another program, while staff nurse overload/insufficient qualified staff was second for BSN programs. Closure or partial closure of a facility was the primary reason for ELM programs. Almost one-third (32%) of ADN programs reported that clinical sites no longer accepting ADN students was a reason for losing clinical space. Only 2% of nursing programs reported that the facility began charging a fee or another RN program offered to pay a fee for the placement as a reason for clinical space being unavailable.

Table 24. Reasons for Clinical Space Being Unavailable by Program Type, 2015-2016

able 24. Reasons for Chinear Opace Being Chavallable by 1 Togram Type, 2013-2010						
	ADN	BSN	ELM	All Programs		
Competition for clinical space due to increase in number of nursing students in region	48.6%	52.9%	33.3%	48.3%		
Displaced by another program	37.8%	29.4%	33.3%	35.0%		
Staff nurse overload or insufficient qualified staff	24.3%	52.9%	33.3%	33.3%		
Closure, or partial closure, of clinical facility	10.8%	47.1%	83.3%	28.3%		
Nurse residency programs	24.3%	29.4%	33.3%	26.7%		
Visit from Joint Commission or other accrediting agency	18.9%	35.3%	16.7%	23.3%		
No longer accepting ADN students*	32.4%	5.9%	16.7%	23.3%		
Decrease in patient census	16.2%	35.3%	16.7%	21.7%		
Change in facility ownership/management	21.6%	17.6%	0.0%	18.3%		
Clinical facility seeking magnet status	24.3%	11.8%	0.0%	18.3%		
Implementation of Electronic Health Records system	5.4%	23.5%	0.0%	10.0%		
Other	2.7%	17.6%	33.3%	10.0%		
The facility began charging a fee (or other RN program offered to pay a fee) for the placement and the RN program would not pay	0.0%	5.9%	0.0%	1.7%		
Number of programs that reported	37	17	6	60		

<sup>\*</sup>Not asked of BSN or ELM programs but data from these programs may be included from text comments received.

Programs that lost access to clinical space were asked to report on the strategies used to cover the lost placements, units, or shifts. Most programs reported that the lost site was replaced at another clinical site – either at a different site currently being used by the program (76%) or at a new clinical site (44%). Reducing student admission is an uncommon practice for addressing the loss of clinical space.

Table 25. Strategies to Address the Loss of Clinical Space by Academic Year

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	2011-	2012-	2013-	2014-	2015-
	2012	2013	2014	2015	2016
Replaced lost space at different site currently used by nursing program	61.2%	64.4%	66.7%	66.2%	76.3%
Added/replaced lost space with new site	48.2%	53.3%	56.8%	48.6%	44.1%
Replaced lost space at same clinical site	47.1%	38.9%	45.7%	32.4%	32.2%
Clinical simulation	29.4%	34.4%	32.1%	37.8%	30.5%
Reduced student admissions	8.2%	2.2%	7.4%	1.4%	5.1%
Other	9.4%	4.4%	1.2%	8.1%	3.4%
Number of programs that reported	85	90	81	74	59

In 2015-2016, forty-three (31%) nursing programs in the state reported an increase from the previous year in out of hospital clinical placements. In 2015-2016, the two most frequently reported non-hospital clinical sites were skilled public health or community health agency and home health agency/home health service. This is comparable to the prior years.

Table 26. Alternative Out-of-Hospital Clinical Sites Used by RN Programs by Academic Year

	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Public health or community health agency	43.60%	51.80%	55.00%	53.70%	41.00%	51.2%
Home health agency/home health service	30.90%	32.10%	35.00%	19.50%	20.50%	41.9%
Medical practice, clinic, physician office	23.60%	33.90%	22.50%	39.00%	30.80%	37.2%
Outpatient mental health/substance abuse	36.40%	42.90%	20.00%	39.00%	28.20%	34.9%
Skilled nursing/rehabilitation facility	47.30%	46.40%	45.00%	43.90%	46.20%	32.6%
School health service (K-12 or college)	30.90%	30.40%	22.50%	34.10%	38.50%	27.9%
Surgery center/ambulatory care center	20.00%	23.20%	30.00%	29.30%	28.20%	25.6%
Hospice	25.50%	25.00%	27.50%	29.30%	23.10%	25.6%
Case management/disease management	7.30%	12.50%	5.00%	7.30%	7.70%	16.3%
Other	14.50%	17.90%	17.50%	12.20%	12.80%	16.3%
Correctional facility, prison or jail	5.50%	7.10%	5.00%	7.30%	10.30%	9.3%
Urgent care, not hospital-based	9.10%	10.70%	5.00%	12.20%	7.70%	7.0%
Renal dialysis unit	12.70%	5.40%	5.00%	4.90%	5.10%	7.0%
Occupational health or employee health service	5.50%	5.40%	0.00%	2.40%	0.00%	2.3%
Number of programs that reported	55	56	40	41	39	43

In 2015-2016, 65% (n=85) of nursing schools reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities, which is the lowest number reported since 2009-2010.

The most common types of restrictions students faced continued to be access to the clinical site itself due to a visit from the Joint Commission or another accrediting agency, access to bar coding medication administration, and access to electronic medical records. Schools reported that the least common types of restrictions students faced were direct communication with health care team members, and alternative setting due to liability.

Table 27. Common Types of Restricted Access in the Clinical Setting for RN Students by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Clinical site due to visit from accrediting agency (Joint Commission)	68.1%	71.0%	74.3%	77.9%	73.1%	68.8%	79.3%
Bar coding medication administration	70.3%	58.0%	68.3%	72.6%	58.1%	59.1%	69.0%
Electronic Medical Records	70.3%	50.0%	66.3%	72.6%	66.7%	60.2%	61.9%
Automated medical supply cabinets	53.1%	34.0%	35.6%	48.4%	45.2%	44.1%	55.4%
Student health and safety requirements		39.0%	43.6%	45.3%	43.0%	40.9%	43.4%
Some patients due to staff workload		31.0%	37.6%	30.5%	41.9%	30.1%	35.4%
IV medication administration	27.7%	31.0%	30.7%	24.2%	23.7%	26.9%	34.9%
Glucometers	37.2%	33.0%	29.7%	36.8%	34.4%	31.2%	27.7%
Alternative setting due to liability	20.2%	13.0%	22.8%	18.9%	18.3%	19.4%	19.3%
Direct communication with health team	11.8%	12.0%	15.8%	17.9%	10.8%	7.5%	8.5%
Number of schools that reported	94	100	101	95	93	93	85

Note: Blank cells indicate that the applicable information was not requested in the given year.

Numbers indicate the percent of schools reporting these restrictions as "common" or "very common".

Schools reported that restricted student access to electronic medical records was due to insufficient time for clinical site staff to train students (81%) and clinical site staff still learning the system (56%). Schools reported that students were restricted from using medication administration systems due to liability (68%) and limited time for clinical staff to train students (40%).

Table 28. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration by Academic Year

Records and medication Administration by Academic Teal										
	Electro	nic Medical R	Records	Medication Administration						
	2013-2014	2014-2015	2015-2016	2013-2014	2014-2015	2015-2016				
Liability	41.7%	36.4%	43.5%	50.0%	62.3%	68.3%				
Insufficient time to train students	60.7%	64.9%	81.2%	39.4%	31.9%	39.7%				
Staff fatigue/burnout	31.0%	29.9%	34.8%	33.3%	24.6%	31.7%				
Staff still learning and unable to assure documentation standards are being met	59.5%	58.4%	56.5%	27.3%	21.7%	23.8%				
Cost for training	28.6%	6.5%	31.9%	18.2%	20.3%	19.0%				
Other	13.1%	6.5%	10.1%	16.7%	5.8%	9.5%				
Patient confidentiality	26.2%	22.1%	30.4%	15.2%	7.2%	6.3%				
Number of schools that reported	84	77	69	66	69	63				

Numbers indicate the percent of schools reporting these restrictions as "uncommon", "common" or "very common" to capture any instances where reasons were reported.

Schools compensate for training in areas of restricted student access by providing training in the simulation lab (88%), in the classroom (66%), and ensuring that all students have access to sites that train them in the area of restricted access (51%). Since 2013-2014, training students in the simulation lab or classroom and use of software have increased while access to other sites to train them has decreased.

Table 29. How the Nursing Program Compensates for Training in Areas of Restricted Access by Academic Year

	2013-2014 % Schools	2014-2015 % Schools	2015-2016 % Schools
Training students in the simulation lab	80.6%	87.1%	88.0%
Training students in the classroom	53.8%	57.0%	66.3%
Ensuring all students have access to sites that train them in this area	61.3%	55.9%	50.6%
Purchase practice software, such as SIM Chart	39.8%	40.9%	43.4%
Other	9.7%	11.8%	12.0%
Number of schools that reported	93	93	83

#### Faculty Census Data<sup>7</sup>

In 2015-2016, the total number of nursing faculty declined slightly, as did the number of part-time faculty, while the number of full-time faculty increased slightly. On October 15, 2016, there were 4,366 total nursing faculty.<sup>8</sup> Of these faculty, 34% (n=1,513) were full-time and 66% (n=2,953) were part-time.

The need for faculty continues to outpace the number of active faculty. On October 15, 2016, schools reported 435 vacant faculty positions. These vacancies represent a 9% faculty vacancy rate overall (12.1% for full-time faculty and 7.1% for part-time faculty).

Table 30. Faculty Census Data by Year

	2007*	2008	2009	2010	2011	2012	2013*	2014*	2015*	2016*
Total Faculty	3,282	3,471	3,630	3,773	4,059	4,119	4,174	4,181	4,532	4,366
Full-time	1,374	1,402	1,453	1,444	1,493	1,488	1,522	1,498	1,505	1,513
Part-time	1,896	2,069	2,177	2,329	2,566	2,631	2,644	2,614	3,000	2,953
Vacancy Rate**	5.9%	4.7%	4.7%	4.7%	4.9%	7.9%	5.9%	9.4%	8.2%	9.1%
Vacancies	206	172	181	187	210	355	263	432	407	435

<sup>\*</sup>The sum of full- and part-time faculty did not equal the total faculty reported in these years.

<sup>\*\*</sup>Vacancy rate = number of vacancies/(total faculty + number of vacancies)

<sup>&</sup>lt;sup>7</sup> Census data represent the number of faculty on October 15<sup>th</sup> of the given year.

<sup>&</sup>lt;sup>8</sup> Since faculty may work at more than one school, the number of faculty reported may be greater than the actual number of individuals who serve as faculty in California nursing schools.

In 2015-2016, schools were asked if the school/program began hiring significantly more part-time than full-time active faculty over the past 5 years than previously. 37% (n=48) of 129 schools responding agreed. These 48 schools were asked to rank the reason for this shift.

The top ranked reasons were non-competitive salaries for full-time faculty, and shortage of RNs applying for full time faculty positions.

Table 31. Reasons for Hiring More Part-time Faculty, 2015-2016

	Average Rank*	Programs reporting
Non-competitive salaries for full time faculty	2.5	43
Shortage of RNs applying for full time faculty positions	3.0	42
Insufficient number of full time faculty applicants with required credential	3.6	41
Insufficient budget to afford benefits and other costs of FT faculty	4.7	35
Need for part-time faculty to teach specialty content	4.8	37
Other	5.1	17
Private, state university or community college laws, rules or policies	5.4	33
Need for faculty to have time for clinical practice	6.0	31
To allow for flexibility with respect to enrollment changes	6.7	32
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	6.8	34

<sup>\*</sup> The lower the ranking, the greater the importance of the reason (1 has the highest importance and 10 has the lowest importance.)

In 2015-2016, 85 of 132 schools (64%) reported that faculty in their programs work an overloaded schedule, and 97% (n=82) of these schools pay the faculty extra for the overloaded schedule.

Table 31. Faculty with Overloaded Schedules by Academic Year

	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016
Schools with overloaded faculty	81	84	85	87	94	99	85	85
Share of schools that pay faculty extra for the overload	92.6%	90.5%	92.9%	94.3%	93.6%	95.0%	96.5%	96.5%
Number of schools that reported	125	125	131	132	133	131	132	132

## Summary

Over the past decade, the number of California pre-licensure nursing programs has grown dramatically, increasing from 130 programs in 2006-2007 to 141 programs in 2015-2016. In the past ten years, the share of nursing programs that partner with other schools to offer programs that lead to a higher degree increased from 9 to 80.

The number of admission spaces available reported by California RN programs has fluctuated over the past ten years. New student enrollments have also fluctuated over the past ten years, reaching a peak of 14,228 in 2009-2010 and remaining stable between 13,100 and 13,300 for the past four years. This decline has largely been due to fewer qualified applications and enrollments in ADN programs.

Pre-licensure RN programs reported 11,191 completions in 2015-2016—a 35% increase in student completions since 2006-2007. After three consecutive years of growth in the number of graduates from California nursing programs from 2006-2007 to 2009-2010, the number of graduates declined slightly and has fluctuated around 11,000 for the last four years.

After three years of an increasing average retention rate to a ten-year high of 82% in 2012-2013, the retention rate has remained close to 80% for the last three years. If retention rates remain at current levels, the declining rate of growth among new student enrollments will likely lead to further declines in the number of graduates from California nursing programs. At the time of the survey, 6% of new nursing program graduates were unable to find employment, which is a decline from the high of 28% in 2009-2010. The number of new graduates employed in California has increased for the third year and was reported at 76%.

Clinical simulation has become widespread in nursing education, with 96% (n=136) of programs reporting using it in some capacity in 2016. On average programs reported students spend 7% of their clinical training in simulation with the highest proportion of time obstetrics and pediatrics. The importance of clinical simulation is underscored by data showing the continued use of out-of-hospital clinical placements and programs continuing to report being denied access to clinical placement sites that were previously available to them. In addition, a large number of schools—65% in 2015-2016—reported that their students had faced restrictions to specific types of clinical practice.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. Even as the number of new student enrollments has started to decline, the number of faculty has continued to rise, largely driven by increases in part-time faculty as the number of full-time faculty has stayed relatively level since 2011. The number of nursing faculty has increased by 33% in the past ten years, from 3,282 in 2007 to 4,366 in 2016. In 2016, 435 faculty vacancies were reported, representing an overall faculty vacancy rate of 9.1% (12.1% for full-time faculty and 7.1% for part-time faculty). This vacancy rate is the second highest reported in the last ten years but a slight decrease from 2014.

#### **APPENDICES**

# APPENDIX A – List of Survey Respondents by Degree Program

#### ADN Programs (82)

American Career College American River College Antelope Valley College Bakersfield College Brightwood College Butte Community College

Cabrillo College Cerritos College Chabot College Chaffey College Citrus College

City College of San Francisco

CNI College (Career Networks Institute)

College of Marin
College of San Mateo
College of the Canyons
College of the Desert
College of the Redwoods
College of the Sequoias
Contra Costa College
Copper Mountain College

Cuesta College Cypress College De Anza College

East Los Angeles College

El Camino College

El Camino College - Compton Center

Evergreen Valley College Fresno City College

Glendale Community College

Golden West College Grossmont College Hartnell College Imperial Valley College Long Beach City College

Los Angeles City College Los Angeles County College of Nursing and

Allied Health

Los Angeles Harbor College Los Angeles Pierce College Los Angeles Southwest College Los Angeles Trade-Tech College Los Angeles Valley College Los Medanos College Mendocino College Merced College Merritt College Mira Costa College Modesto Junior College Monterey Peninsula College

Moorpark College

Mount San Antonio College Mount San Jacinto College

Mount Saint Mary's University - Los Angeles

Napa Valley College
Ohlone College
Pacific Union College
Palomar College
Pasadena City College
Porterville College
Rio Hondo College
Riverside City College
Sacramento City College
Saddleback College

San Bernardino Valley College

San Diego City College San Joaquin Delta College San Joaquin Valley College

Santa Ana College

Santa Barbara City College Santa Monica College Santa Rosa Junior College

Shasta College Shepherd University Sierra College

Solano Community College Southwestern College Stanbridge College Ventura College Victor Valley College Weimar Institute

West Hills College Lemoore

Yuba College

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#### LVN to ADN Programs Only (7)

Allan Hancock College Carrington College College of the Siskiyous Gavilan College Unitek College Mission College Reedley College at Madera Community College Center

#### BSN Programs (38)

American University of Health Sciences Azusa Pacific University Biola University California Baptist University

Chamberlain College\*
Concordia University Irvine

CSU Bakersfield CSU Channel Islands

CSU Chico
CSU East Bay
CSU Fresno
CSU Fullerton
CSU Long Beach
CSU Los Angeles\*
CSU Northridge
CSU Sacramento
CSU San Bernardino
CSU San Marcos

CSU Stanislaus

Dominican University of California

Holy Names University Loma Linda University

Mount Saint Mary's University - Los

Angeles

National University

Point Loma Nazarene University

Samuel Merritt University San Diego State University San Francisco State University

Simpson University
Sonoma State University

The Valley Foundation School of Nursing at

San Jose State

United States University\* University of California Irvine

University of California Los Angeles

University of Phoenix University of San Francisco West Coast University

Western Governors University

#### ELM Programs (14)

Azusa Pacific University
California Baptist University
Charles R. Drew University of Medicine and
Science
CSU Dominguez Hills
CSU Fullerton
CSU Long Beach
Samuel Merritt University
San Francisco State University
University of California Davis\*

University of California Los Angeles University of California San Francisco University of San Diego Hahn School of Nursing University of San Francisco Western University of Health Sciences

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<sup>\*</sup>New programs in 2015-2016

# APPENDIX B – BRN Education Issues Workgroup Members

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