California Board of Registered Nursing 2018-2019 Annual School Report

Data Summary and Historical Trend Analysis

A Presentation of Pre-Licensure Nursing Education Programs in California

February 14, 2020

Prepared by: Lisel Blash, MPA Joanne Spetz, PhD University of California, San Francisco 3333 California Street, Suite 265 San Francisco, CA 94118

Contents

PREFACE	1
Nursing Education Survey Background	1
ORGANIZATION OF REPORT	1
AVAILABILITY OF DATA	1
VALUE OF THE SURVEY	1
SURVEY PARTICIPATION	2
DATA SUMMARY AND HISTORICAL TREND ANALYSIS	3
TRENDS IN PRE-LICENSURE NURSING PROGRAMS	3
NUMBER OF NURSING PROGRAMS	3
Admission Spaces and New Student Enrollments Student Census Data Student Completions Completion and Attrition Rates NCLEX Pass Rates Employment of Recent Nursing Program Graduates Clinical Space & Clinical Practice Restrictions Faculty Data	
SUMMARY	29
Academic Progression Partnerships by Academic Year	
APPENDIX A – LIST OF SURVEY RESPONDENTS BY DEGREE PROGRAM	31
APPENDIX B – BRN NURSING EDUCATION AND WORKFORCE ADVISORY COMMITTEE	(NEWAC) 33

Tables

Table 1. RN Program Response Rate	.3 .4 .5 .6 .7 .7 .8 .9 .10 11 11 12 nic
Table 16. Percent of Recent Nursing Program Graduates Employed in California by Academic Ye	
Table 17. Employment Location of Recent Nursing Program Graduates by Academic Year	15 by
Table 19. RN Programs Denied Clinical Space by Academic Year	18 nic
Table 21. Reasons for Clinical Space Being Unavailable by Academic Year, Percentages	19 20 21 21 22
Table 27. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medic Records and Medication Administration by Academic Year	cal 24 by 25
Table 29. Faculty Data by Year	26 27
Figures	
Figure 1. Completion and Attrition Data by Race and Ethnicity, 2016-17 to 2018-2019 Figure 2. Percent of Recent Nursing Program Graduates Employed in California by Academic Ye	ar

PREFACE

Nursing Education Survey Background

The 2018-2019 Board of Registered Nursing (BRN) School Survey was based on prior BRN surveys and modified based on recommendations from the Nursing Education & Workforce Advisory Committee (NEWAC), which consists of nursing education and industry stakeholders from across California. A list of committee members is included in Appendix C. 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.

Organization of Report

The survey collects data about nursing programs and their students and faculty. Data presented in this report are from the academic year beginning August 1, 2018 and ending July 31, 2019. Census and associated demographic data were requested for October 15, 2019.

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 to describe overall trends 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 compare directly 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.

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 provide data-driven evidence to influence policy at the local, state, federal, and institutional levels.

The BRN extends appreciation to the Nursing Education & Workforce Advisory Committee (NEWAC) and survey respondents. Their participation has been vital to the success of this project.

Survey Participation

All 134 California nursing schools were invited to participate in the survey, and all 134 nursing schools offering 142 BRN-approved pre-licensure programs responded to the survey. Some schools offer more than one nursing program, which is why the number of programs is greater than the number of schools. A list of the participating nursing schools is provided in Appendix A.²

Table 1. RN Program Response Rate

Program Type	# Programs Reporting	Total # Programs	Response Rate
ADN	85	85	100%
LVN-to-ADN	6	6	100%
BSN	39	39	100%
ELM	12	12	100%
Number of programs	142	142	100%

^{**} After this table, all items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

¹ Since last year's report, one school that offered an ADN program has closed. One ADN program had a name and affiliation change. Two schools have started offering new BSN programs.

² Mount Saint Mary's University ADN and BSN programs are counted as two different schools.

DATA SUMMARY AND HISTORICAL TREND ANALYSIS

This analysis presents pre-licensure program data from the 2018-2019 BRN School Survey in comparison with data from previous years of the survey. Data items include the number of nursing programs, enrollments, completions, on-time completion rates, National Council Licensure Examination for Registered Nurses (NCLEX-RN) pass rates and review courses, new graduate employment, student and faculty census data, use of clinical simulation, clinical training hours, availability of clinical space, and student clinical practice restrictions.

Trends in Pre-Licensure Nursing Programs

Number of Nursing Programs

In 2018-2019, 134 schools reported information about students enrolled in their 142 prelicensure nursing programs. In the past year, one school that offered an ADN program closed, and two schools have started offering new BSN programs.

Most pre-licensure nursing programs in California are public. The percentage of public programs has declined over the last ten years from 105 in 2009-2010 to 102 in 2018-2019. The number of private programs has increased from 34 to 40 during this period.

Table 2. Number of Nursing Programs by Academic Year

	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total number of schools*	125	131	132	133	131	132	132	133	134	134
Total nursing programs	139	145	142	143	141	142	141	141	141	142
ADN**	86	89	87	88	89	90	89	91	92	91
BSN	37	39	39	40	36	36	38	37	37	39
ELM	16	17	16	15	16	16	14	13	12	12
Public	105	107	106	106	105	105	104	103	102	102
Private	34	38	36	37	36	37	37	38	39	40

^{*} Since some nursing schools offer more than one program, the number of nursing programs is greater than the number of nursing schools.

^{**} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

Note: From 2012-2013 through 2014-2015, one ADN private program was included as a public program; this was corrected in the 2015-2016 data.

The percentage of ADN and BSN programs reporting a partnership with another RN education program for academic progression has increased over the last ten years, from 28.9% in 2009-2010 to 56.2% in 2018-2019. However, there was an overall decline in the number of schools reporting collaborative partnerships over the last two years.

Associate's degree nursing programs reported the most partnerships (it is common for a number of two-year schools to collaborate with a single institution offering four-year degrees). In 2018-2019, 69.2% (n=63) of the 91 ADN nursing programs responding to this question reported participating in these partnerships.

Table 3. Partnerships by Academic Year

ADN programs* with	30	36	42	58	60	62	69	69	66	63
partnerships	35.3%	41.4%	51.2%	65.9%	68.2%	72.1%	82.1%	77.5%	73.3%	69.2%
ADN programs reporting	85	87	82	88	88	86	84	89	90	91
BSN programs with	5	8	7	6	7	7	11	10	12	10
partnerships	13.9%	22.9%	20.6%	15.8%	20.6%	20.0%	29.7%	28.6%	33.3%	25.6%
BSN programs reporting	36	35	34	38	34	35	37	35	36	39
All programs with	35	44	49	64	67	69	80	79	78	73
partnerships	28.9%	36.1%	42.2%	50.8%	54.9%	57.0%	66.1%	63.7%	61.9%	56.2%
Number of programs reporting	121	122	116	126	122	121	121	124	126	130

^{*} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

Admission Spaces and New Student Enrollments

The number of spaces available for new students in nursing programs has fluctuated over the past ten years. In 2018-2019, 14,897 spaces were reported as available for new students and these spaces were filled with 15,191 students.* This is the highest number of available spaces recorded in the last ten years. As in prior years, some pre-licensure nursing programs enrolled more students in 2018-2019 than the reported number of available admission spaces. This can occur for several reasons, the most common of which are: (1) schools underestimate the share of admitted students who will accept the offer of admission, thus exceeding the targeted number of new enrollees; (2) schools admit LVNs into the second year of a generic ADN program to replace an opening created if a general ADN student leaves the program.

In 2018-2019, the share of nursing programs that reported filling more admission spaces than were available was 33.1% (n=57)—which is considerably lower than the 53.2% (n=74) reported in 2009-2010. This share has been decreasing for a number of years.

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

Tubio II / (Tuliubili	.,		0. 7.0			,				
	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Spaces available	12,797	12,643	12,391	12,739	12,394	11,976	11,928	13,697	14,132	14,897
New student enrollments*	14,228	13,939	13,677	13,181	13,226	13,318	13,152	13,597	14,154	15,191
Share and number of programs that reported filling more admission spaces than were available	53.2% (n=74)	50.3% (n=73)	45.3% (n=72)	42.7% (n=61)	39.0%; (n=55)	39.4%; (n=56)	44%, (n=62)	40.4% (n=57)	39.7% (n=56)	33.1% (n=57)
% Spaces filled with new student enrollments	111.2%	110.3%	110.4%	103.5%	106.7%	111.2%	110.3%	99.3%	100.2%	102.0%

^{*} New student enrollments exclude readmitted student numbers.

The number of qualified applications received by California nursing programs has increased by 14.4% (n=6,000) over the last ten years, from 41,634 2009-2010 to 47,634 in 2018-2019. The number of qualified applications increased by 24.2% (n=9,275) between 2017-2018 and 2018-2019. The number of applications in 2018-2019 was the highest number of applicants in the last ten years.

The number of qualified applications to ADN programs has been slowly climbing after hitting a tenyear low in 2014-2015—reaching 22,852 in 2018-2019. However, this number is still 20% lower than the ten-year high of 28,555 in 2009-2010. This year's BSN applications reached a ten-year high of 21,338 in 2018-2019. This is a 55.7% jump from 2017-2018's total of 13,705 and a 99.5% increase from 2009-2010's total of 10,680. ELM applications in 2018-2019 increased 13.5% from 2017-2018, reaching another ten-year high at 3,444 applications.

Even in periods of decline, as in 2014-2015 and 2015-2016, nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. Since that time, the number of applications have grown and the percent of qualified applications not enrolled has grown. Because 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. It is not known how many individual applicants did not receive an offer of admission from at least one nursing program.

Table 5. Student Admission Applications by Academic Year

rabic o. Otaaci	16 7 (011110	01011 / tpp	mounion	5 D J 7 10 a	4011110 1	<i>-</i> u.				
	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Qualified applications*	41,634	37,847	38,665	35,041	31,575	28,335	28,041	36,004	38,359	47,634
ADN**	28,555	24,722	23,913	19,979	16,682	15,988	16,332	18,190	21,619	22,852
BSN	10,680	11,098	12,387	12,476	12,695	10,196	9,735	15,325	13,705	21,338
ELM	2,399	2,027	2,365	2,586	2,198	2,151	1,974	2,489	3,035	3,444
% Qualified applications not enrolled	65.8%	63.2%	64.6%	62.4%	58.1%	53.0%	53.1%	62.2%	63.1%	68.1%

^{*}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.

^{**} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

New student enrollments have increased over the last two years, after a 7-year period of relative decline between 2009-2010 and 2017-2018. In 2018-2019, 15,191 new students enrolled in registered nursing programs. This is a 7.3% (n=1,037) increase from the previous year's enrollment of 14,154 students. Over the last ten years, BSN enrollments have increased while ADN and ELM enrollments have overall decreased or remained stagnant.

During the same period, private program enrollments increased 47.6% from 4,607 in 2009-2010 to 7,045 in 2018-2019, while public program enrollments decreased 11.1% from 9,621 in 2009-2010 to 8,146 in 2018-2019. In 2018-2019, 46.4% of new student enrollments are to private programs and 53.6% of new student enrollments are to public programs.

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

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
New student enrollments	14,228	13,939	13,677	13,181	13,226	13,318	13,152	13,597	14,154	15,191
ADN*	8,594	7,688	7,411	7,146	7,135	6,914	6,794	7,004	7,017	7,014
BSN	4,842	5,342	5,445	5,185	5,284	5,510	5,594	5,790	6,310	7,307
ELM	792	909	821	850	807	894	764	803	827	870
Private	4,607	4,773	4,795	4,715	4,982	5,309	5,164	5,767	6,203	7,045
Public	9,621	9,166	8,882	8,466	8,244	8,009	7,988	7,830	7,951	8,146

^{*} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

Note: In 2020, the public/private breakdown for 2012-13 through 2016-17 was revised.

In 2018-2019, 11.3% of programs (n=16) reported enrolling fewer students than the previous year. The proportion of schools reporting enrolling fewer students had decreased significantly.

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

Type of Program	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
ADN**	23.0%	21.9%	18.7%	22.0%	14.3%
ADN	87	89	91	91	91
BSN	13.9%	18.4%	16.7%	24.3%	5.1%
BOIN	36	38	36	37	39
FLNA	37.5%	28.6%	15.4%	25.0%	8.3%
ELM	16	14	13	12	12
Total	22.3%	20.6%	17.9%	22.9%	11.3%
Number of programs reporting	139	140	140	140	142

^{*} Not all programs responded to this question; thus, the number reporting is sometimes lower than the total number of programs.

^{**} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

The most common reasons programs gave for enrolling fewer students were "accepted students did not enroll", "unable to secure clinical placements", and "other". The percent of school reporting inability to secure clinical placements for all students as a reason for enrolling more students has increased since 2014-2015 (although the actual numbers are smaller), while the percent of schools citing lost funding, insufficient faculty, and some other reasons has decreased over this time.

In 2018-2019, only four schools indicated that there was an "other" reason for enrolling fewer students, and none of them described that reason.

Table 8. Reasons for Enrolling Fewer Students by Academic Year

	Percent of Programs & Number of Responses								
	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019				
Accepted students did not enroll	45.2%	41.4%	56.0%	53.1%	50.0%				
Accepted students did not enroll	14	12	14	17	8				
Unable to secure clinical	16.1%	10.3%	28.0%	25.0%	37.5%				
placements for all students	5	3	7	8	6				
Other	12.9%	17.2%	24.0%	21.9%	25.0%				
Otriei	4	5	6	7	4				
College/university requirement to	16.1%	27.6%	12.0%	9.4%	0.0%				
reduce enrollment*	5	8	3	3	0				
Loot funding	19.4%	17.2%	8.0%	3.1%	0.0%				
Lost funding	6	5	2	1	0				
In a refficient for a refere	16.1%	13.8%	8.0%	3.1%	0.0%				
Insufficient faculty	5	4	2	1	0				
To reduce costs	16.1%	3.4%	0.0%	3.1%	0.0%				
To reduce costs	5	1	0	1	0				
	9.7%	0.0%	8.0%	0.0%	0.0%				
Lack of qualified applicants	3	0	2	0	0				
Drogram discontinued	9.7%	3.4%	0.0%	0.0%	0.0%				
Program discontinued	3	1	0	0	0				
Number of programs reporting	31	29	25	32	16				

Student Census Data

On October 15th, 2019, the total number of students enrolled in California pre-licensure nursing programs was 27,903. This was a 3.1% increase from the total enrollment of 27,162 in the previous year. Between 2018 and 2019, the BSN census increased by 8.6% (n=1,180) while the ADN census decreased by 3.1% (n= -366) and the ELM census decreased by 5.2% (n= -73).

In the past ten years, the proportion of students in each type of program has shifted. ADN students made up 54.5% of all students in 2010, but that share slipped below 50% in 2011 and continued to decline further to 41.5% in 2019. BSN enrollments increased from 39.8% of all enrollments in 2010 to 53.6% of all enrollments in 2019. The share of enrollments in ELM programs peaked at 6.9% in 2013 and was 4.8% in 2019.

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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ADN*	14,011	13,041	11,860	12,070	11,502	12,027	11,508	11,965	11,959	11,593
ADN	54.5%	49.2%	46.0%	45.8%	46.0%	46.6%	44.8%	45.9%	44.0%	41.5%
BSN	10,242	11,712	12,248	12,453	12,008	12,332	12,846	12,680	13,788	14,968
DOIN	39.8%	44.1%	47.5%	47.3%	48.1%	47.8%	50.0%	48.6%	50.8%	53.6%
ELM	1,466	1,778	1,682	1,808	1,473	1,455	1,317	1,436	1,415	1,342
ELIVI	5.7%	6.7%	6.5%	6.9%	5.9%	5.6%	5.1%	5.5%	5.2%	4.8%
Total nursing students	25,719	26,531	25,790	26,331	24,983	25,814	25,671	26,081	27,162	27,903

Note: Census data represent the number of students on October 15th of the given year.

Student Completions

The number of students completing California nursing programs increased by 3.0% (n=345) over the last ten years, rising from 11,512 in 2009-2010 to 11,857 in 2018-2019. ELM completions decreased from 665 to 615 (-7.5%) over this period, and ADN completions decreased from 7,690 to 5,888 since 2009-2010 (-23.4%). While both ADN and ELM completions decreased, BSN completions increased from 3,157 in 2009-2010 to 5,354 (+69.6%) in 2018-2019.

In 2018-2019, ADN graduates represented slightly less than half of all students completing a prelicensure nursing program in California (49.7%, n=5,888). BSN graduates represented 45.2% (n=5,354) and ELM graduates represented 5.2% (n=615) of all completions.

Table 10. Student Completions by Program Type by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
ADN*	7,690	6,606	6,162	6,164	5,916	5,542	5,671	5,981	5,844	5,888
BSN	3,157	3,330	3,896	4,364	4,606	4,860	4,868	4,666	5,224	5,354
ELM	665	717	756	764	769	717	652	655	822	615
Total student completions	11,512	10,653	10,814	11,292	11,291	11,119	11,191	11,302	11,890	11,857

^{*} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

^{**} All items that reference ADN program data include both generic ADN and LVN-to-ADN programs.

Completion and Attrition Rates

Nursing programs report the number of students scheduled to complete the program each academic year, the number that completed on time, the number still enrolled, and the number that had left the program.

Of the 14,971 students scheduled to complete a nursing program in the 2018-2019 academic year, 83.6% (n=12,511) completed the program on time, 5.9% (n=882) were still enrolled in the program, and 10.5% (n=1,578) left the program. Of those who left program, 49.4% (n=779) had been dismissed and 50.6% (n=799) had dropped out.

The on-time completion rate has fluctuated over the last decade, reaching a ten-year high of 83.6% in 2018-2019. The attrition rate has generally declined since the first part of the decade when it was 13.0% or above. In 2018-2019, the attrition rate was 10.5%. The percent of students still enrolled has also fluctuated, although it was lower in 2018-2019 (5.9%) than it has been in the several years.

Table 11. Student Completion and Attrition by Academic Year

abic 11. Otaaciit ooi	piotion	ana Att	i itioii by	7104401	illo i oai					
	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Students scheduled to complete the program	11,340	11,123	10,800	12,493	11,791	11,692	11,338	12,653	13,396	14,971
Completed on time	8,904	8,776	8,752	10,280	9,743	9,587	9,026	10,387	10,724	12,511
Still enrolled	957	721	590	758	651	563	885	898	1,388	882
Total attrition	1,479	1,626	1,458	1,455	1,397	1,542	1,427	1,369	1,284	1,578
Attrition-dropped out	-	-	-	-	-	820	612	658	573	799
Attrition-dismissed	-	-	-	-	-	689	815	710	711	779
Completed late [‡]	684	509	432	578	1,003	820	409	961	1,003	794
On-time completion rate*	78.5%	78.9%	81.0%	82.3%	82.6%	82.0%	79.6%	82.1%	80.1%	83.6%
Attrition rate**	13.0%	14.6%	13.5%	11.6%	11.8%	13.2%	12.6%	10.8%	9.6%	10.5%
% Still enrolled	8.4%	6.5%	5.5%	6.1%	5.5%	4.8%	7.8%	7.1%	10.4%	5.9%

[‡]These completions are not included in the calculation of either on-time completion or attrition rates.

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

In 2015-2016, data for traditional and accelerated programs were 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. Starting in 2016-2017, data on LVN-to-ADN students within generic programs have been added to the totals for ADN students.

Note: Data for 2016-17 was revised 2020 to reflect updates provided by schools.

^{*}On-time completion rate = (students completing the program on-time) / (students scheduled to complete)

^{**}Attrition rate = (students dropped or dismissed who were scheduled to complete) / (students scheduled to complete the program)

Attrition rates differ across program types. In each of the past 10 years, attrition rates have been lowest among ELM programs, ranging between 3.0% and 7.9%. ADN programs have seen overall improvement in their average attrition rates, declining from a ten-year high of 18.0% in 2010-2011 to a ten-year low of 10.6% in 2018-2019. Attrition rates for BSN programs have varied over the last decade from a low 7.6% to a high of 11.4% in 2015-2016. Attrition rates in public programs have been higher than attrition rates in private programs over the last ten years. However, this gap has narrowed in the past several years due to increases in private program attrition rates and decreases in public program attrition rates. In 2018-2019, the private school program attrition rate was *higher* than the public school attrition rate—12.0% compared to a 9.3% attrition rate for public school programs.

Table 12. Attrition Rates by Program Type by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017*	2017- 2018	2018- 2019
ADN*	16.1%	18.0%	17.6%	14.4%	15.5%	16.2%	14.3%	12.4%	11.3%	10.6%
BSN	7.6%	9.7%	8.1%	8.3%	8.7%	10.5%	11.4%	8.9%	8.3%	11.2%
ELM	5.6%	7.9%	6.7%	4.1%	3.4%	7.7%	4.4%	7.3%	3.0%	3.0%
Private	8.3%	11.4%	8.9%	9.3%	9.4%	12.3%	13.6%	10.3%	8.5%	12.0%
Public	14.5%	15.7%	15.2%	12.6%	13.2%	13.7%	12.0%	11.2%	10.2%	9.3%

Note: Data for traditional and accelerated program tracks is combined in this table. Starting in 2016-2017, data for LVN-to-ADN students *within* generic programs have been added to the totals for ADN students. *2016-2017 attrition rates were revised in 2020 based on new data provided by some schools.

Starting in 2016-17, programs were asked to calculate attrition and on-time completion data by race and ethnicity. In 2018-2019, Native American students had the lowest attrition rate (4.5%) and the highest on-time completion rate (88.8%). African American students had the highest attrition rate (15.8%) and the lowest on-time completion rate (76.1%). Some schools did not have complete race/ethnicity data for their on-time completion and attrition reporting; these are included in "unknown".

Table 13. Completion and Attrition Data by Race and Ethnicity, 2018-2019

	Native American	Asian	African American	Filipino	Hispanic	White	Other	Unknown
Students scheduled to complete the program	89	2,781	746	818	3,477	4,333	1,147	1,558
Completed On-time	79	2,308	568	648	2,879	3,667	1,000	1,346
Still enrolled	6	133	60	71	248	249	44	71
Total attrition	4	340	118	99	350	417	103	141
Dropped Out	2	162	60	32	162	260	51	64
Dismissed	2	178	58	67	188	157	52	77
Completed late*	3	141	67	74	217	185	33	74
On-time Completion Rate**	88.8%	83.0%	76.1%	79.2%	82.8%	84.6%	87.2%	86.4%
Attrition rate***	4.5%	12.2%	15.8%	12.1%	10.1%	9.6%	9.0%	9.1%

^{*}These completions are not included in the calculations for either on-time completion or attrition rates.

^{**}On-time completion rate = (students who completed the program on-time) / (students scheduled to complete the program)

^{***}Attrition rate = (students who dropped or were dismissed who were scheduled to complete) / (students scheduled to complete the program)

[¥]Data for traditional and accelerated program tracks are combined.

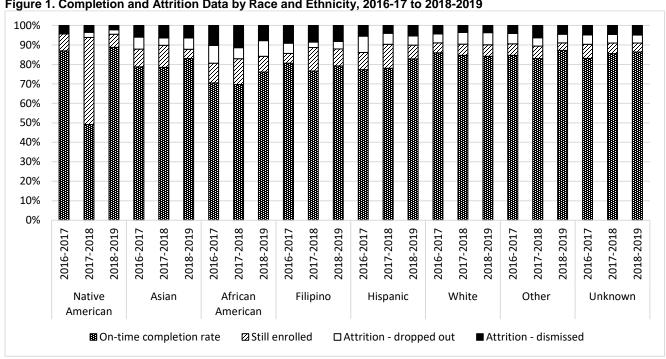


Figure 1. Completion and Attrition Data by Race and Ethnicity, 2016-17 to 2018-2019

NCLEX Pass Rates

NCLEX (National Council Licensure Examination) pass rates for all types of RN programs in California have risen steadily since hitting a ten-year low in 2013-2014. The NCLEX passing standard was raised in April 2013, which may explain the dip in pass rates in that year.³ Pass rates have since risen to over 90% for ADN and BSN programs, and close to 90% for ELM programs

Table 14. First Time NCLEX Pass Rates by Program Type, by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
ADN	88.6%	87.4%	89.8%	88.8%	83.1%	84.3%	86.0%	87.8%	90.0%	91.3%
BSN	89.2%	87.9%	88.7%	87.1%	82.3%	84.4%	88.2%	91.6%	91.9%	91.6%
ELM	89.6%	88.2%	88.9%	91.8%	81.9%	80.7%	84.1%	89.9%	88.5%	89.5%
Number of programs reporting	131	135	137	137	135	135	135	129	134	137

Note: NCLEX pass rates are for students who took the exam for the first time in the given year.

³ For more information on this change, see: Talking Points Pertaining to the 2013 NCLEX-RN® Passing Standard (New Mexico Board of Nursing), https://nmbon.sks.com/uploads/files/2013%20NCLEX-RN%20passing%20standard%20talking%20points.pdf. For more description on how passing standards are set, see National Council of State Boards of Nursing (NCSBN) website: https://www.ncsbn.org/2630.htm

NCLEX pass rates for students who 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 2018-2019, students who graduated from accelerated BSN and ELM programs had *higher* average pass rates, and students from accelerated ADN programs had *lower* average pass rates than their traditional counterparts.

Table 15. First Time NCLEX Pass Rates for Accelerated Programs by Program Type, by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
ADN	89.0%	83.9%	85.8%	93.5%	68.8%	95.5%	73.0%	68.9%	87.6%	82.3%
BSN	88.5%	90.0%	95.9%	83.9%	81.9%	95.2%	91.4%	90.5%	90.5%	92.7%
ELM	-	-	-	-	-	90.0%	83.6%	95.2%	90.8%	92.3%
Number of programs reporting	9	13	19	16	16	12	14	19	16	18

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

^{*}Note: NCLEX pass rates are for students who took the exam for the first time in the given year.

Employment of Recent Nursing Program Graduates

Each year, program directors are asked to report on the percentage of that year's graduates that is employed in nursing in California. The share of new graduates working in nursing in California declined from a high of 81.1% in 2009-2010 to a low of 63.7% in 2012-2013. It has since then risen steadily. The share of graduates working in California was estimated at 82.9% in 2017-2018.

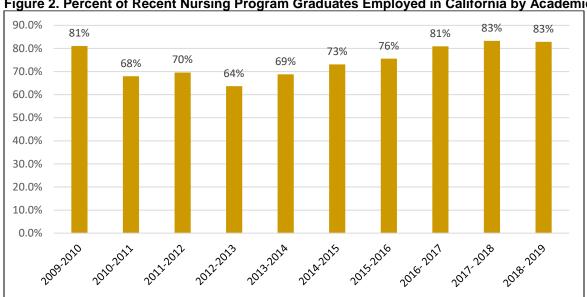


Figure 2. Percent of Recent Nursing Program Graduates Employed in California by Academic Year

Table 16. Percent of Recent Nursing Program Graduates Employed in California by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Employed in California	81.1%	68.0%	69.6%	63.7%	68.8%	73.1%	75.6%	80.9%	83.2%	82.9%
Number of programs reporting	112	112	125	127	128	119	118	119	127	125

Nursing programs report that the largest share of RN program graduates works in hospitals. While this share has fluctuated over the last ten years, hospitals remain the primary reported employer of new graduates. In 2018-2019, 58.6% of graduates were reportedly employed in hospitals. Nursing programs reported that 9.1% of their graduates were pursuing additional education, 7.6% were participating in a new graduate residency, and 6.8% were working in long-term care. 3.9% of new graduates were unable to find employment by October 2019, a figure that has declined since 2009-2010, when 27.5% of new graduates were reportedly unable to find employment.

Respondents who selected the category "other" in 2016-17, 2017-18, and 2018-2019 were prompted to describe other employment locations where their graduates work. Other employment locations written in by respondents included corrections, community clinics, laser therapy, deployed, cosmetic surgery center, consulting services, laboratory, and staying at home with children.

Table 17. Employment Location of Recent Nursing Program Graduates by Academic Year

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Hospital	59.0%	54.4%	61.1%	56.7%	56.0%	59.2%	59.2%	61.1%	63.0%	58.6%
Pursuing additional nursing education ^T	-	-	8.3%	7.9%	7.1%	4.6%	11.0%	10.3%	12.0%	9.1%
Participating in a new graduate residency (paid)	-	-	-	-	-	-	-	-	-	7.6%
Long-term care facilities	9.7%	7.8%	3.6%	3.6%	3.7%	2.6%	4.6%	5.2%	6.3%	6.8%
Other healthcare facilities	6.0%	5.0%	-	7.1%	10.5%	11.0%	3.5%	4.6%	5.3%	5.2%
Not yet licensed	-	-	-	-	-	-	10.6%	10.2%	7.2%	4.7%
Unable to find employment*	27.5%	21.8%	17.6%	18.3%	13.7%	10.6%	5.5%	4.2%	2.4%	3.9%
Community/public health facilities	3.9%	4.5%	5.2%	4.7%	6.0%	3.5%	2.6%	2.6%	3.0%	3.0%
Other	14.8%	6.5%	4.2%	1.7%	3.4%	5.5%	3.2%	2.0%	0.8%	0.9%
Participating in a new graduate residency (unpaid)	-	-	-	-	-	-	-	-	-	0.1%
Employed in California	81.1%	68.0%	69.6%	63.7%	68.8%	73.1%	75.6%	80.9%	83.3%	82.9%

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

Note: Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2017-2018, on average, the employment setting was unknown for 16% of recent graduates.

Hospitals were reported as the employment setting of the largest shares of recent graduates from all prelicensure programs. In 2018-2019, BSN programs reported that the largest average share of recent graduates employed in hospitals (62.2%), followed ELM programs (58.3%), and by ADN programs (57.3%).

In 2018-2019, a large share of ELM graduates (12.7%) were reported to be pursuing additional education, which is consistent with the way many ELM programs are designed. However, the proportion this year is much lower than in prior years. An average of 11.8% of ADN graduates were also pursuing additional education, but only 0.9% of BSN graduates were doing so. This decrease over the last year is likely due in part to the addition of two categories to the survey in 2018-2019—participation in paid and unpaid graduate residencies. In 2018-2019, 8.8% of ADN graduates, 15.3% of BSN graduates, and 6.5% of ELM graduates were participating in new graduate residencies.

Among those employed in non-hospital settings, ADN graduates were more likely to be in long-term care facilities (9.1%) than BSN (2.6%) or ELM graduates (0.9%).

Table 18. Employment Location for Recent Nursing Program Graduates by Program Type by Academic Year

i c ai					
ADN Programs	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Hospital	51.4%	54.7%	58.6%	60.4%	57.3%
Long-term care facilities	10.3%	5.6%	6.3%	7.9%	9.1%
Community/ public health facilities	4.1%	2.4%	3.0%	2.9%	3.0%
Other healthcare facilities	4.9%	4.2%	5.6%	6.5%	6.3%
Pursuing additional nursing education	13.0%	12.6%	11.7%	12.8%	11.8%
Participating in a new graduate residency (paid)	-	-	-	-	0.6%
Participating in a new graduate residency (unpaid)	-	-	-	-	8.2%
Unable to find employment	11.6%	6.0%	5.2%	2.5%	3.8%
Not yet licensed	-	10.1%	8.6%	6.3%	4.0%
Other	5.6%	4.6%	1.2%	0.6%	0.8%
BSN Programs	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Hospital	70.40/				
	79.4%	72.2%	72.6%	76.1%	62.2%
Long-term care facilities	79.4% 4.4%	72.2% 2.4%	72.6% 3.8%	76.1% 3.8%	62.2% 2.6%
·					
Long-term care facilities	4.4%	2.4%	3.8%	3.8%	2.6%
Long-term care facilities Community/ public health facilities	4.4% 3.4%	2.4%	3.8% 1.9%	3.8%	2.6% 2.9%
Long-term care facilities Community/ public health facilities Other healthcare facilities	4.4% 3.4% 2.5%	2.4% 2.9% 2.1%	3.8% 1.9% 3.3%	3.8% 3.1% 2.7%	2.6% 2.9% 3.3%
Long-term care facilities Community/ public health facilities Other healthcare facilities Pursuing additional nursing education	4.4% 3.4% 2.5% 2.0%	2.4% 2.9% 2.1%	3.8% 1.9% 3.3% 2.3%	3.8% 3.1% 2.7% 5.5%	2.6% 2.9% 3.3% 0.9%
Long-term care facilities Community/ public health facilities Other healthcare facilities Pursuing additional nursing education Participating in a new graduate residency (paid)	4.4% 3.4% 2.5% 2.0%	2.4% 2.9% 2.1% 2.4%	3.8% 1.9% 3.3% 2.3%	3.8% 3.1% 2.7% 5.5%	2.6% 2.9% 3.3% 0.9% 15.2%
Long-term care facilities Community/ public health facilities Other healthcare facilities Pursuing additional nursing education Participating in a new graduate residency (paid) Participating in a new graduate residency (unpaid)	4.4% 3.4% 2.5% 2.0%	2.4% 2.9% 2.1% 2.4%	3.8% 1.9% 3.3% 2.3%	3.8% 3.1% 2.7% 5.5%	2.6% 2.9% 3.3% 0.9% 15.2% 0.1%

Table 18. Employment Location for Recent Nursing Program Graduates by Program Type by Academic Year (continued)

ELM Programs	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Hospital	55.6%	53.3%	45.5%	54.6%	58.3%
Long-term care facilities	1.5%	1.8%	0.1%	2.1%	0.9%
Community/ public health facilities	6.0%	3.8%	1.1%	4.4%	3.4%
Other healthcare facilities	5.5%	0.9%	0.4%	3.8%	2.3%
Pursuing additional nursing education	21.8%	29.7%	23.8%	28.2%	12.7%
Participating in a new graduate residency (paid)	-	-	-	-	6.5%
Participating in a new graduate residency (unpaid)	-	-	-	-	0.0%
Unable to find employment	8.2%	3.7%	2.1%	1.9%	2.1%
Not yet licensed	-	5.2%	23.9%	2.5%	12.7%
Other	1.4%	1.9%	3.1%	2.5%	1.1%

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 that year.

Clinical Space & Clinical Practice Restrictions⁴

The number of California nursing programs reporting they were denied access to a clinical placement, unit, or shift decreased from 93 programs in 2010-2011 to 70 programs in 2018-2019. Over that time, the number of students affected by losses of clinical placements, and the number of placements, units, or shifts lost has fluctuated. In 2018-2019, 287 placements, units, or shifts were lost, affecting 2,271 students.

Table 19. RN Programs Denied Clinical Space by Academic Year

able for this regrame be		ou. Opuo	,	<u></u>					
	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Number of programs denied a clinical placement, unit or shift	93	85	90	81	70	60	77	75	70
Programs offered alternative by site*	-	-	-	-	24	26	31	33	27
Placements, units or shifts lost*	-	-	-	-	272	213	302	367	287
Number of programs reporting	142	140	143	141	135	138	141	140	141
Number of students affected	2,190	1,006	2,368	2,195	2,145	1,278	2,147	2,366	2,271

^{*}Significant changes to these questions beginning with the 2014-2015 administration prevent comparison of the data to prior years.

In the 2018-2019 survey, 61 of 142 programs (43.0%) 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 2017-2018.

Table 20. RN Programs That Reported Fewer Students Allowed for a Clinical Space by Academic Year

	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
ADN	31	37	36	36	36
BSN	18	22	18	18	19
ELM	9	6	6	7	6
Number of programs reporting	58	65	60	61	61

-

⁴ 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.

In 2018-2019, "staff nurse overload or insufficient qualified staff" was the most commonly mentioned reason for clinical space being unavailable (50.7%), followed by "competition for clinical space" (43.5%), and "displaced by another program" (43.5%). Only one program (1.4%) reported being denied a space due to another RN program offering to pay a fee for the placement.

Respondents also provided write-in responses to this question. While these varied over the past ten years, the top responses included reasons such as move, remodel or "new facility" (n=18); clinical site expressing a preference for a particular type of student (BSN only, no ELM or ADN students, students from public programs only, local students only, or students from particular schools preferred) (n=15); no reason was given for the denial (n=12); or that another program was given priority because it was paying a fee (n=10). These numbers should be viewed with caution as they often represent the same school giving the same answer over a number of years.

Table 21. Reasons for Clinical Space Being Unavailable by Academic Year, Percentages

Table 21. Reasons for Clinic	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Staff nurse overload or insufficient qualified staff	54.5%	46.2%	54.1%	41.1%	45.7%	38.2%	33.3%	51.9%	63.5%	50.7%
Competition for clinical space due to increase in number of nursing students in region	72.7%	64.5%	58.8%	54.4%	46.9%	48.7%	48.3%	49.4%	52.7%	43.5%
Displaced by another program	62.3%	40.9%	44.7%	42.2%	43.2%	39.5%	35.0%	50.6%	50.0%	43.5%
Nurse residency programs	28.6%	18.3%	29.4%	17.8%	18.5%	18.4%	26.7%	26.0%	24.3%	26.1%
Other clinical facility business needs/changes in policy	-	-	-	-	-	-	-	20.8%	9.5%	24.6%
Visit from Joint Commission or other accrediting agency	-	-		21.1%	22.2%	26.3%	23.3%	33.8%	29.7%	23.2%
No longer accepting ADN students*	26.0%	16.1%	21.2%	20.0%	23.5%	21.1%	23.3%	27.3%	23.0%	21.7%
Implementation of Electronic Health Records system	-	-	3.5%	32.2%	23.5%	13.2%	10.0%	13.0%	17.6%	20.3%
Closure, or partial closure, of clinical facility	-	24.7%	25.9%	26.7%	25.9%	18.4%	28.3%	18.2%	23.0%	18.8%
Change in facility ownership/management	-	11.8%	12.9%	21.1%	14.8%	21.1%	18.3%	24.7%	14.9%	18.8%
Decrease in patient census	35.1%	30.1%	31.8%	30.0%	28.4%	25.0%	21.7%	18.2%	24.3%	17.4%
Clinical facility seeking magnet status	36.4%	12.9%	18.8%	15.6%	11.1%	17.1%	18.3%	15.6%	13.5%	14.5%
Other	19.5%	8.6%	10.6%	10.0%	11.1%	17.1%	6.7%	11.7%	14.9%	14.5%
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%	1.3%	1.4%	1.4%
Facility moving to a new location/ (or hospital construction)**	1.3%	1.1%	0.0%	1.1%	6.2%	2.6%	3.3%	2.6%	1.4%	0.0%
Number of programs that reported	77	93	85	90	81	76	60	77	74	69

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

^{*}Not asked of BSN or ELM programs. **Category recoded from text comments.

In 2018-2019, nine respondents provided write-in answers to describe other reasons that clinical space was unavailable. These include: problems related to wildfires (n=2), delay in contract update, priority given to local students, implementation of new onboarding system requiring students and faculty to pay a fee to use the service, new coordinator at the clinical facility, no reason given, policy change, and "overall decrease in facility available placements".

The following table displays the numbers on which the percentages in the prior table are based.

Table 22. Reasons for Clinical Space Being Unavailable by Academic Year, Counts

	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Staff nurse overload or insufficient qualified staff	42	43	46	37	37	29	20	40	47	35
Competition for clinical space due to increase in number of nursing students in region	56	60	50	49	38	37	29	38	39	30
Displaced by another program	48	38	38	38	35	30	21	39	37	30
Visit from Joint Commission or other accrediting agency	-	-	-	19	18	20	14	26	22	16
Decrease in patient census	27	28	27	27	23	19	13	14	18	12
Nurse residency programs	22	17	25	16	15	14	16	20	18	18
No longer accepting ADN students*	20	15	18	18	19	16	14	21	17	15
Closure, or partial closure, of clinical facility	-	23	22	24	21	14	17	14	17	13
Implementation of Electronic Health Records system	-	-	3	29	19	10	6	10	13	14
Change in facility ownership/management	-	11	11	19	12	16	11	19	11	13
Clinical facility seeking magnet status	28	12	16	14	9	13	11	12	10	10
Other clinical facility business needs/changes in policy	-	-	-	-	-	-	-	-	-	17
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	1	1	1	1	1
Facility moving to a new location/ (or hospital construction)**	1	1	0	1	5	2	2	2	1	0
Other	15	8	9	9	9	13	4	9	11	10
Number of programs that reported	77	92	85	88	80	76	60	77	74	69

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

^{*}Not asked of BSN or ELM programs.

^{**}Category recoded from text comments

In a separate question, programs were asked to report on whether they provide financial support to secure a clinical placement. The number of programs doing so have fluctuated over the years. 2018-2019 marked the largest number of programs reporting doing so (8.5%, n=12) since this question was first asked in 2013-2014.

Table 23. Programs that Provided Financial Support to Secure a Clinical Placement

	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Number providing financial support to secure a clinical placement	-	-	-	1	9	3	10	7	12
Percent providing financial support to secure a clinical placement	-	-	-	0.8%	6.6%	2.2%	7.1%	5.0%	8.5%
Number of programs reporting	-	-	-	123	137	139	141	140	142

Programs that lost access to clinical space were asked to report on the strategies used to cover the lost placements, units, or shifts. In 2018-2019, as in prior years, most programs reported that the lost site was replaced at another clinical site – either at a different site currently being used by the program (79.4%) or at a new clinical site (55.9%). Some programs replaced the lost space at the same clinical site (33.8%), and others replaced the clinical site with clinical simulation activities (45.6%). Reducing student admission was reported by 11.8% of respondents. This is the largest proportion of programs reporting this strategy in the last ten years.

Respondents also provided write-in responses to this question. These answers varied over the years, but included the following: increased clinical section sizes to absorb the students who did not have a placement (n=6); changed scheduling strategies by reducing the total number of clinical hours in the program, changing to one 12 hour shift rather than two eight hour shifts, or ending weeks early to accommodate another program (n=6); reducing number of students per clinical group (n=4), and moving to another site (n=4). These numbers should be viewed with caution as they sometimes represent the same school giving the same answer over a number of years.

In 2018-2019, four schools gave additional text answers for strategies used to address the loss of clinical space. These included using a non-consortium clinical site, reducing the number of students in a clinical group, using a virtual simulation program and outpatient experience, and negotiating down to one 12-hour shift rather than shifts over two days.

Table 24. Strategies to Address the Loss of Clinical Space by Academic Year

	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Replaced lost space at different site currently used by nursing program	61.20%	64.40%	66.70%	66.20%	76.30%	61.80%	68.9%	79.4%
Added/replaced lost space with new site	48.20%	53.30%	56.80%	48.60%	44.10%	55.30%	60.8%	55.9%
Clinical simulation	29.40%	34.40%	32.10%	37.80%	30.50%	40.80%	43.2%	45.6%
Replaced lost space at same clinical site	47.10%	38.90%	45.70%	32.40%	32.20%	35.50%	43.2%	33.8%
Reduced student admissions	8.20%	2.20%	7.40%	1.40%	5.10%	9.20%	8.1%	11.8%
Other	9.40%	4.40%	1.20%	8.10%	3.40%	7.90%	4.1%	5.9%
Number of programs reporting	85	90	81	74	59	76	74	68

In 2018-2019, forty-seven (33.0%) nursing programs reported an increase from the previous year in out-of-hospital clinical placements. In 2018-2019, the three most frequently reported non-hospital clinical sites were public health or community health agency (44.7%), skilled nursing/rehabilitation facility (42.6%), and school health service (36.2%).

Respondents also provided write-in responses suggesting other clinical sites. Over the years, these have included child-related facilities like childcare, pediatric clinics, Head Start, and summer camps (n=30), senior facilities and long-term care (n=5), and outpatient clinics (n=4). These numbers should be viewed with caution as they sometimes represent the same school giving the same answer over a number of years.

In 2018-2019, write-in responses included acute hospital, daycare facility, child development center (n=2), elder care center, therapeutic residential center, and preschool (located on campus grounds).

Table 25. Increase in Use of Alternative Out-of-Hospital Clinical Sites by Nursing Programs

lable 23. Ilicrease III Ose o	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Public health or community health agency	43.6%	51.8%	55.0%	53.7%	41.0%	51.2%	35.3%	39.6%	44.7%
Skilled nursing/rehabilitation facility	47.3%	46.4%	45.0%	43.9%	46.2%	32.6%	37.3%	41.7%	42.6%
School health service (K-12 or college)	30.9%	30.4%	22.5%	39.0%	38.5%	27.9%	25.5%	39.6%	36.2%
Medical practice, clinic, physician office	23.6%	33.9%	22.5%	34.1%	30.8%	37.2%	31.4%	37.5%	34.0%
Home health agency/home health service	30.9%	32.1%	35.0%	29.3%	20.5%	41.9%	29.4%	29.2%	25.5%
Surgery center/ambulatory care center	20.0%	23.2%	30.0%	19.5%	28.2%	25.6%	35.3%	29.2%	25.5%
Hospice	25.5%	25.0%	27.5%	29.3%	23.1%	25.6%	21.6%	20.8%	23.4%
Outpatient mental health/substance abuse	36.4%	42.9%	20.0%	39.0%	28.2%	34.9%	31.4%	33.3%	21.3%
Case management/disease management	7.3%	12.5%	5.0%	12.2%	7.7%	16.3%	7.8%	8.3%	17.0%
Urgent care, not hospital- based	9.1%	10.7%	5.0%	7.3%	7.7%	7.0%	9.8%	6.3%	14.9%
Other	14.5%	17.9%	17.5%	12.2%	12.8%	16.3%	23.5%	12.5%	12.8%
Correctional facility, prison or jail	5.5%	7.1%	5.0%	7.3%	10.3%	9.3%	7.8%	10.4%	6.4%
Renal dialysis unit	12.7%	5.4%	5.0%	4.9%	5.1%	7.0%	5.9%	2.1%	4.3%
Occupational health or employee health service	5.5%	5.4%	0.0%	2.4%	0.0%	2.3%	2.0%	2.1%	4.3%
Number of programs that reported	55	56	40	41	39	43	51	48	47

In 2018-2019, 64.8% (n=92) of nursing schools reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities.

The most common types of restrictions students faced in 2018-2019 continued to be access to the clinical site itself due to a visit from the Joint Commission or another accrediting agency (84.8%), access to bar coding medication administration (60.9%), and access to electronic medical records (59.8%). Schools reported that the least common types of restrictions students faced were direct communication with health care team members (15.2%) and alternative setting due to liability (20.7%).

Table 26. Common Types of Restricted Access in the Clinical Setting for RN Students by Academic Year

	2009-	2010-	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Clinical site due to visit from accrediting agency (Joint Commission)	68.1%	71.0%	74.3%	77.9%	73.1%	68.8%	79.3%	75.8%	81.5%	84.8%
Bar coding medication administration	70.3%	58.0%	68.3%	72.6%	58.1%	59.1%	69.0%	64.8%	66.3%	60.9%
Electronic Medical Records	70.3%	50.0%	66.3%	72.6%	66.7%	60.2%	61.9%	64.8%	62.0%	59.8%
Automated medical supply cabinets	53.1%	34.0%	35.6%	48.4%	45.2%	44.1%	55.4%	57.1%	54.3%	58.7%
Some patients due to staff workload	-	31.0%	37.6%	30.5%	41.9%	30.1%	27.7%	37.4%	38.0%	46.7%
Student health and safety requirements	-	39.0%	43.6%	45.3%	43.0%	40.9%	43.4%	41.8%	34.8%	41.3%
IV medication administration	27.7%	31.0%	30.7%	24.2%	23.7%	26.9%	34.9%	29.7%	34.8%	38.0%
Glucometers	37.2%	33.0%	29.7%	36.8%	34.4%	31.2%	35.4%	36.3%	30.4%	32.6%
Alternative setting due to liability	20.2%	13.0%	22.8%	18.9%	18.3%	19.4%	19.3%	17.6%	18.5%	20.7%
Direct communication with health team	11.8%	12.0%	15.8%	17.9%	10.8%	7.5%	8.5%	12.1%	10.9%	15.2%
Number of schools that reported	94	100	101	95	93	93	84	91	92	92

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

Numbers indicate the percent of schools reporting these restrictions as "common" or "very common". Percentages are derived by dividing the total number of schools that rated each restriction "common" or "very common" by the total number of schools that answered any of these questions.

In 2018-2019, schools reported that restricted student access to **electronic medical records** was primarily due to insufficient time for clinical site staff to train students (69.1%) and staff still learning and unable to assure documentation standards are being met (51.9%).

Some respondents who selected "other" reasons for restricted access to **electronic medical records** provided write-in answers. One main category over the years had to with simple lack of access to the EMR, including responses like "inability to receive access codes", and the difficulty of creating access, for example "too much IT time" and "cost of providing computer codes" (n=21). Another common category was just general policy: "Agencies state this is their policy, no other reason given" (n=9).

Schools reported that students were restricted from using **medication administration systems** due primarily to liability (78.4%) and limited time for clinical staff to train students (39.2%).

Some respondents who selected "other" reasons for restricted access to **medication administration systems** also provided write-in answers. There was a great deal of crossover with EMR restrictions. For example, general policy was frequently noted with answers like "Supposed limitations of the Pharmacy Board" and "Certain Meds not allowed by Hospital" (n=14). The one difference was in the concern over error (n=4) with answers like "Students may make a mistake".

Table 27. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration by Academic Year

		E	lectronic I	Medical Re	cords	
	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Insufficient time to train students	60.7%	64.9%	81.2%	65.8%	63.9%	69.1%
Staff still learning and unable to assure documentation standards are being met	59.5%	58.4%	56.5%	46.1%	49.4%	51.9%
Liability	41.7%	36.4%	43.5%	52.6%	48.2%	48.1%
Staff fatigue/burnout	31.0%	29.9%	34.8%	34.2%	47.0%	44.4%
Cost for training	28.6%	6.5%	31.9%	26.3%	31.3%	27.2%
Patient confidentiality	26.2%	22.1%	30.4%	27.6%	19.3%	24.7%
Other	13.1%	6.5%	10.1%	7.9%	12.0%	8.6%
Number of schools reporting	84	77	69	76	83	81
		ľ	Medication	Administ	ration	
	2013-	2014-	2015-	2016-	2017-	2018-
	2014	2015	2016	2017	2018	2019
Liability	50.0%	62.3%	68.3%	77.4%	74.4%	78.4%
Insufficient time to train students	39.4%	31.9%	39.7%	36.9%	42.3%	39.2%
Staff fatigue/burnout	33.3%	24.6%	31.7%	29.8%	42.3%	36.5%
Staff still learning and unable to assure documentation standards	27.3%	21.7%	23.8%	25.0%	21.8%	17.6%
are being met						
	18.20%	20.30%	19.00%	13.10%	10.3%	13.5%
are being met		20.30%	19.00% 9.50%	13.10% 13.10%	10.3%	13.5% 9.5%
are being met Cost for training	18.20%					

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

Schools provided information about how they compensate for restricted student access (n=93). The most common approaches were providing training in the simulation lab (88.2%), in the classroom (65.6%), and purchasing practice software (50.5%).

Respondents offered write in answers in the "Other" category, including some that expanded on or repeated defined answer categories. These included training in a skills or computer lab (n=13), various instructor-based workarounds like "Training instructors to access electronic medical records on student's behalf" and instructors training students in advance on campus in "boot camps" and other modes (n=10), utilizing the school's own EMR system and software (n=8), using computer-based software or other simulation practices like mock patients (n=7), scheduling strategies like "make-up days on breaks" (n=7), and paper charting (n=4). These numbers should be viewed with caution as they sometimes represent the same school giving the same answer over a number of years.

In 2018-2019, write-in answers suggested diverse strategies such as alternating schedules (n=2), using alternative clinical experiences, having instructors provide the EMR training, using paper charting, having the clinical instructor or staff RN access medications, clinical evaluation of mock patients in clinical courses, and using a simulated medication dispensing machine.

Table 28. How Nursing Programs Compensate for Training in Areas of Restricted Access by Academic Year

Number of schools reporting	93	93	83	91	93	93
Other	9.7%	11.8%	12.0%	11.0%	17.2%	10.8%
Ensuring all students have access to sites that train them in this area	61.3%	55.9%	50.6%	54.9%	48.4%	48.4%
Purchase practice software, such as SIM Chart	39.8%	40.9%	43.4%	45.1%	53.8%	50.5%
Training students in the classroom	53.8%	57.0%	66.3%	56.0%	67.7%	65.6%
Training students in the simulation lab	80.6%	87.1%	88.0%	87.9%	87.1%	88.2%
	2013-2014 % Schools	2014-2015 % Schools	2015-2016 % Schools	2016-2017 % Schools	2017-2018 % Schools	2018-2019 % Schools

Faculty Data⁵

In 2018-2019, the total number of nursing faculty increased, as did the number of part-time and full-time faculty. On October 15, 2019, there were 5,359 total nursing faculty. Of these faculty, 29.0% (n=1,552) were full-time and 71.0% (n=3,807) were part-time. The total number of faculty has increased by 42.0% from 3,773 in 2010. Most of this growth has come from increases in part-time faculty. In 2019, part-time faculty comprised 71.0% of all faculty reported (n=3,807), whereas in 2010, they made up 61.7% of all faculty (n=2,329).

Faculty vacancy rates have fluctuated over time. From 2010 through 2019, the rate ranged from 4.7% to 9.4%. The vacancy rate was 8.2% in 2019.

Table 29. Faculty Data by Year

	2010	2011	2012	2013*	2014*	2015*	2016*	2017	2018	2019
Total Faculty	3,773	4,059	4,119	4,174	4,181	4,532	4,366	4,799	4,923	5,359
Full-Time	1,444	1,493	1,488	1,522	1,498	1,505	1,513	1,546	1,562	1,552
Part-Time	2,329	2,566	2,631	2,644	2,614	3,000	2,953	3,253	3,386	3,807
Vacancy Rate**	4.7%	4.9%	7.9%	5.9%	9.4%	8.2%	9.1%	8.1%	8.0%	8.2%
Vacancies	187	210	355	263	432	407	435	424	429	476

^{*}In these years, the sum of full-time and part-time faculty did not equal the total faculty reported.

Starting in 2015-2016, schools were asked if their program was hiring significantly more part-time than full-time active faculty in the current year as compared with five years prior. In 2018-2019, 36.9% (n=48) of 130 schools responding agreed that they had hired more part-time faculty than in the prior five years. In 2018-2019, schools with ADN programs were more likely than schools without ADN programs to report hiring significantly part-time faculty, and schools with no post-licensure programs were more likely than schools with post-licensure programs to report hiring significantly part-time faculty in the last year compared to the prior five years.

Table 30. Schools that Reported Hiring More Part-Time Faculty than in Prior Years

	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Number of schools that hired more part-time faculty	48	61	57	48
Percent of schools that hired more part-time faculty	37.2%	46.6%	43.2%	36.9%
Number of schools reporting	129	131	132	130

Note: This guestion was added to the survey in 2015-2016.

^{**}Vacancy rate = number of vacancies/ (total faculty + number of vacancies)

⁵ Data represent the number of faculty on October 15th of the given year.

⁶ 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.

These schools were asked to rank the reason for this shift. In 2018-2019, the top-ranked reasons were non-competitive salaries for full-time faculty (n=39) and shortage of RNs applying for full time faculty positions (n=39). The top five ranked items have remained consistent over the three years that this question has been included in the survey.

Over the four years this question has been on the survey, "other" reasons for hiring more faculty have been provided as write-in answers. These reasons included the need to decrease the student/faculty ratio--often due to reduction in the number of students allowed at clinical sites OR to enhance student success (n=8), campus hiring process (too slow, difficulty in getting new positions approved) (n=7), retirement of full-time faculty (n=6). Various other reasons were also cited, such as hiring freeze, elimination of the "67% rule", and location "not attractive" to outside applicants.

In 2018-2019, reasons included retirement (n=2), increased graduate program enrollment, clinical ratios, "unattractive" geography (n=2), and grant support for remediation.

Table 31. Reasons for Hiring More Part-Time Faculty, 2018-19

	2015-2016	2016-2017	2017-2018	2018-2019
Non-competitive salaries for full time faculty	2.5	2.5	2.8	2.5
Shortage of RNs applying for full time faculty positions	3.0	3.0	3.2	3.1
Insufficient number of full time faculty applicants with required credential	3.4	3.6	3.5	4.1
Insufficient budget to afford benefits and other costs of FT faculty	4.1	4.7	4.2	4.8
Need for part-time faculty to teach specialty content	4.4	4.8	4.5	4.8
Private, state university or community college laws, rules or policies	5.7	5.4	5.7	5.8
Other	5.9	5.1	6.6	5.8
Need for faculty to have time for clinical practice	5.6	6.0	6.4	6.0
To allow for flexibility with respect to enrollment changes	6.2	6.7	7.0	6.9
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	7.0	6.8	7.7	7.5

^{*}The lower the ranking, the greater the importance of the reason (one has the highest importance and 10 has the lowest importance.)

In 2018-2019, 95 of 132 schools (72.0%) reported that faculty in their programs work an overloaded schedule, and 90.5% (n=86) of these schools paid the faculty extra for the overloaded schedule.

Over the last ten years, the share of schools that have overloaded faculty has fluctuated between 64.4% and 75.6%. The share of schools with overloaded faculty that pays faculty extra for the overload has remained between 90.5% and 96.7% over this ten-year period.

Table 32. Faculty with Overloaded Schedules by Academic Year

,	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019
Number of schools with overloaded faculty	84	85	87	94	99	85	85	92	92	95
Share of schools with overloaded faculty	67.2%	64.9%	65.9%	70.7%	75.6%	64.4%	66.4%	69.7%	68.7%	72.0%
Number of schools with overloaded faculty that pay faculty extra for the overload	76	79	82	88	94	82	83	89	88	86
Share of schools with overloaded faculty that pay faculty extra for the overload	90.5%	92.9%	94.3%	93.6%	95.0%	96.5%	96.5%	96.7%	95.6%	90.5%
Number of schools reporting	124	131	132	133	131	132	128	132	134	132

Summary

Academic Progression Partnerships by Academic Year

Over the past decade, the number of California pre-licensure nursing programs has grown from 139 programs in 2009-2010 to 142 programs in 2018-2019 (Table 2).

The share of programs reporting a partnership with another program for academic progression has grown over the last ten years, from 29% in 2009-2010 to 56% in 2018-2019. Most of these partnerships were reported by associate's degree nursing programs. In 2018-2019, 69% (n=63) of 91 ADN nursing programs responding to this question reported participating in these partnerships (Table 3).

Available Admission Spaces and New Student Enrollments by Academic Year

The number of available admission spaces reported by California RN programs has fluctuated over the past ten years, rising to a ten-year high of 14,897 in 2018-2018 (Table 4). New student enrollments have also fluctuated over the past ten years, reaching a peak of 14,228 in 2009-2010 before declining for several years, and then climbing back up to a ten-year high of 15,191 in 2018-2019. Over the last decade, there have been fewer enrollments in ADN programs, which have been largely offset by increasing enrollments in BSN programs (Table 6). The number and percent of programs that reported enrolling more students than there were admission spaces available has decreased since 2009-2010 (Table 4).

Student Completions by Academic Year

Pre-licensure RN programs reported 11,857 completions in 2018-2019—a 3% increase in student completions since 2009-2010. The number of graduates has grown slightly after fluctuating around 11,000 completions for the last five years (Table 10). While both ADN and ELM completions decreased, BSN completions increased by 70% in this period.

Completion, Attrition, and Employment Rates

Average on-time completion rates reached 84% in 2018-2019, while the attrition rate was 10.5% (Table 11). At the time of the survey, 4% of nursing program graduates were unable to find employment, which is a significant decline from the high of 28% in 2009-2010. The number of graduates employed in California has stayed steady since 2017-2018 at 83% (Table 16).

Clinical Space and Clinical Practice Restrictions

The number of California nursing programs reporting they were denied access to a clinical placement or shift decreased slightly to 70 programs in 2018-2019 as compared to 75 in 2017-2018 (Table 20). The number of programs denied a clinical placement, unit, or shift has been overall declining since 2009-2010. Staff nurse overload or insufficient qualified staff was the most commonly mentioned reason for clinical space being unavailable (51%) followed by competition for clinical space (44%) and displacement by another program (44%), nurse residency programs (26%), and other clinical facility business needs/changes in policy (25%) (Table 22). The lack of access to clinical space resulted in a loss of 287 clinical placements, units, or shifts, and affecting 2,271 students, which represents about 15% of currently enrolled students (Table 20).

In 2018-2019, programs that reported a loss of clinical space (n=70) addressed that loss by placing students at a different site currently used by the program (79%), adding or replacing lost space with a

new site (56%), using clinical simulation (46%), or replacing lost space at the same clinical site (34%) (Table 25).

In 2018-2019, common or very common types of restricted access in the clinical setting reported by nursing programs (n=92) included clinical site visits from accrediting agency (85%), bar coding medication administration (60.9%), electronic medical records (60%), automated medical supply cabinets (60%), followed by some patients due to staff workload (47%), student health and safety requirements (41%), IV medication administration (38%), and glucometers (33%) (Table 27).

Faculty, Vacancy Rates, Overload

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. The number of nursing faculty overall has increased by 42% in the past ten years, from 3,773 in 2009 to 5,359 in 2019. Of these, 29% (n=1,552) were full time and 71% (n=3,807) were part time. In 2019, 476 faculty vacancies were reported, representing an overall faculty vacancy rate of 8% (12% for full-time faculty and 7% for part-time faculty). Vacancy rates have stayed relatively high over the last five years compared to the period between 2010 and 2013 (Table 30). In 2018-2019, 95 of the 134 schools (71%) reported that faculty in their programs work an overloaded schedule (Table 33).

APPENDIX A - List of Survey Respondents by Degree Program

ADN Programs (85)7

American Career College
American River College
Antelope Valley College
Bakersfield College
Butte Community College
Cabrillo Community College
California Career College
Career Care Institute of LA*

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
Compton College
Contra Costa College

Cuesta College Cypress College De Anza College

East Los Angeles College

Copper Mountain College

El Camino College Evergreen Valley College Fresno City College Glendale Career College Glendale Community College

Golden West College Grossmont College

Gurnick Academy of Medical Arts

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 St. Mary's University AD

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

San Bernardino Valley College

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

Santa Ana College

Saddleback College

Santa Barbara City College Santa Monica College Santa Rosa Junior College

Shasta College Sierra College

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

West Hills College Lemoore

Yuba College

*New ADN program 2018-2019

University of California, San Francisco

⁶ One ADN program/school closed between 2017-2018 and 2018-2019—Brightwood College.

LVN-to-ADN Programs Only (6)

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

BSN Programs (39)

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 St. Mary's University BSN

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

Unitek College*

University of California Irvine

University of California Los Angeles

University of Phoenix

University of San Francisco

Vanguard University*
West Coast University

Western Governors University

*New BSN programs 2018-2019

ELM Programs (12)

Azusa Pacific University
California Baptist University
Charles R. Drew University of Medicine
and Science
Samuel Merritt University
San Francisco State University
University of California Davis
University of California Irvine
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

APPENDIX B - BRN Nursing Education and Workforce Advisory Committee (NEWAC)

APPENDIX B - BRN Nursing Education and	
<u>Members</u>	<u>Organization</u>
Tanya Altmann, PhD, RN	California State University, Sacramento
BJ Bartleson, MS, RN, NEA-BC	California Hospital Association/North (CHA)
Garrett K. Chan, PhD, RN, CNS-BC, ACNPC, CEN, FAEN, FPCN, FNAP, FAAN	HealthImpact
Audrey Berman, PhD, RN	Samuel Merritt University
Stephanie L. Decker	Kaiser Permanente National Patient Care
Denise Duncan, BSN, RN	The United Nurses Associations of California/Union of Health Care Professionals (UNAC/UHCP)
Jose Escobar, MSN, RN, PHN	Los Angeles County Department of Public Health
Brenda Fong	Community Colleges Chancellor's Office
Sabrina Friedman, EdD, DNP, FNP-C, PMHCSN-BC, FAPA	University of California, Los Angeles School of Nursing Health Center at the Union Rescue Mission
Jeannine Graves, MPA, BSN, RN, OCN, CNOR	Sutter Cancer Center
Marketa Houskova, BA, RN, MAIA	American Nurses Association\California (ANA/C)
Loucine Huckabay, PhD, RN, PNP, FAAN	California State University, Long Beach
Kathy Hughes, RN and Carol Jones, MSN, RN, PHN	Service Employees International Union (SEIU)
Saskia Kim, JD and Victoria Bermudez, RN	California Nurses Association/ National Nurses United (CAN/NNU)
Judy Martin-Holland, PhD, MPA, RN, FNP	University of California, San Francisco
Kim Tomasi, MSN, RN and Susan Odegaard Turner, PhD, RN	Association of California Nurse Leaders (ACNL)
Sandra Miller, MBA	Assessment Technologies Institute (ATI)
Robyn Nelson, PhD, RN	West Coast University
Linda Onstad-Adkins/ Fiona Castleton	Health Professions Education Foundation, Office of Statewide Health Planning and Development (OSHPD)
Stephanie R. Robinson, PhD, MHA, RN	Fresno City College
Joanne Spetz, PhD	Phillip R. Lee Institute for Health Policy Studies University of California, San Francisco
Stacie Walker	Health Workforce Development Division, Office of Statewide Health Planning and Development (OSHPD)
Peter Zografos, PhD, RN	Mount San Jacinto College
Ex-Officio Members	
Dr. Joseph Morris, PhD, MSN, RN	California Board of Registered Nursing
Janette Wackerly, MBA, RN	Supervising Nursing Education Consultant, California Board of Registered Nursing