
California Board of Registered Nursing

2015-2016 Annual School Report

Data Summary and Historical Trend Analysis

Greater Sacramento

June 8, 2017

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

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PREFACE

Each year, the California Board of Registered Nursing (BRN) requires all pre-licensure registered nursing programs in California to complete a survey detailing statistics of their programs, students and faculty. The survey collects data from August 1 through July 31. Information gathered from these surveys is compiled into a database and used to analyze trends in nursing education.

The BRN commissioned the University of California, San Francisco (UCSF) to develop the online survey instrument, administer the survey, and report data collected from the survey. This report presents ten years of historical data from the BRN Annual School Survey. Data analyses were conducted statewide and for nine economic regions¹ in California, with a separate report for each region. All reports are available on the BRN website (<http://www.rn.ca.gov/>).

This report presents data from the 6-county Greater Sacramento region. Counties in the region include El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba. All 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. Additional data from the past ten years of the BRN Annual School Survey are available in an interactive database on the BRN website.

Beginning with the 2011-2012 Annual School Survey, certain questions were revised to allow schools to report data separately for satellite campuses located in regions different from their home campus. This change was made in an attempt to more accurately report student and faculty data by region, and it resulted in data that were previously reported in one region being reported in a different region. This is important because changes in regional totals that appear to signal either an increase or a decrease may in fact be the result of a program reporting satellite campus data in a different region. However, due to the small number of students impacted and the added complication in collecting the data, accounting for satellite programs in different regions was discontinued in 2014-2015.

Data for 2005-2006 through 2010-2011 and 2014-2015 and 2015-2016 are not impacted by differences in satellite campus data reporting while 2011-2012 through 2013-2014 includes the regional data separately for satellite campuses. Data tables impacted by these change will be footnoted and in these instances, caution should be used when comparing data across years. 2014-2015 and 2015-2016 reporting for the Greater Sacramento region may be affected by the opening of one new private ADN program, the closure of one private ADN program, and the removal of data from one ELM satellite program headquartered in another region from some totals.

¹ The regions include: (1) Bay Area, (2) Central Coast, (3) Central Sierra (no programs), (4) Greater Sacramento, (5) Northern California, (6) Northern Sacramento Valley, (7) San Joaquin Valley, (8) Los Angeles Area (Los Angeles and Ventura counties), (9) Inland Empire (Orange, Riverside, and San Bernardino counties), and (10) Southern Border Region. Counties within each region are detailed in the corresponding regional report.

DATA SUMMARY AND HISTORICAL TREND ANALYSIS²

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, Greater Sacramento had a total of nine pre-licensure nursing programs; six ADN programs, two BSN programs, and one ELM program. One ADN program closed, and one new BSN and one new ELM program opened. Two-thirds (67%) of pre-licensure nursing programs in the region are public. Private programs accounted for all new program growth in the past decade until the addition of one public program in 2015-2016.

Table 1. 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	7	7	6	6	6	7	7	7	8	9
ADN	5	5	5	5	5	6	6	6	7	6
BSN	1	1	1	1	1	1	1	1	1	2
ELM	1	1	0	0	0	0	0	0	0	1
Public	6	6	5	5	5	5	5	5	5	6
Private	1	1	1	1	1	2	2	2	3	3
Total number of schools	6	6	6	6	6	7	7	7	8	9

² Between 2011-2012 and 2013-2014, data may be influenced by satellite campus data being reported and allocated to their proper region. Tables affected by this change are noted, and readers are cautioned against comparing data collected these years with data collected before and after this change. In the Greater Sacramento region, data for an ELM satellite program headquartered in another region were reported during the 2011-2012 and 2013-2014 period and are not reported in the 2014-2015 and 2015-2016 data.

In 2015-2016, five pre-licensure programs (56%) in the region reported partnering with another school to offer a program leading to a higher nursing degree.

Table 2. 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	1	1	4	0	0	3	2	2	4	5
Formal collaboration							50.0%	100.0%	50.0%	
Informal collaboration							50.0%	0.0%	75.0%	
Number of programs that reported	7	6	6	6	6	7	7	7	8	9

Note: Blank cells indicate the information was not requested

Admission Spaces and New Student Enrollments

Pre-licensure nursing programs in the Greater Sacramento region reported a total 539 spaces available for new students in 2015-2016. These spaces were filled with a total of 563 students. Every year in the last decade, pre-licensure nursing programs in the region enrolled more students than they had spaces available. In 2015-2016, 44% (n=4) of Greater Sacramento region programs enrolled more students than admission spaces available.

Table 3. 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	561	669	530	542	506	653	600	577	493	539
New student enrollments	624	722	552	565	515	677	712	611	503	563
% Spaces filled with new student enrollments	111.2%	107.9%	104.2%	104.2%	101.8%	103.7%	118.7%	105.9%	102.0%	104.5%

[†] Between 2011-2012 and 2013-2014, data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

While Greater Sacramento nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated, the number of qualified applications has declined from a high of 5,213 applications in 2009-2010 to 1,269 applications in 2015-2016. This is the lowest level in the last ten years with the majority of the decline in ADN programs. Of the 1,269 qualified applications, 56% (n=706) did not enroll. A greater proportion of qualified applicants were able to enroll this year than in any year in the last decade.

Table 4. Student Admission Applications† 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	2,391	4,032	4,275	5,213	4,438	4,741	2,680	1,930	1,598	1,269
ADN	1,889	4,032	3,724	4,896	4,140	4,124	2,087	1,125	1,012	915
BSN	502		551	317	298	550	405	709	586	317
ELM						67	188	96		37
% Qualified applications not enrolled	73.9%	82.1%	87.1%	89.2%	88.4%	85.7%	73.4%	68.3%	68.5%	55.6%

*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.

†Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

Pre-licensure nursing programs in the Greater Sacramento region enrolled 563 new students in 2015-2016, which is more students (12%, n=60) than in 2014-2015. Nonetheless, there has been an overall decline in enrollments in the last decade, which is mainly due to fewer new students in ADN programs, and a change in reporting which eliminated enrollment numbers from a satellite ELM program headquartered in another region. The distribution of new enrollments by program type was 62% ADN (n=351), 33% BSN (n=188), and 4% ELM (24). New student enrollment in the region's public programs accounted for 80% of total new student enrollment in the region in 2015-2016. Private school enrollments have decreased somewhat, although they account for a much larger proportion of enrollments than they did 10 years ago (20% in 2015-2016 vs. 5% in 2006-2007).

Table 5. New Student Enrollment 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
New student enrollment	624	722	552	565	515	677	712	611	503	563
ADN	440	561	451	405	355	399	464	354	343	351
BSN	184	161	101	160	160	234	205	208	160	188
ELM	0	0	0	0	0	44	43	49	0	24
Private	28	54	72	64	31	160	237	163	75	110
Public	596	668	480	501	484	517	475	448	428	453

† Between 2011-2012 and 2013-2014, data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

One program reported enrolling fewer students in 2015-2016 compared to the previous year. The main reason indicated by text comments was enrolling a number of students with the expectation of some attrition the previous year, which did not occur.

Table 6. Percent of Programs that Enrolled Fewer Students by Academic Year

Type of Program	2014-2015		2015-2016	
	Enrolled fewer	#of programs reporting	Enrolled fewer	#of programs reporting
ADN	16.7%	6	16.7%	6
BSN	100.0%	1	0.0%	2
ELM	-	-	0.0%	1
Total	28.6%	7	11.1%	9

Student Census Data

A total of 927 students were enrolled in a Greater Sacramento pre-licensure nursing program as of October 15, 2016, which is a 8% (n=72) increase over the previous year. While the ADN census remained virtually the same, both BSN and ELM programs saw increases, which was largely due to the addition of new programs. For ELM and BSN programs, this was largely due to the addition of new programs.

The 2015 census of the region's programs indicates that 58% (n=534) of students were enrolled in ADN programs, 40% (n=369) in BSN programs, and 3% (n=24) in ELM programs.

Table 7. Student Census Data† by Program Type by Year**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADN	705	722	740	665	530	553	604	582	541	534
BSN	401	357	286	285	312	469	437	357	314	369
ELM	60	0	0	0	0	104	102	110	0	24
Total nursing students	1,166	1,079	1,026	950	842	1,126	1,143	1,049	855	927

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

† Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

Student Completions

Program completions at Greater Sacramento pre-licensure nursing programs totaled 452 in 2015-2016. The number of completions in this region has fluctuated over the past decade. In 2015-2016, ADN programs had fewer completions (10%, n=34), but BSN programs had a slight increase (6%, n=9) over the prior year. The distribution of completions by program type was 65% ADN (n=294) and 35% BSN (n=158).

Table 8. Student Completions[†] 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	332	347	406	402	356	273	280	296	328	294
BSN	112	233	169	149	127	246	197	196	149	158
ELM	0	54	0	0	0	37	40	41	0	0
Total student completions	444	634	575	551	483	556	517	533	477	452

[†] Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

Retention and Attrition Rates

Of the 477 students scheduled to complete a Greater Sacramento nursing program in the 2015-2016 academic year, 81% (n=388) completed the program on-time, 9% (n=45) are still enrolled in the program, and 9% (n=44) dropped out or were disqualified from the program.

Table 9. Student Retention and Attrition[†] by Academic Year

	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	519	695	682	600	703	529	578	614	501	477
Completed on time	353	520	552	411	583	442	501	514	410	388
Still enrolled	49	25	39	94	19	38	38	26	32	45
Total attrition	117	150	91	95	101	49	39	74	59	44
<i>Attrition-dropped out</i>									30	16
<i>Attrition-dismissed</i>									29	28
Completed late [‡]				33	28	34	53	8	33	16
Retention rate*	68.0%	74.8%	80.9%	68.5%	82.9%	83.7%	86.7%	83.7%	81.8%	81.3%
Attrition rate**	22.5%	21.6%	13.3%	15.8%	14.4%	9.3%	6.7%	12.1%	11.8%	9.2%
% Still enrolled	9.4%	3.6%	5.7%	15.7%	2.7%	7.0%	6.6%	4.2%	6.4%	9.4%

[‡] These completions are not included in the calculation of either retention or attrition rates.

[†] Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

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

**Attrition rate = (students dropped or disqualified who were scheduled to complete) / (students scheduled to complete the program)

Note: Blank cells indicate the information was not requested.

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.

NCLEX Pass Rates

For the last ten years, NCLEX pass rates in the Greater Sacramento region have been higher for BSN graduates than for ADN program graduates. This pattern continued into 2015-2016. ADN programs had declines in their NCLEX pass rates since 2011-2012, but started to rise slightly in 2014-2015 and again in 2015-2016. The pass rates in BSN programs declined slightly in 2015-2016 after staying relatively stable from 2009-2010 through 2014-2015. The NCLEX passing standard was increased in April 2013, which may have impacted NCLEX passing rates for the subsequent years.

Table 10. First Time NCLEX Pass 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	92.4%	91.3%	90.8%	91.2%	93.7%	95.1%	93.9%	89.0%	89.2%	90.4%
BSN	95.0%	92.6%	95.5%	98.3%	97.2%	98.6%	97.7%	97.4%	97.3%	95.2%

*NCLEX pass rates for students who took the exam for the first time in the given year.

Employment of Recent Nursing Program Graduates³

Hospitals represent the most frequently reported employment setting for recent graduates of pre-licensure programs in the Greater Sacramento region. In 2015-2016, the region's programs reported that 59% of employed recent graduates were working in a hospital setting which is the highest percentage since 2007-2008. Programs also reported that 10% of recent graduates had not found employment in nursing at the time of the survey, which is the lowest proportion reported since these data were first collected in 2009-2010. In 2015-2016, 4% of graduates were not yet licensed, and 5% were pursuing additional nursing education. The 2015-2016 average regional share of new graduates employed in nursing in California was 75%, which is higher than the shares reported over the previous five years.

³ Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2015-2016, on average, the employment setting was unknown for 4% of recent graduates.

Table 11. Employment Location for Recent Nursing Program Graduates[†] by Academic Year

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Hospital	71.4%	73.4%	52.8%	53.0%	50.6%	50.9%	48.1%	56.7%	50.7%	58.7%
Other setting	12.7%	2.0%	0.0%	11.7%	2.0%	12.4%	0.7%	1.4%	12.9%	14.8%
Unable to find employment				27.8%	29.3%	26.7%	26.7%	15.9%	21.2%	10.4%
Pursuing additional nursing education							13.1%	7.7%	4.4%	5.0%
Not yet licensed										4.3%
Long-term care facilities	5.7%	16.4%	14.5%	13.3%	10.7%	4.2%	7.9%	6.5%	4.6%	3.1%
Other healthcare facilities	2.8%	4.0%	2.8%	7.8%	5.0%	2.8%	0.8%	9.5%	3.8%	2.1%
Community/public health facilities	0.7%	4.2%	6.7%	3.3%	3.3%	3.0%	2.7%	2.3%	2.3%	1.7%
Employed in California	97.4%	92.8%	57.0%	88.8%	72.5%	57.5%	59.4%	59.3%	60.8%	75.2%

[†]Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

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

Clinical Training in Nursing Education

Questions regarding clinical simulation⁴ were revised in the 2014-2015 survey to collect data on average amount of hours students spend in clinical areas including simulation in various content areas and plans for future use. Eight of the nine Greater Sacramento region nursing schools reported using clinical simulation in 2015-2016. Two (22%) of the 9 programs have plans to increase staff dedicated to administering clinical simulation at their school in the next 12 months.

In 2015-2016, the content areas using the most hours of clinical simulation on average are Medical/Surgical (14.6) and Fundamentals (10.8). The largest proportion of clinical hours in all programs is in direct patient care (78%) followed by non-direct patient care (17%) and simulation (6%).

In aggregate, programs reported using many fewer clinical hours in 2015-2016 compared to the prior year. Programs reported fewer clinical hours in medical/surgical, obstetrics, pediatrics, geriatrics, psychiatry/mental health and "other" in 2015-2016 than in 2014-2015. Programs reported more overall hours in fundamentals and leadership. Overall programs reported a greater proportion of hours allocated to skills labs and slightly more in clinical simulation in 2015-2016 compared to 2014-2015.

⁴ 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.

Table 12. Average Hours Spent in Clinical Training by Content Area and Academic Year

Content Area	Direct Patient Care		Skills Lab		Clinical Simulation		All Clinical Hours	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
Medical/Surgical	366.8	254.8	14.8	33.1	16.7	14.6	398.3	302.5
Fundamentals	65.3	86.4	88.6	89.4	8.7	10.8	162.6	186.5
Obstetrics	63.3	49.9	12.2	7.6	7.7	7.5	83.2	65.0
Pediatrics	65.3	60.1	10.8	7.4	7.0	6.0	83.2	73.5
Geriatrics	74.7	70.9	6.0	3.9	4.0	5.3	84.7	80.1
Psychiatry/Mental Health	89.7	72.4	1.0	4.2	2.0	0.0	92.7	76.6
Leadership/Management	60.8	66.9	0.0	0.0	4.3	1.0	65.2	67.9
Other	42.5	26.3	3.3	2.5	0.0	5.6	45.8	34.4
Total average clinical hours	828.5	687.5	136.8	148.1	50.3	50.8	1,015.6	886.3
Percent of Clinical Hours	81.6%	77.6%	13.5%	16.7%	5.0%	5.7%	100.0%	100.0%
Number of programs that reported	6	8	6	8	6	8	6	8

The largest proportion of clinical hours in all Greater Sacramento region programs is in direct patient care, and ADN programs allot the largest percentage of clinical hours (80%) to direct patient care activities. BSN programs allocated more time to skills labs (24%) than the other program types, while the ELM program allocated the more time to simulation activities (45%) than the other program types.

Table 13. Average Hours Spent in Clinical Training by Program Area and Content Type, 2015-2016

Content Area	Direct Patient Care			Skills Lab			Clinical Simulation			Total Average Clinical Hours		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Medical/surgical	320.3	100.0	16.0	43.3	5.0	0.0	16.2	20.0	0.0	379.8	125.0	16.0
Fundamentals	100.2	90.0	0.0	95.8	135.0	5.0	6.0	20.0	30.0	202.0	245.0	35.0
Obstetrics	51.5	90.0	0.0	4.0	37.0	0.0	8.7	8.0	0.0	64.2	135.0	0.0
Pediatrics	65.1	90.0	0.0	2.3	45.0	0.0	8.0	0.0	0.0	75.4	135.0	0.0
Geriatrics	91.0	5.0	16.0	4.3	6.0	0.0	5.3	10.0	0.0	100.6	21.0	16.0
Psychiatry/mental health	81.5	90.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	87.1	90.0	0.0
Leadership/management	89.2	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	90.5	0.0	0.0
Other	0.0	210.0	0.0	0.0	20.0	0.0	0.0	45.0	0.0	0.0	275.0	0.0
Total Average Clinical Hours	798.8	675.0	32.0	155.3	248.0	5.0	45.5	103.0	30.0	999.6	1,026	67.0
Number of programs that reported	6	1	1	6	1	1	6	1	1	6	1	1

In the 2015-2016 survey, 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, non-direct patient care, and clinical simulation for each of the eight content areas listed above.

In each content area and clinical experience, the majority planned to maintain the current balance of hours. If changes were planned, they were usually in the direction of increasing clinical hours although there were some planned decreases in fundamentals, medical/surgical, and "other".

Table 14. Planned Increase or Decrease in Clinical Hours by Program Area and Content Type *, 2015-2016

Medical/Surgical	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	11.1%	66.7%	22.2%
Skills Lab	0.0%	75.0%	25.0%
Clinical Simulation	0.0%	66.7%	33.3%
Total clinical hours	0.0%	77.8%	22.2%
Fundamentals	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	66.7%	11.1%
Skills Lab	11.1%	77.8%	11.1%
Clinical Simulation	11.1%	55.6%	22.2%
Total clinical hours	0.0%	100.0%	0.0%
Obstetrics	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	66.7%	33.3%
Skills Lab	0.0%	75.0%	25.0%
Clinical Simulation	0.0%	66.7%	22.2%
Total clinical hours	0.0%	66.7%	33.3%
Pediatrics	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	77.8%	22.2%
Skills Lab	0.0%	87.5%	12.5%
Clinical Simulation	0.0%	77.8%	11.1%
Total clinical hours	0.0%	77.8%	22.2%
Geriatrics	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	88.9%	11.1%
Skills Lab	0.0%	87.5%	0.0%
Clinical Simulation	0.0%	87.5%	12.5%
Total clinical hours	0.0%	100.0%	0.0%

Table 14. Planned Increase or Decrease in Clinical Hours by Program Area and Content Type*, 2015-2016 (Continued)

Psychiatry/Mental Health	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	88.9%	11.1%
Skills Lab	0.0%	87.5%	0.0%
Clinical Simulation	0.0%	88.9%	11.1%
Total clinical hours	0.0%	100.0%	0.0%
Leadership/Management	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	87.5%	12.5%
Skills Lab	0.0%	85.7%	0.0%
Clinical Simulation	0.0%	85.7%	0.0%
Total clinical hours	0.0%	100.0%	0.0%
Other	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	33.3%	33.3%	33.3%
Skills Lab	0.0%	100.0%	0.0%
Clinical Simulation	0.0%	50.0%	50.0%
Total clinical hours	0.0%	66.7%	33.3%

*Totals do not always sum to 100% because some programs answered "not applicable" or "unknown".

No programs were overall reducing clinical hours. In areas where there were reductions indicated, these changes reflected shifts in allocation of delivery mode and were offset by increases in another mode rather than an overall reduction of clinical hours. This was also the case in 2014-2015.

Clinical Space & Clinical Practice Restrictions⁵

Three pre-licensure nursing programs in the Greater Sacramento region reported being denied access to a clinical placement, unit or shift in 2015-2016. None of these programs reported being offered an alternative by the site for the lost clinical unit, shift or placement. The lack of access to clinical space resulted in the loss of 26 clinical placements, units or shifts, which affected 84 students.

In addition, four programs (44%) were allowed fewer students for a clinical placement, unit, or shift in this year than in the prior year.

Table 15. 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	4	1	2	2	1	3
Programs offered alternative by site*					1	0
Placements, units or shifts lost*					1	26
Number of programs that reported	6	7	7	7	8	9
Total number of students affected	90	30	17	91	20	84

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

In addition, 4 (50%) of programs reported that there were fewer students allowed for clinical placements, units or shifts in 2015-2016 than in the prior year.

Table 16. RN Programs That Reported Fewer Students Allowed for Clinical Space by Academic Year

	2014- 2015	2015- 2016
ADN	2	3
BSN	0	1
ELM	0	0
All Programs	2	4

⁵ Some of these data were collected for the first time in 2009-2010. However, changes in these questions for the 2010-2011 administration of the survey prevent comparability of the data. Therefore, data prior to 2010-2011 may not be shown.

The most common reasons schools were denied clinical space in 2015-2016 was “No longer accepting ADN students” and “Staff nurse overload or insufficient qualified staff.”

Table 17. Reasons for Clinical Space Being Unavailable by Academic Year

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
No longer accepting ADN students	25.0%	100.0%	50.0%	50.0%	0.0%	66.7%
Staff nurse overload or insufficient qualified staff	50.0%	100.0%	0.0%	50.0%	0.0%	66.7%
Competition for clinical space due to increase in number of nursing students in region	50.0%	100.0%	50.0%	100.0%	0.0%	33.3%
Visit from Joint Commission or other accrediting agency			50.0%	50.0%	0.0%	33.3%
Change in facility ownership/management	25.0%	0.0%	0.0%	0.0%	0.0%	33.3%
Nurse residency programs	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%
Displaced by another program	0.0%	100.0%	0.0%	50.0%	0.0%	0.0%
Decrease in patient census	25.0%	0.0%	0.0%	50.0%	0.0%	0.0%
Implementation of Electronic Health Records system			50.0%	0.0%	0.0%	0.0%
Closure, or partial closure, of clinical facility	25.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Clinical facility seeking magnet status	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	50.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Number of programs that reported	4	1	2	2	1	3

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

Programs that lost access to clinical space were asked to report on the strategies used to cover the lost placements, sites, or shifts. In 2015-2016, the most frequently reported strategy (67%) was to replace the lost clinical space with a new site.

Table 18. Strategies to Address the Loss of Clinical Space by Academic Year

	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Added/replaced lost space with new site	0.0%	50.0%	100.0%	100.0%	66.7%
Replaced lost space at same clinical site	100.0%	0.0%	50.0%	0.0%	33.3%
Replaced lost space at different site currently used by nursing program	100.0%	0.0%	50.0%	100.0%	33.3%
Clinical simulation	100.0%	0.0%	50.0%	0.0%	33.3%
Reduced student admissions	0.0%	0.0%	50.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%
Number of programs that reported	1	2	2	1	3

Four nursing programs in Greater Sacramento reported an increase in out-of-hospital clinical placements in 2015-2016. Programs reported various alternative placement sites including medical practices, clinics, and physicians' offices; outpatient mental health and substance abuse; public health or community health agency; skill nursing/rehabilitation facility; home health agency/home health service; and "other".

Table 19. 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
Home health agency/home health service	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%
Medical practice, clinic, physician office	33.3%	33.3%	0.0%	100.0%	0.0%	25.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%
Outpatient mental health/substance abuse	0.0%	33.3%	0.0%	100.0%	0.0%	25.0%
Public health or community health agency	33.3%	33.3%	100.0%	0.0%	0.0%	25.0%
Skilled nursing/rehabilitation facility	66.7%	100.0%	0.0%	0.0%	0.0%	25.0%
Case management/disease management	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Correctional facility, prison or jail	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hospice	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Occupational health or employee health service	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Renal dialysis unit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
School health service (K-12 or college)	0.0%	33.3%	0.0%	0.0%	0.0%	0.0%
Surgery center/ambulatory care center	0.0%	66.7%	100.0%	100.0%	0.0%	0.0%
Urgent care, not hospital-based	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Number of programs that reported	3	3	1	1	1	4

In 2015-2016, 56% (n=5) of Greater Sacramento 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 restricted access students faced were access to bar-coding medication administration, to the clinical site itself due to a visit from the Joint Commission or another accrediting agency, glucometers, and electronic medical records. The seven-year trend shows that restricted student access to IV medication administration, direct communication with the health care team, restrictions to some patients due to staff workload and alternative setting due to liability have become less common.

Table 20. 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
Bar coding medication administration	66.7%	80.0%	60.0%	100%	20.0%	25.0%	100%
Clinical site due to visit from accrediting agency (Joint Commission)	83.3%	100%	80.0%	75.0%	60.0%	50.0%	80.0%
Glucometers	50.0%	20.0%	20.0%	25.0%	20.0%	50.0%	80.0%
Electronic Medical Records	66.7%	60.0%	60.0%	75.0%	20.0%	25.0%	80.0%
Automated medical supply cabinets	50.0%	20.0%	0.0%	50.0%	0.0%	25.0%	60.0%
Student health and safety requirements		80.0%	40.0%	25.0%	40.0%	50.0%	40.0%
Some patients due to staff workload		40.0%	40.0%	25.0%	20.0%	0.0%	20.0%
IV medication administration	16.7%	20.0%	20.0%	0.0%	0.0%	25.0%	20.0%
Alternative setting due to liability	33.3%	0.0%	0.0%	50.0%	0.0%	0.0%	0.0%
Direct communication with health team	33.3%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Number of schools that reported	6	5	5	4	5	4	5

Note: Blank cells indicated 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".

In 2015-2016, the top reason schools reported for restricted student access to electronic medical records insufficient time to train students (80%).

In 2015-2016, the top reason schools reported for student restricted access to medication administration systems was liability (67%).

Table 21. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration by Academic Year

	Electronic Medical Records			Medication Administration		
	2013-2014	2014-2015	2015-2016	2013-2014	2014-2015	2015-2016
Liability	0.0%	0.0%	20.0%	100.0%	100.0%	66.7%
Insufficient time to train students	0.0%	100.0%	80.0%	0.0%	50.0%	33.3%
Patient confidentiality	0.0%	0.0%	40.0%	0.0%	0.0%	33.3%
Staff fatigue/burnout	0.0%	66.7%	40.0%	0.0%	50.0%	33.3%
Staff still learning and unable to assure documentation standards are being met	0.0%	66.7%	40.0%	0.0%	0.0%	33.3%
Cost for training	0.0%	66.7%	0.0%	0.0%	50.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Number of schools that reported**	1	3	5	1	2	3

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

The majority of nursing schools in the Greater Sacramento region compensate for training in areas of restricted student access by ensuring all students have access to sites that train them in this area (100%). Sixty-percent compensate by training students in the classroom and in the simulation lab.

Table 22. How the Nursing Program Compensates for Training in Areas of Restricted Access by Academic Year

	2013-2014 % Schools	2014-2015 % Schools	2015-2016 % Schools
Ensuring all students have access to sites that train them in this area	60.0%	25.0%	100.0%
Training students in the simulation lab	80.0%	75.0%	60.0%
Training students in the classroom	60.0%	50.0%	60.0%
Purchase practice software, such as SIM Chart	20.0%	25.0%	40.0%
Other	20.0%	50.0%	20.0%
Number of schools that reported	5	4	5

Faculty Census Data⁶

On October 15, 2016, there were 149 total nursing faculty⁷ in Greater Sacramento, almost half (49%, n=73) of whom were full-time. In the past decade, this region has consistently had between 48% to 51% full-time faculty. The need for faculty continues to outpace the number of active faculty. On October 15, 2016, there were 22 vacant faculty positions in the region, which represents a 12.9% faculty vacancy rate overall (17.6% for full-time faculty and 10.5% for part-time faculty).

Table 23. Faculty Census Data[†] by Year

	2007	2008	2009	2010	2011	2012	2013	2014*	2015	2016
Total Faculty	163	156	175	150	161	168	175	185	138	149
<i>Full-time</i>	83	79	84	86	78	80	80	92	61	73
<i>Part-time</i>	80	77	91	64	83	88	94	92	77	76
Vacancy Rate**	4.1%	4.9%	2.2%	2.0%	3.6%	17.6%	8.9%	12.7%	6.1%	12.9%
<i>Vacancies</i>	7	8	4	3	6	36	17	27	9	22

[†] Between 2011-2012 and 2013-2014 data may be influenced by satellite campus data being reported and allocated to their proper region. Readers are cautioned against comparing data collected these years with data collected before and after this change.

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

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

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

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. 33% (n=3) of 9 schools responding agreed. These 3 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 24. Reasons for Hiring More Part-time Faculty 2015-2016

	Average rank*	Programs reporting
Non-competitive salaries for full time faculty	2.0	3
Shortage of RNs applying for full time faculty positions	2.3	3
Need for part-time faculty to teach specialty content	4.0	3
Insufficient number of full time faculty applicants with required credential	4.3	3
Need for faculty to have time for clinical practice	5.3	3
To allow for flexibility with respect to enrollment changes	5.3	3
Private, state university or community college laws, rules or policies	7.0	3
Insufficient budget to afford benefits and other costs of FT faculty	7.3	3
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	7.3	3
Other:	-	0

*The lower the ranking, the greater the importance of the reason (1 has the highest importance and 10 has the lowest importance.)

⁶ Census data represent the number of faculty on October 15th of the given year.

⁷ 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 nursing schools in the region.

In 2015-2016, nearly half (44%, n=4) of Greater Sacramento region nursing schools reported that their faculty worked overloaded schedules. Of these schools, 100% (n=4) pay the faculty extra for the overloaded schedule.

Table 25. 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	5	5	3	3	3	3	3	4
Share of schools that pay faculty extra for the overload	80%	80%	100%	100%	100%	100%	66.7%	100%
Total number of schools	6	6	6	7	7	7	8	9

Summary

The number of pre-licensure nursing programs in the Greater Sacramento region has grown over the last three years with one new private program opening in 2014-2015, then another private program *closing* in 2015-2016, to be replaced by one private and one public program *opening* in 2015-2016. Five programs in the region reported that they partner with another school to offer a program leading to a higher nursing degree, which is one more than the number of schools reporting partnerships in 2014-2015.

Greater Sacramento programs reported a total of 539 spaces available for new students in 2015-2016, which were filled with a total of 563 new enrollments. This represents the tenth consecutive year pre-licensure nursing programs in the region enrolled more students than there were spaces available. Of the 1,269 qualified applications to the region's programs in 2015-2016, 44% (n=503) enrolled—the highest proportion to enroll in at least ten years.

In 2015-2016, pre-licensure nursing programs in the region reported 452 student completions—which is close to the same number of students completing 10 years ago (n=444 in 2006-2007). The retention rate was 81% in 2015-2016 for the region, which has shown improvement over the last decade. The share of recent graduates unable to find employment in nursing has declined from a high of 29% in 2010-2011 to 10% in 2015-2016, indicating that more nursing school graduates in the region are finding employment in their field.

Clinical simulation has become widespread in nursing education, with 89% of the nursing schools in the Greater Sacramento region reporting using it in some capacity, although only two programs (22%) reported plans to increase staff dedicated to administering clinical simulation in the next 12 months. The majority of programs plan to maintain their number of clinical simulation hours in all content areas. No programs reported reducing clinical hours in any program type although some were shifting the mode of delivery between direct patient care, skills labs, and simulation activities. The importance of clinical simulation is underscored by data showing that more than half (56%, n=5) the Greater Sacramento Region encountered restrictions to clinical practice imposed on them by clinical facilities.

The total number of prelicensure nursing students has declined by about 20% since 2007, and the number of nursing faculty employed has declined about 9% in the same time period. In 2015-2016, 22 faculty vacancies were reported, representing a 12.9% faculty vacancy rate overall (17.6% for full-time faculty and 10.5% for part-time faculty).

APPENDICES

APPENDIX A – Greater Sacramento Nursing Education Programs

ADN Programs (5)

American River College
Sacramento City College
Sierra College
Yuba College
Weimar Institute

LVN to ADN Program Only (1)

Carrington College (*formerly Western Career College – Sacramento*)

BSN Program (2)

Chamberlain College*
CSU Sacramento

ELM Program (1)

University of California, Davis*

* New program in 2015-2016

APPENDIX B – BRN Education Issues Workgroup Members

Members

Loucine Huckabay, Chair
 Judee Berg
 Audrey Berman
 Stephanie L. Decker
 Brenda Fong
 Judy Martin-Holland
 Robyn Nelson
 Tammy Rice
 Stephanie R. Robinson
 Paulina Van

Organization

California State University, Long Beach
 HealthImpact (formerly CINHC)
 Samuel Merritt University
 Kaiser Permanente National Patient Care Services
 Community College Chancellor's Office
 University of California, San Francisco
 West Coast University
 Saddleback College
 Fresno City College
 Samuel Merritt University

Ex-Officio Member

Dr. Joseph Morris

California Board of Registered Nursing

Project Manager

Julie Campbell-Warnock

California Board of Registered Nursing