
California Board of Registered Nursing

2014-2015 Annual School Report

Data Summary and Historical Trend Analysis

Northern Sacramento Valley

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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 5-county Northern Sacramento Valley region. Counties in the region include Butte, Colusa, Glenn, Shasta, and Tehama. 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.

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 2014-2015 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

The number of pre-licensure nursing programs in the Northern Sacramento Valley has remained the same over the last five years. In 2014-2015, the Northern Sacramento Valley had a total of four pre-licensure nursing programs. Of these programs, two are ADN programs and two are BSN programs. The majority (75%) of pre-licensure nursing programs in the region are public.

Table 1. Number of Nursing Programs*, by Academic Year

	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2014- 2015
Total nursing programs	3	3	3	3	3	3	4	4	4	4
ADN	2	2	2	2	2	2	2	2	2	2
BSN	1	1	1	1	1	1	2	2	2	2
ELM	0	0	0	0	0	0	0	0	0	0
Public	3	3	3	3	3	3	3	3	3	3
Private	0	0	0	0	0	0	1	1	1	1
Total number of schools	3	3	3	3	3	3	4	4	4	4

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.

For several years, none of the programs in the region had collaborations with another program that leads to a higher degree than offered at their own institution. However, for the last two years, only one program had collaborations. In 2014-2015 there was one program that partnered with other programs and it had both an informal and formal collaboration.

Table 2. Partnerships*, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Programs that partner with another program that leads to a higher degree	0	0	0	0	1	1	2	2	1	1
Formal collaboration								50.0%	100.0%	100.0%
Informal collaboration								50.0%	100.0%	100.0%
Number of programs that reported	3	3	3	3	3	4	4	4	4	4

*These data were collected for the first time in 2005-2006.

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

Admission Spaces and New Student Enrollments

The number of admission spaces for new students in Northern Sacramento Valley nursing programs has fluctuated over the last decade, reaching a high of 290 during 2010-2011. The 243 spaces available for new students in 2014-2015 were filled with a total of 267 students. Pre-licensure nursing programs in the region have enrolled more students than were spaces available in eight of the past ten years.

Table 3. Availability and Utilization of Admission Spaces, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Spaces available	228	206	220	241	226	290	250	230	262	243
New student enrollments	293	239	237	272	223	300	257	267	260	267
% Spaces filled with new student enrollments	128.5%	116.0%	107.7%	112.9%	98.7%	103.4%	102.8%	116.1%	99.2%	109.9%

Northern Sacramento Valley nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. In 2014-2015, programs in the region received 1,200 qualified applications for admission, which is a 9% (n=99) increase in applications compared to the previous year. Of the qualified applications received, 78% of them did not enroll in 2014-2015.

Table 4. Student Admission Applications*, by Academic Year

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Qualified applications	697	705	611	1,053	1,034	1,194	1,332	1,384	1,101	1,200
ADN	278	262	193	627	763	883	1,016	1,084	733	723
BSN	419	443	418	426	271	311	316	300	368	477
% Qualified applications not enrolled	58.0%	66.1%	61.2%	74.2%	78.4%	74.9%	80.7%	80.7%	76.4%	77.8%

*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.

New student enrollments in the Northern Sacramento Valley have remained about the same over the past three years. In 2014-2015, there were 267 new students in programs in the region, 58% (n=156) of these students enrolled in ADN programs while 42% (n=111) enrolled in BSN programs.

No Northern Sacramento Valley programs reported that they enrolled fewer students in 2014-2015 compared to the previous year.

Table 5. New Student Enrollment by Program Type, by Academic Year

	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
New student enrollment	293	239	237	272	223	300	257	267	260	267
ADN	174	158	146	175	165	193	154	153	148	156
BSN	119	81	91	97	58	107	103	114	112	111
Private	0	0	0	0	0	26	30	34	32	32
Public	293	239	237	272	223	274	227	233	228	235

Student Census Data

The total number of students enrolled in pre-licensure nursing programs in the region has fluctuated over the last decade. On October 15, 2015, there were a total of 537 students enrolled in programs in the region. A little over half (52%) of these students were in ADN programs and a little under half (48%) in BSN programs.

Table 6. Student Census Data* by Program Type, by Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ADN	230	298	255	303	319	326	291	286	264	279
BSN	235	246	264	281	222	304	243	259	261	258
Total nursing students	465	544	519	584	541	630	534	545	525	537

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

Student Completions

The number of students that completed a nursing program in the region has been declining since the ten-year high of 267 students in 2010-2011. This decline was driven by ADN programs, which had a 24% (n=43) decline in the number of students completing their programs in the last five years. In 2014-2015, 250 students completed programs in the region. Slightly more than half, 54% (n=136), of graduating students completed an ADN program and 46% (n=114) completed a BSN program.

Table 7. Student Completions by Program Type, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
ADN	109	149	126	139	147	179	169	159	129	136
BSN	55	75	77	78	78	88	88	94	100	114
Total student completions	164	224	203	217	225	267	257	253	229	250

Retention and Attrition Rates

Of the 231 students scheduled to complete a Northern Sacramento Valley nursing program in the 2014-2015 academic year, 94% (n=216) completed the program on-time, 2% (n=4) are still enrolled in the program, and 5% (n=11) dropped out or were disqualified from the program. The average retention rate in the region increased over the last two years, with a corresponding drop in the attrition rate.

Table 8. Student Retention and Attrition, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Students scheduled to complete the program	160	211	216	185	231	227	231	249	252	231
Completed on time	143	194	180	166	203	211	205	213	222	216
Still enrolled	3	8	4	1	5	5	7	4	3	4
Total attrition	14	9	32	18	23	11	19	32	27	11
<i>Attrition-dropped out</i>										10
<i>Attrition-dismissed</i>										1
Completed late					4	6	2	4	2	2
Retention rate*	89.4%	91.9%	83.3%	89.7%	87.9%	93.0%	88.7%	85.5%	88.1%	93.5%
Attrition rate**	8.8%	4.3%	14.8%	9.7%	10.0%	4.8%	8.2%	12.9%	10.7%	4.8%
% Still enrolled	1.8%	3.8%	1.9%	0.5%	2.2%	2.2%	3.0%	1.6%	1.2%	1.7%

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

*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 indicated that the applicable information was not requested in the given year.

After three years of an increasing average attrition rate for ADN programs in the region, the average attrition rate for these programs declined over the last two years to 9.3%. Average attrition rates for BSN programs decreased from 9.5% in 2012-2013 to 0 over the last two years

Table 9. Attrition Rates by Program Type*, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	014- 2015
ADN	7.8%	4.5%	20.6%	14.3%	13.9%	4.8%	9.8%	15.3%	13.2%	9.3%
BSN						5.0%	5.1%	9.5%	7.4%	0.0%

*Changes to the survey that occurred between 2003-2004 and 2005-2006 may have affected the comparability of these data over time.

NCLEX Pass Rates

Over the last ten years, NCLEX pass rates in the Northern Sacramento Valley region have fluctuated for ADN and BSN program graduates. In 2014-2015, the highest average NCLEX pass rate was for BSN graduates. The NCLEX passing standard was increased in April 2013, which may have impacted NCLEX passing rates in subsequent years.

Table 10. First Time NCLEX Pass Rates* by Program Type, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
ADN	80.3%	85.5%	82.1%	85.1%	82.8%	85.8%	87.9%	87.9%	80.4%	83.1%
BSN	80.0%	95.3%	82.9%	84.4%	87.4%	92.8%	96.6%	88.7%	92.5%	97.0%

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

Employment of Recent Nursing Program Graduates³

The largest share of RN program graduates work in hospitals. Although this share had been decreasing in recent years, from a high of 93% in 2006-2007 to a low of 61% in 2010-2011, it has fluctuated over the past four years. In 2014-2015, Northern Sacramento Valley programs reported that 80% of graduates were employed in hospitals. The share of recent graduates employed as nurses in California had been in decline since 2007-2008 but has increased somewhat over the last four years. Northern Sacramento Valley nursing programs reported that less than 1% of recent graduates had been unable to find employment at the time of the survey, which is down from a high of 10% in 2010-2011.

Table 11. Employment Location for Recent Nursing Program Graduates, by Academic Year

	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Hospital	86.3%	92.7%	92.3%	80.0%	81.0%	61.3%	73.3%	88.1%	76.9%	79.7%
Long-term care facilities	1.7%	2.5%	3.3%	5.0%	5.0%	6.7%	8.0%	3.7%	8.2%	10.0%
Community/public health facilities	10.0%	1.3%	1.7%	20.0%	15.0%	6.3%	3.3%	2.5%	5.2%	3.7%
Other healthcare facilities	2.0%	4.3%	1.0%	7.5%	5.7%	5.0%	4.0%	2.0%	3.1%	2.5%
Pursuing additional nursing education ^T								1.3%	3.3%	0.8%
Other	0.0%	0.0%	1.7%	0.0%	0.0%	6.0%	5.7%	0.6%	3.7%	2.5%
Unable to find employment*					5.0%	9.5%	5.7%	1.8%	1.8%	0.8%
Employed in California	96.7%	98.7%	96.0%	89.0%	92.7%	80.0%	85.0%	86.0%	91.5%	89.8%

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

³ Graduates whose employment setting was reported as "unknown" have been excluded from this table. . In 2014-2015, on average, the employment setting was unknown for 4% of recent graduates.

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. All four of the Northern Sacramento Valley region nursing schools reported using clinical simulation in 2014-2015. Two (50%) of the 4 schools have plans to increase staff dedicated to administering clinical simulation at their school in the next 12 months.

The content areas using the most hours of clinical simulation on average are Medical/Surgical (36.0) and Fundamentals (9.3). The largest proportion of clinical hours in all programs is in direct patient care (74%) followed by non-direct patient care (17%) and simulation (9%).

Table 12. Average Hours Spent in Clinical Training by Content Area 2014-2015

Content Area	Direct Patient Care	Non-Direct Patient Care (excluding simulation)	Clinical Simulation	Avg Total Clinical Hours
Medical/Surgical	335.3	38.7	36.0	410.0
Fundamentals	128.0	113.7	9.3	251.0
Obstetrics	48.3	2.7	8.0	59.0
Pediatrics	43.3	2.7	6.7	52.7
Geriatrics	56.0	0.0	6.0	62.0
Psychiatry/Mental Health	32.7	4.0	5.3	42.0
Leadership/Management	62.3	0.0	4.0	66.3
Other	0.0	0.0	13.3	13.3
Total average clinical hours	706.0	161.7	88.7	956.3
Percent of Clinical Hours	73.8%	16.9%	9.3%	100.0%
Number of programs that reported	3	3	3	3

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.

BSN programs allot the largest percentage of clinical hours (76%) to direct patient care activities. BSN programs also allocated comparatively more time to clinical simulation (14% vs. 7% for ADN programs), while ADN programs allocated the most time to non-direct patient care.

Table 13. Average Hours Spent in Clinical Training by Program Area and Content Type

Content Area	Direct Patient Care		Non-Direct Patient Care (excluding simulation)		Clinical Simulation		Total Clinical Hours	
	ADN	BSN	ADN	BSN	ADN	BSN	ADN	BSN
Medical/Surgical	433.0	140.0	50.0	16.0	42.0	24.0	525.0	180.0
Fundamentals	117.5	149.0	140.5	60.0	6.0	16.0	264.0	225.0
Obstetrics	40.0	65.0	2.0	4.0	8.0	8.0	50.0	77.0
Pediatrics	40.0	50.0	2.0	4.0	8.0	4.0	50.0	58.0
Geriatrics	44.0	80.0	0.0	0.0	4.0	10.0	48.0	90.0
Psychiatry/ Mental Health	12.0	74.0	0.0	0.0	4.0	8.0	18.0	90.0
Leadership/ Management	32.0	123.0	0.0	0.0	0.0	12.0	32.0	135.0
Other	0.0	0.0	0.0	0.0	0.0	40.0	0.0	40.0
Total average clinical hours	718.5	681.0	196.5	92.0	72.0	122.0	987.0	895.0
Number of programs that reported*	2	1	2	1	2	1	2	1

*One BSN program did not report clinical hours.

In the 2014-2015 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 all content areas, the trend was to maintain the current overall number of clinical hours. If changes were indicated, the trend was towards decreasing hours in direct patient care and increasing hours in clinical simulation and sometimes non-direct patient care.

Table 14. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type

Fundamentals	Decrease hours	Maintain hours	Increase hours
Direct patient care	25.0%	75.0%	0.0%
Non-direct patient care	0.0%	100.0%	0.0%
Clinical simulation	0.0%	75.0%	25.0%
All clinical hours	0.0%	100.0%	0.0%
Medical/Surgical	Decrease hours	Maintain hours	Increase hours
Direct patient care	50.0%	25.0%	25.0%
Non-direct patient care	0.0%	50.0%	50.0%
Clinical simulation	0.0%	50.0%	50.0%
All clinical hours	0.0%	100.0%	0.0%

Table 14. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type, Continued

Obstetrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	50.0%	50.0%	0.0%
Non-direct patient care	0.0%	50.0%	50.0%
Clinical simulation	0.0%	50.0%	50.0%
All clinical hours	0.0%	100.0%	0.0%
Pediatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	50.0%	50.0%	0.0%
Non-direct patient care	0.0%	50.0%	50.0%
Clinical simulation	0.0%	50.0%	50.0%
All clinical hours	0.0%	100.0%	0.0%
Psychiatry/Mental Health	Decrease hours	Maintain hours	Increase hours
Direct patient care	25.0%	75.0%	0.0%
Non-direct patient care	25.0%	50.0%	25.0%
Clinical simulation	0.0%	75.0%	25.0%
All clinical hours	0.0%	100.0%	0.0%
Geriatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	25.0%	75.0%	0.0%
Non-direct patient care	25.0%	50.0%	25.0%
Clinical simulation	0.0%	75.0%	25.0%
All clinical hours	0.0%	100.0%	0.0%
Leadership/Management	Decrease hours	Maintain hours	Increase hours
Direct patient care	25.0%	50.0%	25.0%
Non-direct patient care	0.0%	75.0%	25.0%
Clinical simulation	0.0%	75.0%	25.0%
All clinical hours	0.0%	100.0%	0.0%
Other	Decrease hours	Maintain hours	Increase hours
Direct patient care	0.0%	100.0%	0.0%
Non-direct patient care	0.0%	100.0%	0.0%
Clinical simulation	0.0%	100.0%	0.0%
All clinical hours	0.0%	100.0%	0.0%

Respondents were asked why they were reducing the clinical hours in their program if they indicated in the prior questions that they were decreasing clinical hours in any content area or clinical experience type. The one program that answered this question noted that they were not reducing clinical hours overall but rather shifting hours to simulation.

Clinical Space & Clinical Practice Restrictions⁵

The number of nursing programs in the Northern Sacramento Valley region that reported being denied access to a clinical placement, unit or shift has varied over the last four years. In 2014-2015, two programs reported that they were denied clinical space, which affected 306 students. Neither of the programs reported being offered an alternative by the site for the lost space.

Table 15. RN Programs Denied Clinical Space, by Academic Year

	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Number of programs denied a clinical placement, unit or shift	3	2	1	3	2
Programs offered alternative by site*					0
Placements, units or shifts lost*					2
Number of programs that reported	4	4	4	4	4
Total number of students affected	31	180	56	126	306

*Significant changes to these questions for the 2014-2015 administration prevent comparison to the data from prior years.

In addition, 3 programs reported that there were fewer students allowed for clinical placements, units or shifts in 2014-2015 than in the prior year.

Table 15.1 RN Programs That Reported Fewer Students Allowed for a Clinical Placement, Unit, or Shift

	ADN	BSN	Total
Fewer students allowed for a clinical placement, unit, or shift	2	1	3
Total number of programs that reported	2	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 are not shown.

Over the past five years, programs in the region reported that staff nurse overload, decrease in patient census, competition for clinical space due to increase in number of nursing students in the region, and displacement by another program are the most common reasons for clinical space being unavailable. In 2014-2015, competition for clinical space due to more nursing students and displacement by another program were the most frequently reported reasons for clinical space being unavailable.

Table 16. Reasons for Clinical Space Being Unavailable*, by Academic Year

	2009-2010	2010-2011	2011-2012	2012-2013	2014-2015
Competition for clinical space due to increase in number of nursing students in region	100.0%	66.7%	100.0%	0.0%	100.0%
Displaced by another program	100.0%	33.3%	50.0%	100.0%	100.0%
Staff nurse overload or insufficient qualified staff	100.0%	33.3%	100.0%	100.0%	50.0%
Decrease in patient census	100.0%	33.3%	50.0%	100.0%	50.0%
Visit from Joint Commission or other accrediting agency				0.0%	50.0%
No longer accepting ADN students	0.0%	33.3%	0.0%	100.0%	50.0%
Clinical facility seeking magnet status	0.0%	0.0%	0.0%	0.0%	50.0%
Implementation of Electronic Health Records system	0.0%	0.0%	0.0%	0.0%	0.0%
Closure, or partial closure, of clinical facility	0.0%	100.0%	50.0%	0.0%	0.0%
Change in facility ownership/management		0.0%	50.0%	0.0%	0.0%
Nurse residency programs	0.0%	0.0%	0.0%	0.0%	0.0%
The facility began charging a fee (or other RN program offered to pay a fee) for the placement and the RN program would not pay				0.0%	0.0%
Other	0.0%	33.3%	0.0%	0.0%	0.0%
Number of programs that reported	1	3	2	1	2

*Data were collected for the first time in the 2009-2010 or 2010-2011 survey.

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 2014-2015, the only reported strategies (100%) were to replace the lost clinical space at a different clinical site currently used by the nursing program, and replacing the lost space with a new site.

Table 17. Strategies to Address the Loss of Clinical Space*, by Academic Year

	2011-2012	2012-2013	2013-2014	2014-2015
Clinical simulation	0%	100%	100%	100.0%
Replaced lost space at same clinical site	0%	0%	100%	66.7%
Replaced lost space at different site currently used by nursing program	0%	100%	0%	66.7%
Added/replaced lost space with new site	0%	0%	0%	0.0%
Reduced student admissions	0%	0%	0%	0.0%
Other	100%	100%	0%	0.0%
Number of programs that reported	1	2	1	3

*Data collected for the first time in 2011-12.

Two of the four nursing programs in the Northern Sacramento Valley reported an increase in out-of-hospital clinical placements in 2014-2015. Outpatient mental health and substance abuse services and surgery centers and ambulatory care centers were reported as the most frequently used alternative clinical placement sites overall.

Table 18. Alternative Out-of-Hospital Clinical Sites* Used by RN Programs, by Academic Year

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Outpatient mental health/substance abuse	50.0%	100.0%	100.0%	100.0%	100.0%
Surgery center/ambulatory care center	50.0%	0.0%	100.0%	50.0%	100.0%
Home health agency/home health service	50.0%	100.0%	100.0%	50.0%	50.0%
Public health or community health agency	50.0%	100.0%	0.0%	50.0%	50.0%
Skilled nursing/rehabilitation facility	50.0%	50.0%	0.0%	50.0%	50.0%
School health service (K-12 or college)	0.0%	0.0%	0.0%	0.0%	50.0%
Correctional facility, prison or jail	0.0%	0.0%	0.0%	0.0%	50.0%
Medical practice, clinic, physician office	0.0%	50.0%	0.0%	0.0%	0.0%
Hospice	0.0%	50.0%	0.0%	0.0%	0.0%
Renal dialysis unit	0.0%	0.0%	0.0%	0.0%	0.0%
Case management/disease management	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%
Urgent care, not hospital-based	0.0%	0.0%	0.0%	0.0%	0.0%
Other			0.0%	0.0%	0.0%
Number of programs that reported	2	2	1	2	2

*These data were collected for the first time in 2010-2011.

Over the last five years, schools in the Northern Sacramento Valley consistently reported that students in their pre-licensure nursing programs commonly encountered restricted access to electronic medical records, bar coding medication administration, and the clinical site itself due to a visit from an accrediting agency. In 2014-2015, three-quarters of the schools in the region reported that pre-licensure students in their programs had encountered restrictions to these same clinical practice areas.

Table 19. 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
Electronic Medical Records	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Bar coding medication administration	100.0%	100.0%	100.0%	100.0%	100.0%	66.7%
Clinical site due to visit from accrediting agency (Joint Commission)	66.7%	66.7%	100.0%	100.0%	50.0%	66.7%
IV medication administration	33.3%	66.7%	33.3%	0.0%	50.0%	66.7%
Automated medical supply cabinets	33.3%	66.7%	66.7%	66.7%	0.0%	66.7%
Some patients due to staff workload		33.3%	66.7%	33.3%	0.0%	66.7%
Alternative setting due to liability	0.0%	0.0%	0.0%	0.0%	0.0%	66.7%
Student health and safety requirements		33.3%	66.7%	0.0%	50.0%	33.3%
Glucometers	66.7%	66.7%	66.7%	66.7%	0.0%	33.3%
Direct communication with health team	33.3%	0.0%	33.3%	0.0%	0.0%	33.3%
Number of schools that reported	3	3	3	3	2	3

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”.

Schools reported that restricted student access to electronic medical records was primarily due to clinical site staff still learning the system (100%), liability (67%), and patient confidentiality (67%). Schools reported that students were restricted from using medication administration systems primarily due to liability (67%).

Table 20. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration, 2013-2014 & 2014-2015

	Electronic Medical Records		Medication Administration	
	2013-2014	2014-2015	2013-2014	2014-2015
Staff still learning and unable to assure documentation standards are being met	100%	100%	50%	33%
Liability	100%	67%	50%	67%
Patient confidentiality	100%	67%	50%	33%
Insufficient time to train students	100%	33%	50%	33%
Staff fatigue/burnout	0%	33%	50%	33%
Cost for training	100%	33%	50%	33%
Other	0%	0%	0%	0%
Number of schools that reported	2	3	2	3

Note: Data collected for the first time in 2013-2014. Numbers indicate the percent of schools reporting these restrictions as “uncommon”, “common” or “very common” to capture any instances where reasons were reported.

A majority of nursing schools in the region compensate for training in areas of restricted student access by using practice software (100%), providing student training in the simulation lab and classroom, and ensuring all students have access to sites that train them in this area and (67%).

Table 21. How the Nursing Program Compensates for Training in Areas of Restricted Access

	2013-2014 % Schools	2014-2015 % Schools
Purchase practice software, such as SIM Chart	100.0%	100.0%
Training students in the simulation lab	100.0%	66.7%
Training students in the classroom	100.0%	66.7%
Ensuring all students have access to sites that train them in this area	50.0%	66.7%
Other	0.0%	0.0%
Number of schools	2	3

Note: Data collected for the first time in 2013-2014.

Faculty Census Data⁶

On October 15, 2015, there were 90 total nursing faculty⁷ in the Northern Sacramento Valley. Of these faculty, 40% (n=36) were full-time and 61% (n=55) were part-time. The need for faculty continues to outpace the number of active faculty. On October 15, 2015, there were 12 vacant faculty positions in the region. These vacancies represent an 11.8% faculty vacancy rate overall (12.2% for full-time faculty and 11.3% for part-time faculty), which is the highest rate in the past ten years.

Table 22. Faculty Census Data, by Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*
Total Faculty	63	84	80	82	102	99	80	83	92	90
<i>Full-time</i>	30	33	36	35	36	37	33	37	35	36
<i>Part-time</i>	33	51	44	47	66	62	47	46	57	55
Vacancy Rate**	4.5%	6.7%	0.0%	3.5%	8.1%	4.8%	2.4%	8.8%	9.8%	11.8%
<i>Vacancies</i>	3	6	0	3	9	5	2	8	10	12

*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)

For the past five years, three schools in the Northern Sacramento Valley reported that their faculty have overloaded schedules. All three schools reported paying the faculty extra for the overloaded schedule.

Table 23. Faculty with Overloaded Schedules*, by Academic Year

	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015
Schools with overloaded faculty	2	2	3	3	3	3	3
Share of schools that pay faculty extra for the overload	100.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total number of schools	3	3	4	4	4	4	4

*These data were collected for the first time in 2008-2009.

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 the region's nursing schools.

Summary

The Northern Sacramento Valley region reported a total of four nursing programs in 2014-2015, which has been consistent since 2010-2011. In 2014-2015, one program in the region reported collaborating with another program that offers a higher degree than offered at their own institution.

In 2014-2015, there were more admission spaces available in Northern Sacramento Valley pre-licensure nursing education programs than there were ten years ago. Although new enrollments have fluctuated during this time period, they have remained relatively constant over the past four years. Programs in the region continue to receive more qualified applications than can be accommodated. In 2014-2015, the region received 1,200 applications, 22% (n=267) of which enrolled.

Nursing programs in the region graduated 52% (n=86) more students in 2014-2015 than ten years before. However, the number of students completing these programs has fluctuated over the past five years – from 267 students in 2010-2011 to 229 in 2013-2014 and back up to 250 in 2014-2015. The average retention rate in the region increased over the two years, while the average attrition rate decreased during the same time period. For the past four years, average attrition rates for BSN programs have been lower than for ADN programs.

The share of new graduates working as nurses in California has been generally increasing since 2010-2011, comprising 90% of new graduates in 2014-2015. At the time of the survey, less than 1% of new graduates in the region were unable to find employment in nursing, a decrease from the high of 10% in 2010-2011 and the lowest level in the last six years.

All four programs in the Northern Sacramento Valley have been using clinical simulation since 2010-2011, and one-half (n=2) reported plans to increase staff dedicated to administering clinical simulation in the next 12 months. One-quarter to one-half of schools planned to increase the number of hours spent in direct patient care in nearly every content area. The importance of clinical simulation is underscored by data showing that three-quarters (75%, n=3) schools in the Northern Sacramento Valley encountered restrictions to clinical space and practice imposed on them by clinical facilities.

Expansion in RN education has required nursing programs to hire more faculty over the last ten years to teach the growing number of students. The total number of nursing faculty in the region increased over the past three years. In 2015, there were 90 faculty and 12 faculty vacancies in the region, representing a vacancy rate of 11.8% overall (12.2% for full-time faculty and 11.3% for part-time faculty).

APPENDICES

APPENDIX A – Northern Sacramento Valley Nursing Education Programs

ADN Programs (2)

Butte College
Shasta College

BSN Programs (2)

CSU Chico
Simpson University

APPENDIX B – BRN Education Issues Workgroup Members

Members

	<u>Organization</u>
Loucine Huckabay, Chair	California State University, Long Beach
Judee Berg	HealthImpact (formerly CINHC)
Audrey Berman	Samuel Merritt University
Stephanie L. Decker	Kaiser Permanente National Patient Care Services
Brenda Fong	Community College Chancellor's Office
Deloras Jones	Independent Consultant
Judy Martin-Holland	University of California, San Francisco
Robyn Nelson	West Coast University
Tammy Rice	Saddleback College
Stephanie R. Robinson	Fresno City College
Paulina Van	Samuel Merritt University

Ex-Officio Member

Louise Bailey	California Board of Registered Nursing
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Project Manager

Julie Campbell-Warnock	California Board of Registered Nursing
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