
California Board of Registered Nursing

2015-2016 Annual School Report

Data Summary and Historical Trend Analysis

Southern Border

June 15, 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

Contents

PREFACE	1
DATA SUMMARY AND HISTORICAL TREND ANALYSIS.....	2
TRENDS IN PRE-LICENSURE NURSING PROGRAMS	2
<i>Number of Nursing Programs.....</i>	<i>2</i>
<i>Admission Spaces and New Student Enrollments</i>	<i>3</i>
<i>Student Census Data.....</i>	<i>6</i>
<i>Student Completions.....</i>	<i>6</i>
<i>Retention and Attrition Rates.....</i>	<i>7</i>
<i>NCLEX Pass Rates.....</i>	<i>8</i>
<i>Employment of Recent Nursing Program Graduates.....</i>	<i>9</i>
<i>Clinical Training in Nursing Education.....</i>	<i>10</i>
<i>Clinical Space & Clinical Practice Restrictions.....</i>	<i>14</i>
<i>Faculty Census Data.....</i>	<i>20</i>
SUMMARY	22
APPENDICES.....	23
APPENDIX A – SOUTHERN BORDER NURSING EDUCATION PROGRAMS	23
APPENDIX B – BRN EDUCATION ISSUES WORKGROUP MEMBERS	24

Tables

Table 1. Number of Nursing Programs by Academic Year	2
Table 2. Partnerships by Academic Year	3
Table 3. Availability and Utilization of Admission Spaces, by Academic Year	3
Table 4. Student Admission Applications by Academic Year	4
Table 5. New Student Enrollment by Program Type by Academic Year	4
Table 6. Percent of Programs that Enrolled Fewer Students by Academic Year	5
Table 7. Reasons for Enrolling Fewer Students by Academic Year	5
Table 8. Student Census Data by Program Type by Year.....	6
Table 9. Student Completions by Program Type by Academic Year	6
Table 10. Student Retention and Attrition by Academic Year.....	7
Table 11. Attrition Rates by Program Type by Academic Year	7
Table 12. First Time NCLEX Pass Rates by Program Type by Academic Year	8
Table 13. Employment Location for Recent Nursing Program Graduates by Academic Year	9
Table 14. Average Hours Spent in Clinical Training by Content Area and Academic Year	10
Table 15. Average Hours Spent in Clinical Training by Program Area and Content Type, 2015-2016	11
Table 16. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type, 2015-2016.....	11
Table 17. Why Program is Reducing Clinical Hours by Academic Year	13
Table 18. RN Programs Denied Clinical Space by Academic Year	14
Table 19. RN Programs That Reported Fewer Students Allowed for Clinical Space by Academic Year	14
Table 20. Reasons for Clinical Space Being Unavailable by Academic Year	15
Table 21. Reasons for Clinical Space Being Unavailable by Program Type, 2015-2016	16
Table 22. Strategies to Address the Loss of Clinical Space by Academic Year	16
Table 23. Alternative Out-of-Hospital Clinical Sites Used by RN Programs by Academic Year	17
Table 24. Common Types of Restricted Access in the Clinical Setting for RN Students by Academic Year.....	18
Table 25. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration by Academic Year	19
Table 26. How the Nursing Program Compensates for Training in Areas of Restricted Access by Academic Year	19
Table 27. Faculty Census Data by Year	20
Table 28. Reasons for Hiring More Part-time Faculty 2015-2016	20
Table 29. Faculty with Overloaded Schedules by Academic Year	21

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 Southern Border, which includes San Diego and Imperial counties. 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 2015-2016 is 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. 2015-2016 reporting for the Southern Border region may be affected by the change in reporting for satellite campus data.

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

There have been 13 nursing programs in the Southern Border region since 2006-2007. The only change from the previous year was one ELM program converted to a BSN program which did not affect the total number of programs. In 2015-2016, the distribution of programs by program type was: seven ADN programs, five BSN programs, and one ELM program. The majority (62%) of pre-licensure nursing programs in the region are public, and this has stayed constant over the last ten years.

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	13	13	13	13	13	13	13	13	13	13
ADN	8	8	7	7	7	7	7	7	7	7
BSN	4	4	4	4	4	4	5	4	4	5
ELM	1	1	2	2	2	2	1	2	2	1
Public	8	8	8	8	8	8	8	8	8	8
Private	5	5	5	5	5	5	5	5	5	5
Total number of schools	12	12	13	13	13	13	13	13	13	13

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.

The share of nursing programs in the Southern Border region that partner with another nursing school that offers a higher degree has increased from three programs in 2011-2012 to nine programs in 2015-2016. These nine programs represent more than half (69%) of nursing programs in the region.

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	0	1	1	5	3	3	4	8	6	9
Formal collaboration							50.0%	12.5%	66.7%	
Informal collaboration							75.0%	100.0%	83.3%	
Number of programs that reported	13	13	13	13	13	13	13	13	13	13

Note: Blank cells indicate the information was not requested

Admission Spaces and New Student Enrollments

The availability of admission spaces for new students in the Southern Border region and number of new students enrolling in those spaces has fluctuated over time. In 2015-2016, programs in the region reported a total of 1,157 admission spaces available, which were filled with a total of 1,354 new students. Southern Border programs have enrolled more students than they had admission spaces in nine of the last ten years, and in 2015-2016 six (46%) of schools overenrolled students.

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	1,173	1,176	1,140	1,212	1,351	1,148	1,099	1,203	1,175	1,157
New student enrollments	1,211	1,241	1,276	1,484	1,523	1,223	1,033	1,303	1,383	1,354
% Spaces filled with new student enrollments	103.2%	105.5%	111.9%	122.4%	112.7%	106.5%	94.0%	108.3%	117.7%	117.0%

[†] 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.

Southern Border nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. The number of qualified applications received by programs in the region has fluctuated over time. In 2015-2016, 43% of the 2,390 qualified applications to programs in the region were not able to enroll (n=1,036).

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	2,637	2,378	2,802	2,751	2,117	2,887	2,555	2,501	2,264	2,390
ADN	1,433	1,377	1,677	1,448	1,240	1,467	1,238	1,380	1,128	1,360
BSN	1,104	901	1,011	1,203	745	1,188	1,088	820	1,004	930
ELM	100	100	114	100	132	232	229	301	132	100
% Qualified applications not enrolled	54.1%	47.8%	54.5%	46.1%	28.1%	57.6%	59.6%	47.9%	38.9%	43.3%

*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.

New student enrollments in the region in 2015-2016 has declined 11% (n=169) from a high of 1,523 in 2010-2011 but has increased 12% (n=143) over the last decade. The distribution of new enrollments by program type was 40% ADN (n=537), 56% BSN (n=764), and 4% ELM (n=53). There is a greater share of students in public programs (58%) than in private programs (42%).

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	1,211	1,241	1,276	1,484	1,523	1,223	1,033	1,303	1,383	1,354
ADN	653	648	608	660	624	596	553	610	545	537
BSN	521	550	612	699	757	521	371	554	783	764
ELM	37	43	56	125	142	106	109	139	55	53
Private	451	448	451	661	669	596	401	664	586	574
Public	760	793	825	823	854	627	632	639	797	780

† 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.

Two programs in the Southern Border region reported that they enrolled fewer students in 2015-2016 compared to the previous year. The most common reason programs gave for enrolling fewer students were due to other reasons not listed on the survey, including closure of a program

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	42.9%	7	0.0%	7
BSN	0.0%	4	40.0%	5
ELM	50.0%	2	0.0%	1
Total	30.8%	13	15.4%	13

Table 7. Reasons for Enrolling Fewer Students by Academic Year

	2014-2015	2015-2016
College/university / BRN requirement to reduce enrollment	75.0%	50.0%
Other	25.0%	50.0%
Accepted students did not enroll	0.0%	0.0%
Insufficient faculty	0.0%	0.0%
Lost funding	0.0%	0.0%
To reduce costs	0.0%	0.0%
Unable to secure clinical placements for all students	0.0%	0.0%
All Reporting	4	2

Student Census Data

The number of students enrolled in nursing programs in the Southern Border region in 2016 decreased 12% (n=340) from the prior year's ten-year high of 2,815 students. ADN programs experienced a decline of 15% (n=141), while BSN programs declined 12% (n=216). In contrast, ELM programs saw an 18% (n=17) increase from the previous year. As of 2015-2016, a total of 2,475 students were enrolled in one of Southern Border region's pre-licensure nursing program. The 2016 census of the region's programs indicates that 33% (n=823) of students were enrolled in ADN programs, 62% (n=1,540) in BSN programs, and 5% (n=112) in ELM programs.

Table 8. Student Census Data*† by Program Type by Year

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADN	1,104	1,208	1,063	1,027	1,021	1,049	949	982	964	823
BSN	1,052	1,062	1,301	1,469	1,084	1,158	1,296	1,159	1,756	1,540
ELM	43	85	143	206	183	211	184	237	95	112
Total nursing students	2,199	2,355	2,507	2,702	2,288	2,418	2,429	2,378	2,815	2,475

*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 Southern Border pre-licensure nursing programs have increased 59% (n=462) over the last ten years. In 2015-2016, student completions were at a ten-year high, although this may be due to changes in how satellite data are reported. Of the 1,250 students who completed a program in 2015-2016, 39% (n=493) completed ADN programs, 57% (n=715) completed BSN programs, and 3% (n=42) completed ELM programs.

Table 9. 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	503	576	573	549	468	442	493	508	500	493
BSN	250	288	447	641	557	477	458	441	605	715
ELM	35	0	42	53	100	174	98	98	76	42
Total student completions	788	864	1,062	1,243	1,125	1,093	1,049	1,047	1,181	1,250

† 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

On-time retention rates in the Southern Border region reported a ten-year high of 88% in 2014-2015 but declined again in 2015-2016 mainly due to the number of students reported as still enrolled. Of the 1,159 students scheduled to complete one of the region's pre-licensure nursing programs in the 2015-2016 academic year, 75% (n=867) completed the program on-time, 16% (n=185) are still enrolled, and 9% (n=107) dropped out or were disqualified from the program.

Table 10. 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	820	926	1,186	1,291	1,065	1,159	928	1,153	1,207	1,159
Completed On Time	649	712	914	1,015	902	989	684	955	1,063	867
Still Enrolled	64	61	100	114	53	49	104	19	38	185
Total Attrition	107	153	172	162	110	121	140	179	106	107
<i>Attrition-Dropped Out</i>									60	53
<i>Attrition-Dismissed</i>									46	54
Completed Late [‡]				64	65	49	28	29	72	50
Retention rate*	79.1%	76.9%	77.1%	78.6%	84.7%	85.3%	73.7%	82.8%	88.1%	74.8%
Attrition rate**	13.0%	16.5%	14.5%	12.5%	10.3%	10.4%	15.1%	15.5%	8.8%	9.2%
% Still enrolled	7.8%	6.6%	8.4%	8.8%	5.0%	4.2%	11.2%	1.6%	3.1%	16.0%

[‡] 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.

Attrition rates among the region's pre-licensure nursing programs vary by program type. Average attrition rates are lowest among ELM programs. In 2015-2016 the average ADN and BSN program attrition rates were among the lowest reported in the last ten years. Attrition rates for private programs have generally been lower, as is the case this year.

Table 11. Attrition Rates by Program Type[†] by Academic Year

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
ADN	11.6%	14.8%	18.4%	16.7%	16.4%	18.2%	18.1%	15.9%	12.3%	11.5%
BSN	16.7%	19.1%	11.2%	10.8%	5.7%	6.0%	13.4%	16.4%	6.3%	7.9%
ELM	5.4%	-	3.5%	2.1%	4.1%	2.8%	5.7%	9.1%	4.8%	2.3%
Private	9.6%	20.2%	13.0%	12.1%	8.5%	4.6%	12.4%	16.4%	3.7%	6.0%
Public	15.2%	14.5%	15.3%	12.8%	11.7%	15.3%	16.6%	14.9%	13.0%	12.5%

[†] 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.

NCLEX Pass Rates

Over the last ten years, NCLEX pass rates in the Southern Border region have fluctuated. In 2015-2016, the highest average NCLEX pass rate was for BSN graduates. All programs had decreases in their NCLEX pass rates in 2015-2016 in comparison to the previous year. The NCLEX passing standard was increased in April 2013, which may have impacted NCLEX passing rates for the subsequent years.

Table 12. 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	87.0%	80.4%	84.5%	88.6%	84.3%	92.4%	88.0%	82.6%	87.5%	85.8%
BSN	93.0%	88.6%	90.9%	86.1%	87.4%	89.5%	91.5%	92.8%	94.3%	92.7%
ELM	94.9%	-	92.3%	62.5%	82.9%	80.2%	84.4%	72.0%	91.7%	-

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

Employment of Recent Nursing Program Graduates³

While hospitals represent the most frequently reported employment setting for recent graduates of pre-licensure programs in the Southern Border region, this share has shown an overall decline from a high of 93% of recent graduates in 2007-2008 to 59% in 2015-2016. In 2015-2016, the largest shares in non-hospital based employment for these graduates were in other healthcare facilities (3%). Programs reported that 21% of recent graduates are pursuing additional nursing education and that 9% of recent graduates had not found employment in nursing at the time of survey which is significantly lower than that reported in previous years. The average regional share of new graduates employed in nursing in California has fluctuated over the last ten years and has declined from a high of 95% in 2007-2008 to 68% in 2015-2016 which is down significantly from the previous year (84%).

Table 13. 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	78.5%	93.2%	83.3%	55.6%	56.6%	63.1%	67.4%	51.4%	59.0%	58.6%
Pursuing additional nursing education							4.3%	3.2%	16.3%	21.4%
Unable to find employment				30.7%	20.3%	22.5%	17.4%	17.2%	9.8%	8.9%
Not yet license										3.4%
Other healthcare facilities	1.8%	2.2%	6.4%	5.6%	4.7%	4.3%	1.4%	12.3%	5.0%	3.1%
Community/public health facilities	1.6%	2.4%	6.1%	7.3%	3.8%	2.2%	2.5%	6.3%	3.8%	2.3%
Long-term care facilities	1.7%	2.0%	6.9%	5.0%	4.3%	5.2%	5.1%	7.4%	4.9%	2.2%
Other setting	3.2%	0.2%	9.2%	11.4%	3.9%	2.6%	1.9%	2.3%	1.1%	0.0%
Employed in California	79.4%	95.2%	93.5%	77.1%	72.6%	73.0%	66.6%	73.6%	84.0%	67.6%

[†]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.

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 36% 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 use⁵. Eleven of the 13 Southern Border nursing programs reported using clinical simulation in 2015-2016. Almost a quarter (23%, n=3) of the 13 programs 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 (26) and Obstetrics (11.3). The largest proportion of clinical hours in all programs is in direct patient care (79%) followed by skills lab (14%) and simulation (7%).

Overall, programs reported more clinical hours on average in 2014-2015 than in 2015-2016. In 2015-2016, schools reported on average fewer clinical hours in many content areas in 2015-2016 compared to the prior year. Programs also reported allocating a greater proportion of hours to skills labs and clinical simulation and less to direct patient care in 2015-2016 compared to 2014-2015.

Table 14. 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	243.7	207.2	16.6	37.8	26.6	26.0	286.9	267.5
Fundamentals	91.7	88.6	31.7	45.1	6.7	6.8	130.1	140.5
Obstetrics	75.2	66.5	11.2	12.8	7.5	11.3	93.8	90.6
Pediatrics	76.0	67.7	11.0	11.6	6.5	9.5	93.5	88.8
Geriatrics	110.1	98.5	0.0	7.7	3.8	6.3	113.9	112.5
Psychiatry/Mental Health	77.6	70.8	9.0	9.5	6.8	3.1	93.4	83.5
Leadership/Management	79.4	70.0	0.7	0.0	2.2	0.5	82.3	70.5
Other	41.0	9.0	1.3	0.0	1.2	0.7	43.5	9.7
Total average clinical hours	794.7	678.4	81.5	121.2	61.2	64.2	937.4	863.8
Percent of clinical hours	84.8%	78.5%	8.7%	14.0%	6.5%	7.4%	100.0%	100.0%
Number of programs that reported	12	11	12	11	12	11	12	11

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.

⁵ One school did not use clinical simulation and one did not answer this question.

The largest proportion of clinical hours in ADN and BSN Southern Border region programs is in direct patient care (82% and 70%).

Table 15. 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	267.3	102.0	0.0	48.8	21.3	0.0	30.3	18.5	0.0	339.4	141.8	0.0
Fundamentals	106.1	58.0	0.0	50.9	35.0	0.0	6.6	7.3	0.0	163.6	100.3	0.0
Obstetrics	69.7	61.0	0.0	6.4	24.0	0.0	8.6	16.0	0.0	84.7	101.0	0.0
Pediatrics	70.4	63.0	0.0	4.6	24.0	0.0	10.6	7.5	0.0	85.6	94.5	0.0
Geriatrics	130.8	42.0	0.0	3.6	15.0	0.0	8.7	2.0	0.0	143.1	59.0	0.0
Psychiatry/ Mental Health	72.7	67.5	0.0	3.0	21.0	0.0	1.7	5.5	0.0	77.4	94.0	0.0
Leadership/ Management	71.3	67.8	0.0	0.0	0.0	0.0	0.0	1.5	0.0	71.3	69.3	0.0
Other	14.1	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	14.1	2.0	0.0
Total average clinical hours	802.5	461.3	0.0	110.3	140.3	0.0	66.4	60.3	0.0	979.2	661.8	0.0
Number of programs that reported	7	4	0	7	4	0	7	4	0	7	4	0

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. The only content areas where a program planned to increase clinical hours were fundamentals and geriatrics, and in both those areas, the increase was largely if not entirely in clinical simulation. There were plans to decrease clinical hours in nearly all content areas, predominantly in direct patient care.

Table 16. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type*, 2015-2016

Medical/Surgical	Decrease hours	Maintain hours	Increase hours
Direct patient care	18.2%	72.7%	0.0%
Skills lab	0.0%	90.0%	0.0%
Clinical simulation	0.0%	91.7%	0.0%
Total clinical hours	18.2%	72.7%	0.0%
Fundamentals	Decrease hours	Maintain hours	Increase hours
Direct patient care	18.2%	72.7%	0.0%
Skills lab	0.0%	80.0%	10.0%
Clinical simulation	0.0%	63.6%	18.2%
Total clinical hours	9.1%	72.7%	9.1%

Table 16. Planned Increase or Decrease in Clinical Hours by Content Area and Clinical Experience Type*, 2015-2016 (Continued)

Obstetrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	18.2%	72.7%	0.0%
Skills lab	10.0%	70.0%	0.0%
Clinical simulation	8.3%	66.7%	8.3%
Total clinical hours	9.1%	81.8%	0.0%
Pediatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	27.3%	63.6%	0.0%
Skills lab	10.0%	60.0%	10.0%
Clinical simulation	16.7%	50.0%	16.7%
Total clinical hours	9.1%	81.8%	0.0%
Geriatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	10.0%	70.0%	10.0%
Skills lab	0.0%	77.8%	0.0%
Clinical simulation	0.0%	72.7%	18.2%
Total clinical hours	10.0%	70.0%	10.0%
Psychiatry/Mental Health	Decrease hours	Maintain hours	Increase hours
Direct patient care	18.2%	72.7%	0.0%
Skills lab	0.0%	70.0%	0.0%
Clinical simulation	0.0%	72.7%	9.1%
Total clinical hours	9.1%	81.8%	0.0%
Leadership/Management	Decrease hours	Maintain hours	Increase hours
Direct patient care	0.0%	80.0%	0.0%
Skills lab	0.0%	60.0%	0.0%
Clinical simulation	0.0%	70.0%	0.0%
Total clinical hours	0.0%	80.0%	0.0%
Other	Decrease hours	Maintain hours	Increase hours
Direct Patient Care	0.0%	33.3%	0.0%
Non-Direct Patient Care	0.0%	33.3%	0.0%
Clinical Simulation	0.0%	50.0%	0.0%
Total clinical hours	0.0%	33.3%	0.0%

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

Respondents were asked why they were reducing the clinical hours in their program if they indicated in the prior questions that they were decreasing clinical hours in any content area or clinical experience type. Only two programs reported they would be reducing clinical hours. The reason given for decreasing clinical hours was that students can meet learning objectives in less time and to increase focus on geriatric and care for chronic conditions.

Table 17. Why Program is Reducing Clinical Hours by Academic Year

	2014-2015	2015-2016
Can teach required content/ Students can meet learning objectives in less time	0.0%	50.0%
Other	100.0%	50.0%
Unable to find sufficient clinical space	0.0%	0.0%
Funding issues or unavailable funding	0.0%	0.0%
Insufficient clinical faculty	0.0%	0.0%
Total reporting	1	2

Clinical Space & Clinical Practice Restrictions⁶

More than half (62%, n=8) of Southern Border region nursing programs reported being denied access to a clinical placement, unit or shift in 2015-2016. In 2015-2016, 50% (n=4) of programs that had been denied clinical placements, units or shifts were offered an alternative by the same clinical site.

The lack of access to clinical space resulted in a loss of 68 clinical placements, units or shifts, which affected 173 students. In addition, nine (75%) out of the 12 that reported were allowed fewer students for a clinical placement, unit, or shift in this year than in the prior year.

Table 18. 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	11	12	10	8	10	8
Programs offered alternative by site*					3	4
Placements, units or shifts lost*					139	68
Number of programs that reported	13	12	13	13	12	12
Total number of students affected	258	124	172	217	235	173

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

Table 19. RN Programs That Reported Fewer Students Allowed for Clinical Space by Academic Year

	2014- 2015	2015- 2016
ADN	5	4
BSN	4	5
ELM	1	0
All Programs	10	9

⁶ 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 frequently reported reasons why schools were denied clinical space in 2015-2016 were staff nurse overload or insufficient qualified staff, clinical facility seeking magnet status, competition for clinical space, decrease in patient census, and nurse residency programs. and displaced by another program. These reasons have been consistently the most common reported across time. Competition for clinical space due to increase in number of nursing students in the Southern Border region decreased from 82% in 2014-2015 to 43% in 2015-2016.

Table 20. Reasons for Clinical Space Being Unavailable by Academic Year

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Staff nurse overload or insufficient qualified staff	50.0%	27.3%	66.7%	20.0%	62.5%	63.6%	50.0%
Clinical facility seeking magnet status	30.0%	18.2%	25.0%	10.0%	25.0%	18.2%	37.5%
Competition for clinical space due to increase in number of nursing students in region	80.0%	72.7%	75.0%	60.0%	62.5%	81.8%	37.5%
Decrease in patient census	40.0%	0.0%	0.0%	10.0%	25.0%	36.4%	37.5%
Displaced by another program	90.0%	45.5%	75.0%	60.0%	50.0%	63.6%	37.5%
Nurse residency programs	10.0%	9.1%	33.3%	30.0%	37.5%	45.5%	37.5%
Change in facility ownership/management		18.2%	0.0%	20.0%	25.0%	18.2%	25.0%
Closure, or partial closure, of clinical facility		27.3%	25.0%	40.0%	25.0%	27.3%	25.0%
Implementation of Electronic Health Records system				10.0%	0.0%	9.1%	12.5%
No longer accepting ADN students	40.0%	18.2%	41.7%	30.0%	37.5%	18.2%	12.5%
Other	10.0%	9.1%	0.0%	20.0%	12.5%	0.0%	12.5%
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					0.0%	0.0%	12.5%
Visit from Joint Commission or other accrediting agency				0.0%	0.0%	27.3%	12.5%
Number of programs that reported	10	11	12	10	8	11	8

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

ADN programs reported decrease in patient census, staff nurse overload or insufficient qualified staff, nurse residency programs, and clinical facility seeking magnet status as reasons why clinical spaces are unavailable. For BSN programs, staff nurse overload or insufficient qualified staff was also the primary barrier along with competition for clinical space and displaced by another program.

Table 21. Reasons for Clinical Space Being Unavailable by Program Type, 2015-2016

	ADN	BSN	ELM	Total
Staff nurse overload or insufficient qualified staff	50.0%	50.0%	0.0%	50.0%
Clinical facility seeking magnet status	50.0%	25.0%	0.0%	37.5%
Competition for clinical space due to increase in number of nursing students in region	25.0%	50.0%	0.0%	37.5%
Decrease in patient census	50.0%	25.0%	0.0%	37.5%
Displaced by another program	25.0%	50.0%	0.0%	37.5%
Nurse residency programs	50.0%	25.0%	0.0%	37.5%
Change in facility ownership/management	0.0%	50.0%	0.0%	25.0%
Closure, or partial closure, of clinical facility	0.0%	50.0%	0.0%	25.0%
Implementation of Electronic Health Records system	0.0%	25.0%	0.0%	12.5%
No longer accepting ADN students	25.0%	0.0%	0.0%	12.5%
Other	0.0%	25.0%	0.0%	12.5%
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	0.0%	25.0%	0.0%	12.5%
Visit from Joint Commission or other accrediting agency	0.0%	25.0%	0.0%	12.5%
Number of programs that reported	4	4	0	8

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 (71%) was to replace lost space at the same clinical site or at a different site currently used by the nursing program. More than half of the programs also reported being able to add or replace lost space with a new site (57%).

Table 22. Strategies to Address the Loss of Clinical Space by Academic Year

	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Replaced lost space at same clinical site	66.7%	30.0%	37.5%	36.4%	71.4%
Replaced lost space at different site currently used by nursing program	66.7%	60.0%	50.0%	72.7%	71.4%
Added/replaced lost space with new site	58.3%	70.0%	75.0%	54.5%	57.1%
Clinical simulation	33.3%	20.0%	25.0%	36.4%	42.9%
Reduced student admissions	8.3%	20.0%	0.0%	0.0%	0.0%
Other	8.3%	0.0%	0.0%	9.1%	0.0%
Number of programs that reported	12	10	8	11	7

Five nursing programs in the region reported increasing their out of hospital clinical placements in the past year. In 2015-2016, 60% of these programs reported placing students in skilled nursing/rehabilitation facility, home health agency/home health service, or public health/community health agency as an alternative clinical site.

Table 23. 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
Skilled nursing/rehabilitation facility	70.0%	50.0%	50.0%	16.7%	50.0%	60.0%
Home health agency/home health service	40.0%	75.0%	33.3%	16.7%	25.0%	60.0%
Public health or community health agency	40.0%	50.0%	66.7%	33.3%	75.0%	60.0%
Medical practice, clinic, physician office	30.0%	25.0%	16.7%	33.3%	25.0%	40.0%
Other			16.7%	16.7%	25.0%	40.0%
Surgery center/ambulatory care center	0.0%	12.5%	16.7%	0.0%	50.0%	20.0%
Hospice	40.0%	37.5%	66.7%	83.3%	75.0%	20.0%
Case management/disease management	10.0%	25.0%	0.0%	0.0%	0.0%	20.0%
Urgent care, not hospital-based	10.0%	12.5%	16.7%	0.0%	25.0%	0.0%
Outpatient mental health/substance abuse	50.0%	62.5%	16.7%	0.0%	25.0%	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%	16.7%	0.0%	25.0%	0.0%
Correctional facility, prison or jail	10.0%	25.0%	0.0%	16.7%	0.0%	0.0%
School health service (K-12 or college)	30.0%	25.0%	66.7%	16.7%	25.0%	0.0%
Number of programs that reported	10	8	6	6	4	5

In 2015-2016, 54% (n=7) of Southern Border schools reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities. This is the lowest number reported since this data has been collected. Over the past seven years in which these data have been collected the most common type of restricted access students faced was to the clinical site itself, due to a visit from the Joint Commission or another accrediting agency. In 2015-2016, other common restrictions were bar coding medication administration (71%), electronic medical records (57%), glucometers (57%), and IV medication administration (57%).

Table 24. 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	22.2%	30.0%	50.0%	50.0%	44.4%	37.5%	71.4%
Clinical site due to visit from accrediting agency (Joint Commission)	56.7%	80.0%	80.0%	87.5%	77.8%	87.5%	71.4%
Electronic Medical Records	33.3%	40.0%	60.0%	75.0%	55.6%	50.0%	57.1%
Glucometers	11.1%	10.0%	20.0%	0.0%	11.1%	12.5%	57.1%
IV medication administration	0.0%	10.0%	10.0%	12.5%	33.3%	12.5%	57.1%
Automated medical supply cabinets	11.1%	20.0%	20.0%	0.0%	44.4%	62.5%	42.9%
Alternative setting due to liability	11.1%	10.0%	40.0%	12.5%	11.1%	12.5%	42.9%
Some patients due to staff workload		20.0%	60.0%	37.5%	66.7%	37.5%	42.9%
Student health and safety requirements		10.0%	30.0%	25.0%	33.3%	50.0%	42.9%
Direct communication with health team	0.0%	20.0%	30.0%	25.0%	11.1%	12.5%	14.3%
Number of schools that reported	9	10	10	8	9	8	7

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, schools reported insufficient time to train students (83%) as the most frequent reason for restricted student access to electronic medical records, followed by liability. Staff fatigue/burnout decreased over the past three years from 50% in 2013-2014 to 29% in 2015-2016.

The top reasons reported for restricted access to medication administration systems were liability (50%) and insufficient time to train students (50%). The proportion of schools reporting staff still learning the system as a reason decreased from 40% in 2014-2015 to 17% in 2015-2016. Staff fatigue/burnout also decreased from 60% in 2014-2015 to 33% in 2015-2016.

Table 25. 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
Insufficient time to train students	75.0%	75.0%	83.3%	53.8%	40.0%	50.0%
Liability	50.0%	37.5%	50.0%	46.2%	60.0%	50.0%
Staff fatigue/burnout	50.0%	37.5%	33.3%	61.5%	60.0%	33.3%
Staff still learning and unable to assure documentation standards are being met	25.0%	12.5%	16.7%	15.4%	40.0%	16.7%
Cost for training	12.5%	12.5%	33.3%	15.4%	0.0%	0.0%
Other	25.0%	0.0%	0.0%	23.1%	20.0%	0.0%
Patient confidentiality	0.0%	12.5%	0.0%	23.1%	0.0%	0.0%
Number of schools that reported	8	8	6	13	5	6

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 Southern Border region compensate for training in areas of restricted student access by providing training in simulation lab (86%), ensuring all students have access to sites that train students in the areas of restricted access (71%), and training students in the classroom (43%). Purchasing practice software such as SIM Chart was not as common (29%). This data is similar to that reported over the past two years.

Table 26. How the Nursing Program Compensates for Training in Areas of Restricted Access by Academic Year

	2013-2014 % Schools	2014-2015 % Schools	2015-2016 % Schools
Training students in the simulation lab	100.0%	100.0%	85.7%
Ensuring all students have access to sites that train them in this area	77.8%	75.0%	71.4%
Training students in the classroom	88.9%	62.5%	42.9%
Purchase practice software, such as SIM Chart	33.3%	25.0%	28.6%
Other	0.0%	0.0%	0.0%
Number of schools that reported	9	8	7

Faculty Census Data⁷

In 2015-2016 there were 522 total nursing faculty⁸ teaching at Southern Border region nursing programs, 32% of whom (n=166) were full-time while 72% (n=377) were part-time. The overall number of faculty has increased by 50% (n=173) in this region in the past ten years, mainly due to an increase in part-time faculty. In addition, there were 70 vacant faculty positions. These vacancies represent an 11.8% faculty vacancy rate overall (11.2% for full-time faculty and 11.5% for part-time faculty) which is the highest vacancy rate reported in the last decade.

Table 27. Faculty Census Data[†] by Year

	2007	2008	2009	2010	2011	2012	2013	2014*	2015*	2016*
Total Faculty	349	402	445	482	492	454	415	427	539	522
<i>Full-time</i>	124	134	136	143	148	139	157	131	168	166
<i>Part-time</i>	225	268	309	339	344	315	258	280	327	377
Vacancy Rate**	5.7%	3.4%	2.2%	2.2%	3.9%	4.4%	2.6%	10.9%	6.1%	11.8%
<i>Vacancies</i>	21	14	10	11	20	21	11	52	35	70

[†] 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.

*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. 25% (n=3) of 12 schools responding agreed. These schools were asked to rank the reason for this shift.

The top ranked reason was non-competitive salaries for full-time faculty, followed by private, state university or community college laws, rules or policies.

Table 28. Reasons for Hiring More Part-time Faculty 2015-2016

	Average Rank*	Programs reporting
Non-competitive salaries for full time faculty	4.0	3
Private, state university or community college laws, rules or policies	4.3	3
Shortage of RNs applying for full time faculty positions	4.7	3
Insufficient number of full time faculty applicants with required credential	5.0	3
Other:	5.5	2
Insufficient budget to afford benefits and other costs of FT faculty	5.7	3
Need for faculty to have time for clinical practice	6.0	3
To allow for flexibility with respect to enrollment changes	6.0	3
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	6.0	3
Need for part-time faculty to teach specialty content	6.3	3

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

⁷ Census data represent the number of faculty on October 15th of the given year.

⁸ 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, the majority (69%) of Southern Border region nursing schools reported that their faculty worked overloaded schedules. Of these schools, 100% (n=9) pay the faculty extra for the overloaded schedule.

Table 29. 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	9	8	8	8	7	10	9	9
Share of schools that pay faculty extra for the overload	88.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total number of schools	13	13	13	13	13	13	13	13

Summary

The number of Southern Border pre-licensure nursing programs has remained constant at 13 programs since 2006-2007. The share of programs partnering with another program to offer a higher degree than offered at their own school has been increasing over the last three years, from 23% (n=3) of programs in 2011-2012 to 69% (n=9) of programs in 2015-2016.

In 2015-2016, programs in the region reported a total of 1,157 admission spaces available, which were filled with a total of 1,354 new students. Southern Border nursing programs continue to receive more applications requesting entrance into their programs than can be accommodated. In 2015-2016, programs in the region received 2,390 qualified applications for admission, 57% of which were able to enroll, which is the third highest percentage reported in the past ten years. Two (15%) of programs in the region reported enrolling fewer students than the previous year with the majority being due to either BRN requirement to reduce enrollment or program discontinued.

Programs reported 1,250 student completions in 2015-2016 from Southern Border pre-licensure nursing programs, the highest it has been reported in the past ten years. If the current ten year low attrition rate of 9% remains constant, and if new student enrollments continue to increase, the annual number of graduates from the region's pre-licensure nursing programs is likely to increase in future years. At the time of the survey, 9% of recent graduates from the region's programs were unable to find employment in nursing, which is down from its high of 31% in 2009-2010.

Clinical simulation has become widespread in nursing education, with all but two nursing schools in the Southern Border region reporting using it in some capacity, and nearly a quarter of schools (23%) reporting 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 and some programs indicated plans to increase their clinical simulation time. The importance of clinical simulation is underscored by data showing that half (62%) of Southern Border region programs are being denied access to clinical placement sites that were previously available to them. In addition, three-quarters (75%, n=9) of the number that reported, were allowed fewer students for a clinical placement, unit, or shift in this year than in the prior year.

The total number of currently enrolled pre-licensure nursing students has increased by about 12% since 2007; the number of nursing faculty has increased by about 50% in the same period, largely driven by an increase in part-time faculty. In 2015-2016, 70 faculty vacancies were reported, representing an 11.8% faculty vacancy rate overall (11.2% for full-time faculty and 11.5% for part-time faculty). This is the highest vacancy rate reported in the last ten years.

APPENDICES

APPENDIX A – Southern Border Nursing Education Programs

ADN Programs (7)

Brightwood College (formerly Kaplan College)
Grossmont College
Imperial Valley College
Mira Costa College
Palomar College
San Diego City College
Southwestern College

BSN Programs (5)

CSU San Marcos
National University
Point Loma Nazarene University
San Diego State University
United States University

ELM Programs (1)

University of San Diego, Hahn School of Nursing

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