
California Board of Registered Nursing

2015-2016 Annual School Report

Data Summary and Historical Trend Analysis

Inland Empire

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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 Inland Empire, which includes Orange, Riverside and San Bernardino 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 2014-2015 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 Inland Empire 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) Inland Empire (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, the Inland Empire had a total of 22 pre-licensure nursing programs. Of these programs, 13 are ADN programs, 7 are BSN programs, and two are ELM programs. Data from many satellite programs in the Inland Empire region whose headquarters are in other regions are not included in the 2015-2016 data for this region. Of the pre-licensure nursing programs in the region, 68% (n=15) are public.

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	17	19	24	25	25	23	24	24	22	22
ADN	11	12	14	14	14	12	13	14	13	13
BSN	5	5	8	9	9	9	9	8	7	7
ELM	1	2	2	2	2	2	2	2	2	2
Public	15	15	15	15	15	15	15	15	15	15
Private	2	4	9	10	10	8	9	9	7	7
Total Number of Schools	16	17	20	21	21	21	22	21	20	20

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

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 that partner with another nursing school that offers a higher degree continued to increase. In 2015-2016, one-half of Inland Empire nursing programs (50%, n=11) collaborated with another program that offered a higher degree than offered at their own program.

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 program that leads to a higher degree	2	1	1	2	5	10	12	9	8	11
Formal collaboration							66.7%	88.9%	75.0%	
Informal collaboration							66.7%	66.7%	87.5%	
Number of programs that reported	17	18	22	24	25	23	24	23	22	22

Note: Blank cells indicate the information was not requested

Admission Spaces and New Student Enrollments

In 2015-2016, nursing programs in the region reported a total of 1,657 spaces available – a decline from prior years largely due to changes in how satellite campus data are allocated by region and one program closure. These spaces were filled with a total of 2,015 students. Pre-licensure nursing programs in the Inland Empire enrolled more students than there were spaces available in eight of the last ten years. Half of all programs overenrolled students in 2015-2016.

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	1,643	1,734	2,361	2,984	2,350	2,582	3,085	3,060	1,635	1,657
New student enrollments	1,946	1,907	2,496	2,884	2,774	2,957	3,008	3,071	2,019	2,015
% Spaces filled with new student enrollments	118.4%	110.0%	105.7%	96.6%	118.0%	114.5%	97.5%	100.4%	123.5%	121.6%

[†] 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.

Pre-licensure nursing programs in the Inland Empire continue to receive more applications requesting entrance into their programs than can be accommodated. Almost half (44%) of qualified applications were not able to enroll in 2015-2016.

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	3,310	5,412	6,013	8,256	7,178	6,094	7,214	7,012	3,793	3,611
ADN	2,803	4,514	4,719	5,237	3,816	3,282	2,954	2,922	2,392	2,319
BSN	357	739	1,110	2,806	3,219	2,624	4,087	3,866	1,336	1,242
ELM	150	159	184	213	143	188	173	224	65	50
% Qualified applications not enrolled	41.2%	64.8%	58.5%	65.1%	61.4%	51.5%	58.3%	56.2%	46.8%	44.2%

*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 Inland Empire region enrolled 2,015 new students in 2015-2016. The distribution of new enrollments by program type was 60% ADN (n=1,214), 38% BSN (n=761), and 2% ELM (n=40). The decrease in the number of new students enrolling in nursing programs in the region compared to 2013-2014 is largely a result of a private program closure and re-allocation of satellite program data to other regions. Public nursing program enrollments in the region have declined 25% since 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	1,946	1,907	2,496	2,884	2,774	2,957	3,008	3,071	2,019	2,015
ADN	1,473	1,442	1,773	1,633	1,224	1,213	1,173	1,330	1,265	1,214
BSN	473	394	649	1,205	1,488	1,640	1,744	1,630	714	761
ELM	0	71	74	46	62	104	91	111	40	40
Private	242	316	934	1,364	1,346	1,458	1,556	1,661	686	740
Public	1,704	1,591	1,562	1,520	1,428	1,499	1,452	1,410	1,333	1,275

† 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.

Four programs (18%) reported that they enrolled fewer students in 2015-2016 compared to the previous year, including two ADN programs, one BSN program, and one ELM 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	16.7%	12	15.4%	13
BSN	0.0%	6	14.3%	7
ELM	50.0%	2	50.0%	2
Total	15.0%	20	18.2%	22

Programs reported that accepted students not enrolling and “other” were top reasons for enrolling fewer students.

Table 7. Reasons for Enrolling Fewer Students by Academic Year

	2014-2015	2015-2016
Accepted students did not enroll	33.3%	75.0%
Other	0.0%	50.0%
College/university / BRN requirement to reduce enrollment	0.0%	25.0%
Lost funding	0.0%	25.0%
Insufficient faculty	33.3%	0.0%
To reduce costs	33.3%	0.0%
Unable to secure clinical placements for all students	0.0%	0.0%
All Reporting	3	4

Student Census Data

A total of 3,963 students were enrolled in one of the region's pre-licensure nursing programs as of October 15, 2016. The 2016 student census indicates that 50% (n=1,982) of students were enrolled in an ADN program, 49% (n=1,938) in a BSN program, and 1% (n=43) in an ELM program.

Table 8. Student Census Data^{††} by Program Type by Year

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ADN	2,336	2,471	2,834	2,809	2,224	2,071	2,068	2,096	2,128	1,982
BSN	964	1,104	1,702	1,847	3,257	3,287	3,585	3,440	1,803	1,938
ELM	63	125	151	124	105	195	145	152	89	43
Total nursing students	3,363	3,700	4,687	4,780	5,586	5,553	5,798	5,688	4,020	3,963

*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

Student completions at Inland Empire pre-licensure nursing programs totaled 1,643 in 2015-2016. The distribution of completions by program type in 2015-2016 was 59% ADN (n=961), 39% BSN (n=646), and 2% ELM (n=36).

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	950	1,057	1,220	1,588	1,201	1,019	1,002	953	881	961
BSN	187	243	308	401	505	876	1,185	1,251	696	646
ELM	0	0	54	22	51	65	92	110	48	36
Total student completions	1,137	1,300	1,582	2,011	1,757	1,960	2,279	2,314	1,625	1,643

†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

Attrition rates at nursing programs in the region have fluctuated over the last decade, but overall declined from a high of 15% in 2008-2009 to 10% in 2015-2016. Of the 1,677 students scheduled to complete an Inland Empire nursing program in 2015-2016, 83% (n=1,385) completed the program on-time, 7% (n=118) are still enrolled in the program, and 10% (n=174) 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	1,121	1,309	1,696	1,921	1,729	1,879	2,368	2,482	1,630	1,677
Completed on time	805	954	1,184	1,457	1,364	1,526	2,016	2,069	1,318	1,385
Still enrolled	129	162	261	263	111	118	89	123	106	118
Total attrition	187	193	251	201	254	235	263	290	206	174
<i>Attrition-dropped out</i>									159	63
<i>Attrition-dismissed</i>									47	111
Completed late [‡]				179	97	112	158	449	74	79
Retention rate*	71.8%	72.9%	69.8%	75.8%	78.9%	81.2%	85.1%	83.4%	80.8%	82.6%
Attrition rate**	16.7%	14.7%	14.8%	10.5%	14.7%	12.5%	11.1%	11.7%	12.7%	10.4%
% Still enrolled	11.5%	12.4%	15.4%	13.7%	6.4%	6.3%	3.8%	5.0%	6.5%	7.0%

[‡] 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. In 2015-2016, attrition rates in the region were lowest among BSN and ELM programs (8% and 3% respectively) and highest among ADN programs (12%). Average attrition rates have historically been lower among private programs in the region, although this has fluctuated. In 2015-2016, private programs had lower attrition rates than public programs (8% vs. 12%).

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	17.7%	16.0%	14.8%	10.3%	13.2%	13.2%	13.2%	14.8%	15.4%	12.0%
BSN	11.0%	9.0%	16.1%	10.2%	14.0%	10.6%	9.8%	10.2%	8.8%	8.1%
ELM	-	-	8.1%	19.0%	44.4%	23.2%	7.1%	2.7%	8.6%	2.5%
Private	19.0%	14.6%	14.2%	8.6%	12.8%	12.2%	9.9%	9.9%	8.6%	8.1%
Public	16.5%	14.8%	15.0%	11.4%	15.6%	12.6%	12.2%	13.6%	14.5%	11.5%

[†] 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.

*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.

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

NCLEX Pass Rates

Over the last ten years, NCLEX pass rates in the Inland Empire region have fluctuated. In 2015-2016, ADN graduates had the highest average NCLEX pass rate (87%), followed closely by BSN graduates (86%). ADN programs had a decrease in their average NCLEX pass rate in 2015-2016. BSN program pass rates have gone up while ELM program pass rates have continued to decrease since 2013-2014. The NCLEX passing standard was increased in April 2013, which may have impacted NCLEX passing 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	92.6%	90.2%	89.2%	90.8%	86.5%	90.8%	91.0%	86.2%	89.6%	87.4%
BSN	78.9%	82.4%	84.4%	88.1%	86.1%	83.1%	81.2%	82.9%	82.9%	86.3%
ELM	-	-	89.5%	83.3%	93.0%	92.0%	81.8%	87.8%	85.7%	80.4%

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

Employment of Recent Nursing Program Graduates³

While the share of recent nursing graduates employed in hospitals has declined from its high of 94% in 2007-2008, hospitals continue to employ the largest share of recent graduates in the Inland Empire. In 2015-2016, the region's programs reported that 61% of employed recent graduates were working in a hospital setting. Programs also reported that 2% of recent graduates had not found employment in nursing at the time of the survey, which has been much lower the past two years than previous years. Seven percent of graduates were seeking additional nursing education (7%) and 13% were not yet licensed. The 2015-2016 average regional share of new graduates employed in nursing in California was 77%, the highest percentage since 2010-2011.

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	80.1%	93.7%	73.6%	75.0%	66.5%	71.8%	60.7%	60.3%	73.8%	61.3%
Not yet licensed										12.6%
Pursuing additional nursing education	2.1%	1.2%	4.4%	6.3%	4.4%	5.5%	7.1%	4.6%	8.7%	7.3%
Other healthcare facilities	2.3%	2.8%	3.6%	3.3%	3.2%	2.7%	2.6%	2.6%	4.3%	6.9%
Other setting	1.3%	0.1%	2.6%	15.2%	3.8%	4.4%	2.4%	8.0%	7.3%	5.4%
Long-term care facilities	2.0%	2.3%	3.1%	3.8%	3.4%	2.0%	5.5%	5.4%	3.5%	3.1%
Unable to find employment				18.5%	11.6%	13.7%	18.3%	11.8%	2.7%	2.4%
Community/public health facilities							3.4%	7.5%	1.2%	1.1%
Employed in California	70.5%	96.7%	77.9%	81.0%	78.7%	74.6%	67.9%	70.5%	71.0%	77.1%

[†]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 17% 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 (100%) of the Inland Empire nursing programs reported using clinical simulation in 2015-2016. Fourteen (64%) of the 22 programs have plans to increase staff dedicated to administering clinical simulation in their program in the next 12 months.

The content areas using the most hours of clinical simulation on average are Medical/Surgical (17.1) and Obstetrics (8.0). The largest proportion of clinical hours in all programs is in direct patient care (81%) followed by skills lab (14%) and simulation (6%).

Overall, programs reported slightly more clinical hours on average in 2015-2016 compared to 2014-2015. Clinical hours by content area were similar except in the case of geriatrics and "other", where many more clinical hours were reported and slightly less in medical/surgical and leadership/management in 2015-2016 than in prior years. In terms of allocation by experience type, more time was allocated to direct patient care and skills labs, and less to simulation 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	303.4	301.5	24.4	43.4	45.7	17.1	373.5	361.9
Fundamentals	82.4	72.3	44.8	58.3	10.5	7.1	137.7	137.6
Obstetrics	74.1	77.0	8.4	8.1	10.2	8.0	92.6	93.1
Pediatrics	72.0	75.5	7.8	8.0	7.7	6.0	87.5	89.4
Geriatrics	58.3	85.3	3.3	10.0	5.6	7.7	64.5	103.0
Psychiatry/Mental Health	67.0	69.0	5.1	4.6	5.8	5.1	78.1	78.7
Leadership/Management	78.1	80.2	16.9	6.0	6.3	3.3	97.5	89.5
Other	13.1	38.1	1.7	0.5	1.2	0.7	16.0	39.4
Total average clinical hours	742.0	798.9	112.3	138.8	93.0	54.9	947.3	992.7
Percent of clinical hours	78.3%	80.5%	11.9%	14.0%	9.8%	5.5%	100.0%	100.0%
Number of programs that reported	21	22	21	22	21	22	21	22

ADN, BSN, and ELM programs allocated roughly the same proportion of hours to direct patient care (80-81%), skills lab (14%), and clinical simulation (5-6%).

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 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	357.4	214.1	243.5	51.2	37.6	13.0	19.9	12.9	13.5	428.5	264.6	270.0
Fundamentals	82.5	47.0	94.5	60.7	53.7	58.0	9.8	2.7	5.0	153.0	103.4	157.5
Pediatrics	75.2	75.7	77.0	9.5	5.3	7	7.1	3.9	6.0	91.8	84.9	90.0
Obstetrics	76.9	77.7	75.5	9.5	5.9	6.5	8.8	6.4	8.0	95.2	90.0	90.0
Geriatrics	108.9	60.9	18.0	12.5	7.9	1.5	7.2	10.0	3.0	128.5	78.7	22.5
Psychiatry/ Mental Health	62.0	79.7	77.0	3.7	5.7	6.0	4.5	5.7	7.0	70.2	91.1	90.0
Leadership/ Management	92.9	71.7	27.5	5.1	6.0	12.0	3.2	3.0	5.5	101.2	80.7	45.0
Other	15.2	91.4	0.0	0.0	1.7	0.0	0.8	0.9	0.0	16.0	94.0	0.0
Total Average Clinical Hours	871.0	718.3	613.0	152.3	123.7	104.0	61.1	45.4	48.0	1084.4	887.4	765.0
Number of programs that reported	13	7	2	13	7	2	13	7	2	13	7	2

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 most content areas and clinical experience types, the trend was to retain the current number of hours. In a number of categories, programs indicated decreasing direct and indirect patient care hours. However, larger percentages of programs indicated plans to increase simulation hours.

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	21.1%	63.2%	5.3%
Skills lab	27.8%	55.6%	0.0%
Clinical simulation	5.6%	50.0%	33.3%
All clinical hours	15.0%	75.0%	0.0%
Fundamentals	Decrease hours	Maintain hours	Increase hours
Direct patient care	0.0%	79.0%	5.3%
Skills lab	15.8%	63.2%	5.3%
Clinical simulation	0.0%	55.0%	30.0%
All clinical hours	0.0%	85.7%	0.0%

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	15.0%	75.0%	0.0%
Skills lab	5.6%	77.8%	0.0%
Clinical simulation	5.3%	68.4%	15.8%
All clinical hours	9.5%	81.0%	0.0%
Pediatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	10.0%	80.0%	0.0%
Skills lab	11.1%	72.2%	0.0%
Clinical simulation	0.0%	63.2%	26.3%
All clinical hours	4.8%	85.7%	0.0%
Geriatrics	Decrease hours	Maintain hours	Increase hours
Direct patient care	15.0%	70.0%	0.0%
Skills lab	0.0%	77.8%	5.6%
Clinical simulation	0.0%	61.1%	27.8%
All clinical hours	4.8%	81.0%	0.0%
Psychiatry/Mental Health	Decrease hours	Maintain hours	Increase hours
Direct patient care	30.0%	60.0%	0.0%
Skills lab	11.1%	61.1%	5.6%
Clinical simulation	5.3%	47.4%	36.8%
All clinical hours	4.8%	85.7%	0.0%
Leadership/Management	Decrease hours	Maintain hours	Increase hours
Direct patient care	15.0%	65.0%	0.0%
Skills lab	11.1%	55.6%	5.6%
Clinical simulation	0.0%	44.4%	33.3%
All clinical hours	4.8%	66.7%	4.8%
Other	Decrease hours	Maintain hours	Increase hours
Direct patient care	14.3%	28.6%	28.6%
Skills lab	0.0%	57.1%	0.0%
Clinical simulation	0.0%	33.3%	33.3%
All clinical hours	0.0%	50.0%	12.5%

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

Four programs indicated that they were reducing clinical hours. These respondents were asked why they were reducing the clinical hours in their program in any content area or clinical experience type. The most common reasons was that students were able to meet learning objectives in less time, followed by “other”.

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%	75.0%
Other	16.7%	50.0%
Unable to find sufficient clinical space	33.3%	25.0%
Funding issues or unavailable funding	0.0%	0.0%
Insufficient clinical faculty	0.0%	0.0%
Number of programs that reported	6	4

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

Clinical Space & Clinical Practice Restrictions⁵

Eight Inland Empire pre-licensure nursing programs reported they were denied access to a clinical placement, unit or shift in 2015-2016. This is a significant decrease over the years prior to 2014-2015. The majority (63%, n=5) of the programs that were denied access to clinical placements, units, or shifts were offered an alternative by the clinical site. The lack of access to clinical space resulted in a loss of 12 clinical placements, units, or shifts. These lost clinical spaces affected 161 students in 2015-2016.

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	17	15	17	15	9	8
Programs Offered Alternative by Site*					2	5
Placements, Units or Shifts Lost*					18	12
Number of programs that reported	24	23	24	23	21	22
Total number of students affected	323	100	512	371	278	161

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

In addition, 16 (73%) of programs reported that there were fewer students allowed for clinical placements, units or shifts in 2015-2016 than in the prior year.

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.

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

	2014- 2015	2015- 2016
ADN	8	9
BSN	4	5
ELM	1	2
All Programs	13	16

Overall, being displaced by another program, followed by competition for space arising from an increase in the number of nursing students were the most frequently reported reasons why Inland Empire programs were denied clinical space. The share of programs reporting staff nurse overload or insufficient qualified staff has decreased over time.

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
Displaced by another program	72.7%	64.7%	80.0%	58.8%	60.0%	25.0%	62.5%
Competition for clinical space due to increase in number of nursing students in region	63.6%	41.2%	46.7%	29.4%	66.7%	41.7%	50.0%
Nurse residency programs	27.3%	29.4%	60.0%	47.1%	13.3%	25.0%	37.5%
Staff nurse overload or insufficient qualified staff	72.7%	52.9%	53.3%	41.2%	53.3%	41.7%	37.5%
Clinical facility seeking magnet status	18.2%	17.6%	20.0%	17.6%	20.0%	16.7%	25.0%
Closure, or partial closure, of clinical facility					13.3%	0.0%	25.0%
Decrease in patient census		23.5%	26.7%	23.5%	26.7%	16.7%	25.0%
No longer accepting ADN students	45.5%	11.8%	46.7%	29.4%	33.3%	16.7%	25.0%
Visit from Joint Commission or other accrediting agency	45.5%	17.6%	33.3%	23.5%	20.0%	33.3%	25.0%
Change in facility ownership/management		11.8%	20.0%	41.2%	26.7%	33.3%	12.5%
Implementation of Electronic Health Records system				11.8%	20.0%	16.7%	0.0%
Other				23.5%	20.0%	16.7%	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	9.1%	0.0%	6.7%	17.6%	6.7%	0.0%	0.0%
Number of programs that reported	11	17	15	17	15	12	8

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

Reasons for lack of access to clinical space vary by program. In 2015-2016, displacement by another program was one of the most common reasons for unavailable clinical space among ADN programs, followed by competition for clinical space due to an increase in the number of nursing students. Competition for clinical space was also among the top reasons for BSN programs. No ELM programs reported being denied clinical space.

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

	ADN	BSN	ELM	Total
Displaced by another program	66.7%	50.0%	0.0%	62.5%
Competition for clinical space due to increase in number of nursing students in region	50.0%	50.0%	0.0%	50.0%
Nurse residency programs	33.3%	50.0%	0.0%	37.5%
Staff nurse overload or insufficient qualified staff	33.3%	50.0%	0.0%	37.5%
Clinical facility seeking magnet status	33.3%	0.0%	0.0%	25.0%
Closure, or partial closure, of clinical facility	16.7%	50.0%	0.0%	25.0%
Decrease in patient census	33.3%	0.0%	0.0%	25.0%
No longer accepting ADN students	33.3%	0.0%	0.0%	25.0%
Visit from Joint Commission or other accrediting agency	16.7%	50.0%	0.0%	25.0%
Change in facility ownership/management	16.7%	0.0%	0.0%	12.5%
Implementation of Electronic Health Records system	0.0%	0.0%	0.0%	0.0%
Other	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%	0.0%	0.0%
Number of programs that reported	6	2	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 strategies were to add or to replace the lost space at a different site currently being used by the program (75%) or replace the lost clinical space with a new site (50%). These have been the top reasons for the last four years.

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 different site currently used by nursing program	60.0%	70.6%	60.0%	63.6%	75.0%
Added/replaced lost space with new site	40.0%	70.6%	66.7%	45.5%	50.0%
Clinical simulation	20.0%	35.3%	20.0%	36.4%	37.5%
Replaced lost space at same clinical site	66.7%	47.1%	26.7%	27.3%	37.5%
Other	0.0%	0.0%	0.0%	27.3%	0.0%
Reduced student admissions	13.3%	0.0%	20.0%	9.1%	0.0%
Number of programs that reported	15	17	15	11	8

Forty-five percent (n=10) of nursing programs in the Inland Empire reported an increase in out-of-hospital clinical placements in 2015-2016. Public health or community health agencies topped the list, followed by school health services and surgery center/ambulatory care centers as the most frequently reported alternative placement sites in 2015-2016. No programs reported occupational health or urgent care as alternative placements in 2015-2016.

Table 23. Alternative Out-of-Hospital Clinical Sites Used by RN Programs and Academic Year

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Skilled nursing/rehabilitation facility	27.3%	33.3%	46.2%	77.8%	37.5%	30.0%
School health service (K-12 or college)	27.3%	26.7%	15.4%	55.6%	75.0%	60.0%
Public health or community health agency	18.2%	53.3%	61.5%	55.6%	37.5%	70.0%
Medical practice, clinic, physician office	36.4%	33.3%	23.1%	33.3%	12.5%	30.0%
Home health agency/home health service	27.3%	13.3%	38.5%	33.3%	12.5%	30.0%
Surgery center/ambulatory care center	18.2%	13.3%	23.1%	33.3%	25.0%	60.0%
Outpatient mental health/substance abuse			15.4%	33.3%	37.5%	50.0%
Hospice	27.3%	26.7%	23.1%	22.2%	12.5%	40.0%
Renal dialysis unit	36.4%	13.3%	7.7%	22.2%	12.5%	20.0%
Case management/disease management	0.0%	6.7%	7.7%	11.1%	0.0%	20.0%
Urgent care, not hospital-based	0.0%	0.0%	0.0%	11.1%	25.0%	0.0%
Correctional facility, prison or jail	18.2%	13.3%	7.7%	0.0%	12.5%	10.0%
Occupational health or employee health service	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Other			23.1%	0.0%	12.5%	10.0%
Number of programs that reported	11	15	13	9	8	10

More than three-quarters (70%, n=14) of Inland Empire 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 to electronic medical records and access to bar coding medication administration. These have been among the most common restrictions every year. No schools reported that students faced restrictions to direct communication with the health care team.

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
Electronic Medical Records	76.5%	71.4%	78.9%	68.8%	87.5%	80.0%	92.9%
Bar coding medication administration	76.5%	57.1%	73.7%	75.0%	68.8%	66.7%	78.6%
Automated medical supply cabinets	58.9%	38.1%	31.6%	43.8%	31.3%	46.7%	57.1%
Clinical site due to visit from accrediting agency (Joint Commission)	58.9%	61.9%	63.2%	75.0%	62.5%	66.7%	57.1%
Student health and safety requirements		42.9%	52.6%	50.0%	50.0%	33.3%	50.0%
Glucometers	47.1%	52.4%	57.9%	43.8%	43.8%	40.0%	28.6%
Some patients due to staff workload		33.3%	15.8%	25.0%	37.5%	20.0%	28.6%
Alternative setting due to liability	11.8%	19.0%	15.8%	12.5%	18.8%	6.7%	14.3%
IV medication administration	29.5%	28.6%	26.3%	25.0%	12.5%	13.3%	14.3%
Direct communication with health team	5.9%	14.3%	5.3%	6.3%	25.0%	0.0%	0.0%
Number of programs that reported	17	21	19	16	16	15	14

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 most commonly due to insufficient time for clinical site staff to train students (86%). Schools reported the top reason that that students were restricted from using medication administration systems was liability (60%).

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
Liability	50.0%	61.5%	42.9%	66.7%	57.1%	60.0%
Staff fatigue/burnout	50.0%	38.5%	35.7%	50.0%	42.9%	40.0%
Cost for training	12.5%	38.5%	42.9%	0.0%	42.9%	10.0%
Insufficient time to train students	75.0%	76.9%	85.7%	50.0%	28.6%	10.0%
Other	12.5%	30.8%	7.1%	16.7%	28.6%	10.0%
Staff still learning and unable to assure documentation standards are being met	25.0%	61.5%	64.3%	0.0%	14.3%	10.0%
Patient confidentiality	0.0%	23.1%	28.6%	0.0%	28.6%	0.0%
Number of schools that reported	8	13	14	6	7	10

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 Inland Empire compensate for training in areas of restricted student access by providing training in simulation lab (93%) and ensuring all students have access to sites that train them in the restricted area (64%).

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	81.3%	73.3%	92.9%
Ensuring all students have access to sites that train them in this area	56.3%	66.7%	64.3%
Training students in the classroom	56.3%	60.0%	57.1%
Purchase practice software, such as SIM Chart	37.5%	33.3%	50.0%
Other	12.5%	20.0%	14.3%
Number of schools that reported	16	15	14

Faculty Census Data⁶

On October 15, 2015, there were 885 total nursing faculty⁷ in the Inland Empire. The total number of faculty has increase by 96% (n=433) since 2007, the majority being part-time faculty. Of these faculty, 31% (n=278) were full-time and 69% (n=615) were part-time. In addition, there were 54 vacant faculty positions in the region. This represents a 6% faculty vacancy rate overall (10.6% for full-time faculty and 3.3% for part-time faculty).

Table 27. Faculty Census Data[†] by Year

	2007*	2008	2009	2010	2011	2012	2013	2014*	2015*	2016*
Total Faculty	452	521	530	624	709	985	871	830	867	885
<i>Full-time</i>	223	228	252	264	278	371	314	295	255	278
<i>Part-time</i>	229	293	278	360	431	614	557	530	596	615
Vacancy Rate**	3.4%	4.90%	8.6%	7.1%	3.7%	5.2%	4.3%	8.3%	6.0%	5.8%
<i>Vacancies</i>	16	27	50	48	27	54	39	75	55	54

[†] 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=5) of 20 schools responding agreed. These 5 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”, followed by “need for part-time faculty to teach special content”.

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.

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

	Average Rank*	Programs reporting
Non-competitive salaries for full time faculty	2.8	5
Shortage of RNs applying for full time faculty positions	2.8	5
Need for part-time faculty to teach specialty content	3.4	5
Insufficient number of full time faculty applicants with required credential	4.4	5
Insufficient budget to afford benefits and other costs of FT faculty	5.0	5
Private, state university or community college laws, rules or policies	5.0	5
Need for faculty to have time for clinical practice	6.2	5
To allow for flexibility with respect to enrollment changes	7.4	5
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	8.4	5
Other	9.0	2

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

The majority of schools in the Inland Empire continue to report that their faculty work overloaded schedules. In 2015-2016, 60% (n=12) of schools reported that their faculty work an overloaded schedule, and most (92%) of these schools 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	13	14	13	13	16	15	12	12
Share of schools that pay faculty extra for the overload	84.6%	85.7%	84.6%	92.3%	87.5%	93.3%	100.0%	91.7%
Total number of schools	19	21	21	21	22	21	20	20

Summary

Over the past decade, the number of Inland Empire pre-licensure nursing programs has grown by 29%, from 17 programs in 2006-2007 to 22 programs in 2015-2016. The majority of programs in the region (68%) continue to be public.

New student enrollments among the region's programs grew rapidly from 2006-2007 to 2013-2014, partially due to the inclusion of satellite program data between 2011-2012 and 2013-2014. Enrollment then declined in 2014-2015 due to the closure of one private program and reallocation of satellite program data to another region. In 2015-2016 Inland Empire programs reported a total of 1,657 spaces available for new students, which were filled with a total of 2,015 students. Nursing programs in the region have enrolled more students than were spaces available in eight of the past ten years. Of the 3,611 qualified applications received by programs in the region in 2015-2016, 56% enrolled.

In 2015-2016, programs in the region reported that 1,643 students completed their programs, about 45% more completions than reported ten years ago. Retention rates at the regions nursing programs have increased in the past ten years as was reported at 83% in 2015-2016. At the time of the survey, 2% of recent graduates from Inland Empire nursing programs were unable to find employment in nursing, the lowest rate in the last seven years.

Clinical simulation has become widespread in nursing education, with all nursing programs in the Inland Empire region reporting using it in some capacity. Almost two-thirds of these programs (64%) have plans to increase staff dedicated to administering clinical simulation in their program in the coming year. In all content areas, most schools were retaining the number of clinical hours. In many cases they were re-allocating clinical hours across experience type. Four programs reported that they were reducing clinical hours, largely due to students being able to meet learning objectives in less time. The importance of clinical simulation is underscored by data showing that a large portion of programs in the Inland Empire (73%) were allowed fewer clinical placement sites that were previously available to them. In addition, 16 programs were allowed fewer students for a clinical placement, unit, or shift in this year than in the prior year.

Expansion in RN education has required nursing programs to hire more faculty to teach the growing number of students. The number of nursing faculty in the region has almost doubled in the past ten years. While almost half of faculty were full-time in 2006, in 2016, they made up only 31% of faculty. In 2016, 54 faculty vacancies were reported, representing a 6.0% faculty vacancy rate, which was virtually identical to that reported in 2015.

APPENDICES

APPENDIX A – Inland Empire Nursing Education Programs

ADN Programs (13)

Chaffey College
College of the Desert
Copper Mountain College
CNI College
Cypress College
Golden West College
Mount San Jacinto College
Riverside City College
Saddleback College

San Bernardino Valley College
Santa Ana College
Stanbridge College
Victor Valley College

BSN Programs (7)

CSU Fullerton
CSU San Bernardino
California Baptist University
Concordia University Irvine

Loma Linda University
University of California Irvine
Western Governors University

ELM Programs (2)

California Baptist University
CSU Fullerton

APPENDIX B – BRN Education Issues Workgroup Members

Members

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Organization

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 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

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