# California Board of Registered Nursing 2016-2017 Annual School Report

Data Summary for Pre-Licensure Nursing Programs

April 5, 2018

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

# Contents

PREFACE	1
Nursing Education Survey Background	1
Organization of Report	1
Availability of Data	1
Value of the Survey	1
Survey Participation	2
DATA SUMMARY – Pre-Licensure Programs	3
Newly Enrolled Nursing Students	5
Currently Enrolled Nursing Students	10
Students who Completed a Nursing Program	14
Faculty Data	22
Nursing Program Data	
School Data	
APPENDICES	75
APPENDIX A – List of Survey Respondents by Degree Program	75
APPENDIX B – Definition List	77
APPENDIX C – BRN Nursing Education and Workforce Advisory Committee	81

# Tables

Table 1.	RN Program Response Rate	2
Table 2.	Number of California RN Programs by Program Type	3
Table 3.	Applications* for Admission by Program Type	3
Table 4.	Share of Accepted Applications that Enrolled by Program Type	4
Table 5.	Share of Admission Spaces Filled with New Student Enrollments by Program Type4	4
Table 6.	Programs That Enrolled Fewer Students in 2016-2017 than in 2015-2016	5
Table 7.	Reasons for Enrolling Fewer Students	5
Table 8.	Newly Enrolled Students by Program Type*	5
Table 9.	Newly Enrolled Students in 30-Unit Track	3
Table 10	. Reasons for Not Retaining the LVN 30-Unit Option Pathway	3
Table 11	. Ethnic Distribution of Newly Enrolled Nursing Students by Program Type	7
Table 12	. Gender Distribution of Newly Enrolled Nursing Students by Program Type	7
Table 13	. Age Distribution of Newly Enrolled Nursing Students by Program Type	3
Table 14	. Prior Experience of Newly Enrolled Veterans	3
Table 15	. Special Admission Considerations Offered Veterans	9
Table 16	. Special Options, Tracks, or Services Offered to Veterans	9
Table 17	. Currently Enrolled Students by Program Type10	)
Table 18	. Ethnic Distribution of Nursing Student Census Data by Program Type17	1
Table 19	. Gender Distribution of Nursing Student Census Data by Program Type12	2
Table 20	. Age Distribution of Nursing Student Census Data by Program Type12	2
Table 21	. Accommodations Provided for Students with Disabilities Enrolled in Nursing Programs by Program Type*13	
Table 22	. Nursing Student Completions by Program Type14	1
Table 23	. Ethnic Distribution of Students Who Completed a Nursing Program by Program Type	5
Table 24	. Gender Distribution of Students who Completed a Nursing Program	3
Table 25	. Age Distribution of Students who Completed a Nursing Program by Program Type16	3
Table 26	. Accommodations Provided for Students with Disabilities who Completed Nursing Programs by Program Type*17	7
Table 27	. Completion, Retention and Attrition Data by Program Type18	3
Table 28	. Completion, Retention and Attrition Data by Race and Ethnicity18	3
Table 29	. Employment of Recent Nursing Program Graduates*19	9
Table 30	. Student Debt Load of Recent Nursing Program Graduates	)
Table 31	. Type of Schedule by Program Type20	)

Table 32.	Average Time to Completion by Schedule and Program Type	21
Table 33.	Reasons for Delayed Completion, ADN Students Only	21
Table 34.	Total Faculty and Faculty Vacancies*	22
Table 35.	Reasons for Hiring More Part-time Faculty	22
Table 36.	Funding of Faculty Positions	23
Table 37.	Faculty Teaching Assignments	23
Table 38.	External Funding for Faculty Next Year	23
Table 39.	Faculty Ethnicity	24
Table 40.	Faculty Gender and Age	24
Table 41.	Highest Level of Education of Faculty*	25
Table 42.	Strategies for Recruiting Diverse Faculty	26
Table 43.	Methods Used to Prepare Part-time Faculty to Teach	26
Table 44.	Reasons Faculty Leave Their Positions	27
Table 45.	Reasons Faculty Go From Full-Time to Part-Time	27
Table 46.	Characteristics of Newly Hired Faculty	28
Table 47.	Reasons for Hiring Faculty	28
Table 48.	Barriers to Recruiting Faculty	29
Table 49.	Average Annual Salary Paid for Full-Time Faculty by Highest Degree Earned & Leng of Academic Appointment	
Table 50.	Admission Criteria by Program Type	30
Table 51.	Selection Criteria for Qualified Applications by Program Type	31
Table 52.	Difficult to Hire Clinical Areas	31
Table 53.	Waiting Lists by Program Type	32
Table 54.	Current and Projected New Student Enrollment by Program Type	32
Table 55.	Barriers to Program Expansion by Program Type	33
Table 56.	Program Expansion Strategies to Address a Lack of Clinical Sites by Program Type 3	34
Table 57.	RN Programs Denied Clinical Space by Program Type	35
Table 58.	RN Programs That Reported Fewer Students Allowed for Clinical Space	35
Table 59.	Clinical Area that Lost Placements, Shifts or Units by Program Type	35
Table 60.	Reasons for Clinical Space Being Unavailable by Program Type	36
Table 61.	Strategies to Address Lost Clinical Space by Program Type	37
Table 62.	Increase in Use of Alternative Out-of-Hospital Clinical Sites by Program	37
Table 63.	LVN to BSN Admission Criteria	38
Table 64.	LVN to BSN Selection Criteria	38
Table 65.	LVN-to-ADN Articulation by Program Type	39

Table 66.	Number of RN Programs that Partner with Other Nursing Programs by Program Type	
Table 67.	Professional Accreditation for Eligible Programs by Program Type	
Table 68.	First Time NCLEX Pass Rates by Program Type	41
Table 69.	NCLEX Pass Rates for Accelerated Programs by Program Type	41
Table 70.	Percent of Program Graduates Who Take Comprehensive NCLEX Review Courses	12
Table 71.	Who Teaches NCLEX Review Course?	12
Table 72.	Method of Delivering NCLEX Review Course	43
Table 73.	Who Pays for NCLEX Review Course?	43
Table 74.	When is the Post-graduation Course Offered?	43
Table 75.	Funding Sources for Simulation Purchases, Maintenance, and Faculty Development and Training	
Table 76.	Policies and Procedures to Ensure Quality of Simulation	45
Table 77.	Elements of Simulation Plan	46
Table 78.	Reasons Why the Program Does Not Have a Written Plan	16
Table 79.	Extent of Integration of Recognized Simulation Standards	17
Table 80.	Reasons Why Programs Do Not Comply with CCR 1426(g)(2)	17
Table 81.	Areas Where Simulation is Used to Achieve Learning Objectives	18
Table 82.	Quantitative Measures Used to Show Impact of Simulation Learning Activities on NCLEX Pass Rates	49
Table 83.	Qualitative Measures Used to Show Impact of Simulation Learning Activities on NCLEX Pass Rates	49
Table 84.	Nationally Recognized Tools Used to Evaluate Simulation Courses	50
Table 85.	Other Tools Used to Evaluate Simulation Courses	51
Table 86.	Type of Simulation Used by Topic Area	52
Table 87.	Type of Simulation Anticipated in 2-3 Years by Topic Area	53
Table 88.	Average Hours Spent in Clinical Training by Program Type and Content Area	54
Table 89.	Planned Increase or Decrease in Clinical Hours by Content Area and Type of Clinical Experience *	
Table 90.	Why Program is Reducing Clinical Hours	57
Table 91.	Institutional Accreditations	58
Table 92.	Nursing Program Directors' Time	59
Table 93.	Other Programs Administered by the RN Program Director	30
Table 94.	Number of Assistant Directors by Size of School and Program Type*	51
Table 95.	Average Number of Assistant Director Hours Allotted per Week by Size of School and Program Type*	
Table 96.	Average Number of Assistant Director Hours Spent per Week by Size of School and Program Type*	32

Table 97. Nursing Program Assistant Directors' Time6	33
Table 98. Number of Clerical Staff by Size of School and Program Type*	54
Table 99. Average Number of Clerical Staff Hours by Size of School and Program Type*6	35
Table 100. Adequacy of Amount of Clerical Support6	35
Table 101. Number of Clinical Coordinators by Size of School and Program Type*6	66
Table 102. Average Number of Clinical Coordinator Hours by Size of School and Program Type	
Table 103. Adequacy of Amount of Clinical Coordination Support	37
Table 104. Retention Specialists and Average Number of Retention Specialist Hours by Size of School and Program Type*6	
Table 105. Factors Impacting Student Attrition6	38
Table 106. Strategies to Recruit and Admit Underrepresented Students	39
Table 107. Strategies to Support and Retain Underrepresented Students	39
Table 108. Access to Prerequisite Courses7	70
Table 109. Common Types of Restricted Access in the Clinical Setting for RN Students by         Academic Year	71
Table 110. Share of Schools Reporting Reasons for Restricting Student Access to Electronic           Medical Records and Medication Administration	72
Table 111. How the Nursing Program Compensates for Training in Areas of Restricted Access7	72
Table 112. Clinical Area in Which Restricted Access Occurs7	73
Table 113. Schools' Collection of Disability Data	73
Table 114. Funding of Nursing Programs	74

# PREFACE

#### Nursing Education Survey Background

The 2016-2017 Board of Registered Nursing (BRN) school survey was based on prior BRN surveys and modified based on recommendations from the Board's Education Issues Workgroup, which consists of nursing education stakeholders from across California. A list of workgroup members is included in the Appendices. The University of California, San Francisco was commissioned by the BRN to develop the online survey instrument, administer the survey, and report data collected from the survey.

#### Organization of Report

The survey collects data about nursing programs and their students and faculty. Data presented in this report are from the academic year beginning August 1, 2016 and ending July 31, 2017. Census and associated demographic data were requested for October 15, 2017.

Data from pre- and post-licensure nursing education programs are presented in separate reports and will be available on the BRN website. Data are presented in aggregate form to describe overall trends and, therefore, may not be applicable to individual nursing education programs.

Statistics for enrollments and completions represent two separate student populations. Therefore, it is not possible to compare directly enrollment and completion data.

#### Availability of Data

The BRN Annual School Survey was designed to meet the data needs of the BRN as well as other interested organizations and agencies. A database with aggregate data derived from the last ten years of BRN School Surveys will be available for public access on the BRN website.

#### Value of the Survey

This survey has been developed to support nursing, nursing education and workforce planning in California. The Board of Registered Nursing believes that the results of this survey will provide data-driven evidence to influence policy at the local, state, federal and institutional levels.

The BRN extends appreciation to the Education Issues Workgroup and survey respondents. Their participation has been vital to the success of this project.

# Survey Participation

All 133 California nursing schools were invited to participate in the survey, and all 133 nursing schools offering 141 BRN-approved pre-licensure programs responded to the survey.<sup>1</sup> Some schools offer more than one nursing program, which is why the number of programs is greater than the number of schools. A list of the participating nursing schools is provided in Appendix A.

Program Type	# Programs Responded	Total # Programs	Response Rate
ADN	84	84	100%
LVN-to-ADN	7	7	100%
BSN	37	37	100%
ELM	13	13	100%
All Programs	141	141	100%

#### Table 1. RN Program Response Rate

<sup>&</sup>lt;sup>1</sup> Since last year's report, two schools that previously offered ELM programs are no longer accepting students and did not submit data for this report. One school reported a new ELM program. There are two new ADN programs. There is one less BSN program because one school that had a BSN program in 2015-16 has converted that program to an RN-to-BSN program.

# DATA SUMMARY – Pre-Licensure Programs

#### Number of California Nursing Programs

• 65% of California pre-licensure nursing programs that reported data are ADN programs including both generic ADN programs and LVN-to-ADN programs.

#### Table 2. Number of California RN Programs by Program Type

		70
ADN	84	59.6%
LVN-to-ADN	7	5.0%
BSN	37	26.2%
ELM	13	9.2%
Total	141	100.0%

#### Applications to California Nursing Programs

- 40% of the 36,004 qualified applications to pre-licensure nursing education programs received in 2016-2017 were accepted. Since these data represent applications and an individual can apply to multiple nursing programs, the number of applications is presumably greater than the number of individuals applying for admission to nursing programs in California. It is not known how many individual applicants did not receive an offer of admission from at least one nursing program.
- LVN-to-ADN programs had the highest percentage of qualified applications accepted while generic ADN programs had the lowest.

#### Table 3. Applications\* for Admission by Program Type

	ADN	LVN-to- ADN	BSN**	ELM	All Programs
<b>Total Applications Received</b>	28,779	830	36,518	3,885	70,012
Screened	24,202	830	31,901	3,519	60,452
Qualified	17,642	548	15,325	2,489	36,004
Accepted	6,435	374	6,535	1,072	14,416
% Qualified Applications Accepted	36.5%	68.2%	42.6%	43.1%	40.0%

\*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.

\*\*This year, LVN to BSN applications were included in the number of applications to BSN programs. While these numbers have some impact on totals, they represent only 2% of qualified BSN applications.

# Number of Students who Enrolled in California Nursing Programs

- As in prior years, some pre-licensure nursing programs enrolled more students in 2016-2017 than the reported number of available admission spaces. This can occur for several reasons, the most common of which are: (1) schools underestimate the share of admitted students who will accept the offer of admission, thus exceeding the targeted number of new enrollees; (2) schools admit LVNs into the second year of a generic ADN program to replace an opening created if a general ADN student leaves the program.
- 40% (n=57) of pre-licensure programs reported that they filled more admission spaces than were available.
- ELM programs had the lowest share of students enroll into programs for which they were accepted (75%), followed by BSN programs (89%), while the ADN programs enrolled more students than they accepted.

#### Table 4. Share of Accepted Applications that Enrolled by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs*
Applications Accepted	6,435	374	6,535	1,072	14,233
New Student Enrollments	6,628	376	5,790	803	13,597
% Accepted Applications that Enrolled	103.0%	100.5%	88.6%	74.9%	95.5%

# Table 5. Share of Admission Spaces Filled with New Student Enrollments by ProgramType

	ADN	LVN-to- ADN	BSN	ELM	All Programs*
Spaces Available	6,356	377	5,957	839	13,697
New Student Enrollments	6,628	376	5,790	803	13,597
% Spaced Filled with New Student Enrollments	104.3%	99.7%	97.2%	95.7%	99.3%

\*LVN to BSN student admission spaces are included in the 2016-2017 data. These spaces were not included in the prior years' totals.

 In 2016-2017, 18% of programs (n=25) reported enrolling fewer students than the previous year. The most common reasons programs gave for enrolling fewer students were "accepted students did not enroll", "unable to secure clinical placements", and "other".

#### Table 6. Programs That Enrolled Fewer Students in 2016-2017 than in 2015-2016

Type of Program	ADN	LVN-to- ADN	BSN	ELM	All Programs
Enrolled fewer	20.2%	0.0%	16.7%	15.4%	17.9%
Did not enroll fewer	79.8%	100.0%	83.3%	84.6%	82.1%
Number of programs reporting	84	7	36	13	140

#### Table 7. Reasons for Enrolling Fewer Students

	% of programs
Accepted students did not enroll	56.0%
Unable to secure clinical placements for all students	28.0%
Other	24.0%
College / university / BRN requirement to reduce enrollment	12.0%
Lost funding	8.0%
Insufficient faculty	8.0%
Lack of qualified applicants	4.0%
To reduce costs	0.0%
Number of programs reporting	25

# **Newly Enrolled Nursing Students**

# Newly Enrolled Students by Degree Type

• The plurality (49%) of students who enrolled in a pre-licensure nursing program for the first time were generic ADN students.

# Table 8. Newly Enrolled Students by Program Type\*

	% Enrollment	#
	48.7%	6,628
LVN-to-ADN	2.8%	376
BSN	42.6%	5,790
ELM	5.9%	803
Total	100.0%	13,597

# Newly Enrolled Students in 30-Unit Option

• 76 new students were reported enrolled in a 30-unit option track. Most of these were in a single program

#### Table 9. Newly Enrolled Students in 30-Unit Track

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Number of 30-Unit option students	74	0	2	0	76
Number of programs reporting	84	7	36	12	139

- Respondents were asked if they thought the LVN 30-unit option pathway should remain available. The majority said "No" although 9% of respondents (n=11) felt it should remain available.
- The 9% of respondents who wanted the 30-unit option to remain available were asked to
  explain why they believed this. Eight people gave explanations, which included concern
  over students who needed to return to the workforce right away and ensuring diversity in
  the nursing field. As one respondent commented, "If you truly want diversity and equity in
  the nursing workforce these pathways/pipelines are what are financially viable."
- Respondents who did not think it should remain available were asked why not. The most commonly selected reason was that "Many students struggle in this pathway."
- There were a number of open-ended comments to this question, including several expressing concern that this pathway is regressive in an environment that requires more educational preparation for nurses.

#### Table 10. Reasons for Not Retaining the LVN 30-Unit Option Pathway

Reason	%
Many students struggle in this pathway	24.9%
Limits career mobility to other states	23.5%
Limits career/job opportunity	22.4%
Other	12.5%
Limits future educational opportunities/advancement	9.1%
Low NCLEX pass rates compared to other students	7.6%
Number of programs reporting	114

# Ethnic Distribution of Newly Enrolled Nursing Students

- 67% of students who enrolled in a pre-licensure nursing program for the first time were ethnic minorities. This is a slight increase from last year when the proportion was 65%.
- ADN programs enrolled the greatest shares of Hispanic (30%) and Filipino students (9%) while LVN-to-RN programs enrolled the greatest shares of other Asian students (28%) and Hawaiian/Pacific Islander students (5%). ELM programs enrolled the greatest shares of African American students (10%) and white students (35%).

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Native American	0.8%	0.3%	0.5%	1.0%	0.7%
Asian	13.3%	27.8%	24.5%	20.9%	18.9%
Asian Indian	0.8%	1.2%	0.9%	0.6%	0.8%
Filipino	8.7%	2.4%	7.4%	3.6%	7.7%
Hawaiian/Pacific Islander	1.2%	4.5%	1.0%	1.3%	1.2%
African American	6.1%	2.7%	3.4%	10.1%	5.1%
Hispanic	30.0%	15.8%	21.1%	21.9%	25.4%
Multi-race	4.4%	8.4%	5.9%	4.7%	5.2%
Other	1.9%	3.6%	1.3%	0.7%	1.6%
White	32.7%	33.4%	33.9%	35.2%	33.4%
Total	6,364	335	5,501	676	12,876
Ethnic Minorities*	67.3%	66.6%	66.1%	64.8%	66.6%
# Unknown/ unreported	264	41	289	127	721

### Table 11. Ethnic Distribution of Newly Enrolled Nursing Students by Program Type

\*Ethnic minorities include all reported non-White racial and ethnic groups, including "Other" and "Multi-race".

#### Gender Distribution of Newly Enrolled Nursing Students

- 21% of students who enrolled in a pre-licensure program for the first time reported their gender was male.
- This year for the first time, ADN and BSN programs had greater shares of men enrolling in their programs than did ELM and LVN-to-ADN programs.

#### Table 12. Gender Distribution of Newly Enrolled Nursing Students by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Male	22.2%	16.2%	21.6%	15.8%	21.4%
Female	77.7%	83.2%	78.2%	73.1%	78.4%
Other	0.0%	0.0%	0.0%	0.0%	0.0%
Total	6,622	374	5,780	714	13,490
# Unknown/ unreported	6	2	10	89	107

# Age Distribution of Newly Enrolled Nursing Students

• 71% of newly enrolled students in pre-licensure nursing programs were younger than 31 years of age.

# Table 13. Age Distribution of Newly Enrolled Nursing Students by Program Type

-	ADN	LVN-to- ADN	BSN	ELM	All Programs
17 – 20 years	2.4%	1.1%	21.9%	0.0%	10.6%
21 – 25 years	30.0%	17.1%	40.0%	43.0%	34.6%
26 – 30 years	28.6%	35.2%	20.5%	34.1%	25.6%
31 – 40 years	26.9%	34.9%	13.7%	16.9%	21.0%
41 – 50 years	10.0%	9.3%	3.3%	5.0%	6.9%
51 – 60 years	1.9%	2.4%	0.5%	0.8%	1.3%
61 years and older	0.2%	0.0%	0.0%	0.3%	0.1%
Total students	6,479	375	5,623	646	13,123
# Unknown/ unreported	149	1	167	157	474

#### Veterans

- 89 programs reported 478 declared military veterans among newly enrolled students between 8/1/16 and 7/31/17. This represents approximately 3.6% of all newly enrolled students.
- More than one-third (36%) of newly enrolled veterans was reported to have health occupation experience or training prior to enrollment, and 14% entered with an LVN license.

#### Table 14. Prior Experience of Newly Enrolled Veterans

	Percent of Veterans
Prior health occupations training and/or experience	35.8%
Entered the program with an LVN license	13.6%
Entered the program as advanced placement	5.6%
Total veterans	478

 Eighty-eight (88) programs reported that special admission considerations are offered for military veterans. The most commonly reported special admission considerations were credit for equivalent courses or transfer credits (68%) and review of individual transcripts (65%).

#### Table 15. Special Admission Considerations Offered Veterans

	%
Credit for equivalent courses or transfer credits	68.2%
Review of individual transcripts	64.8%
Credit for pre-requisites and fundamentals for military medic or corpsman experience	43.2%
Priority admission	34.1%
Other	13.6%
Additional credit awarded in Multicriteria screening process as defined in California Assembly Bill 548*	10.2%
No special consideration for admission	9.1%
Number of programs reporting	88

• The most common special option, track, or service offered to veterans was counseling (53%), followed by challenge exams regardless of LVN licensure (46%).

#### Table 16. Special Options, Tracks, or Services Offered to Veterans

	%
Counseling	53.4%
Offering challenge exams, regardless of LVN licensure	45.5%
Offering challenge exams, if the veteran has an LVN license	30.7%
Medic/LVN to RN program	21.6%
No special options, tracks or services offered	13.6%
Other	9.1%
Veterans resource center*	2.3%
NCLEX support course specifically for veterans	1.1%
Number of programs reporting	88

\*Category generated from text answers as described in "other" response.

# **Currently Enrolled Nursing Students**

# Nursing Student Census by Degree Type

- On October 15, 2017, 26,081 students were enrolled in a California nursing program that leads to RN licensure.
- BSN programs had the greatest share of students, at 49% of all nursing students enrolled on October 15, 2017.
- This year respondents were asked to disaggregate ELM pre- and post-licensure students in their reporting. These data are presented in the table below.

#### Table 17. Currently Enrolled Students by Program Type

	% Currently Enrolled	#
ADN	44.6%	11,639
LVN-to-ADN	1.2%	326
BSN	48.6%	12,680
ELM	5.5%	1,436
Total	100.0%	26,081
ELM Postlicensure		612

# Ethnic Distribution of Nursing Student Census

- Two-thirds (66%) of students enrolled in a pre-licensure nursing program as of October 15, 2017, were from an ethnic minority group.
- The overall share of ethnic minority nursing students was similar across most program types, although the breakdowns of different groups vary between program types. The exception was LVN-to-ADN programs, which were somewhat more diverse with a greater preponderance of Asian and fewer Hispanic students than the other programs.
- Generic ADN programs had the greatest share of Hispanic students (30%). ELM programs had the greatest share of African American students (11%). LVN-to-ADN programs had the greatest proportion of Asian students (33%).
- This year respondents were asked to disaggregate ELM pre- and post-licensure students in their reporting. These data are provided in the table below.

	ADN	LVN-to- ADN	BSN	ELM Prelicensure	All Prelicensure Programs	ELM Postlicensure
Native American	0.5%	0.7%	0.6%	0.8%	0.6%	0.5%
Asian	12.6%	32.9%	22.8%	21.3%	18.2%	27.1%
Asian Indian	1.3%	1.0%	1.0%	2.7%	1.2%	0.5%
Filipino	8.4%	3.1%	7.9%	0.0%	7.7%	1.7%
Hawaiian/Pacific Islander	1.5%	3.1%	1.3%	0.6%	1.3%	0.5%
African American	5.6%	2.7%	3.3%	10.8%	4.7%	5.5%
Hispanic	30.3%	16.9%	22.0%	23.2%	25.7%	22.5%
Multi-race	4.4%	7.5%	5.8%	5.7%	5.2%	3.7%
Other	2.4%	2.4%	0.7%	0.5%	1.5%	1.2%
White	33.1%	29.8%	34.6%	34.4%	33.9%	36.8%
Total	11,336	295	12,084	1,292	25,007	587
Ethnic Minorities*	66.9%	70.2%	65.4%	65.6%	66.1%	63.2%
# Unknown/ unreported	303	31	596	144	1,074	25

#### Table 18. Ethnic Distribution of Nursing Student Census Data by Program Type

\*Ethnic minorities include all reported non-White racial and ethnic groups, including "Other" and "Multi-race".

# Gender Distribution of Nursing Student Census Data

- Men represented 21% of all students enrolled in pre-licensure nursing programs as of October 15, 2016.
- Generic ADN programs and BSN programs had the greatest shares of men enrolled (21% in each), while LVN-to-ADN programs had the smallest share.

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicensure
Male	21.4%	14.2%	20.8%	18.0%	20.8%	18.3%
Female	78.5%	85.8%	79.2%	82.0%	79.2%	81.7%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	11,615	324	12,345	1,436	25,720	612
# Unknown/ unreported	24	2	335	0	361	0

#### Table 19. Gender Distribution of Nursing Student Census Data by Program Type

# Age Distribution of Nursing Student Census Data

- 73% of students enrolled in a pre-licensure nursing program as of October 15, 2017 were younger than 31 years old.
- ADN and LVN-to-ADN programs had considerably more students over the age of 30 (37% and 45% respectively) than did BSN or ELM programs. BSN programs had the fewest students over 30 (15%).

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicensure
17 – 20 years	2.4%	0.9%	19.5%	0.0%	10.9%	0.0%
21 – 25 years	29.2%	13.8%	43.8%	34.5%	37.3%	13.7%
26 – 30 years	29.2%	28.2%	19.1%	35.3%	25.2%	39.4%
31 – 40 years	26.9%	33.4%	11.6%	18.8%	19.6%	21.6%
41 – 50 years	8.6%	9.2%	3.0%	5.3%	5.8%	3.9%
51 – 60 years	1.8%	2.5%	0.6%	1.0%	1.2%	1.1%
61 years and older	0.1%	0.3%	0.0%	0.0%	0.1%	0.3%
Total	11,432	288	12,366	1,364	25,450	490
# Unknown/ unreported	207	38	314	74	633	12 2

#### Table 20. Age Distribution of Nursing Student Census Data by Program Type

# Declared Disabilities among Students Enrolled in Nursing Programs

- Nursing programs that have access to student disability data reported that 1,273 students were approved for accommodations for a declared disability.
- Since only 39 schools (29%) reported that they would be able access and report aggregate student disability data as part of this survey, the number of students with accommodations may be underreported.
- Exam accommodations were the most commonly reported (82%). These accommodations were used extensively by ADN and ELM programs, and somewhat less so by BSN and ELM programs. Academic counseling and advising and disability-related counseling and referral were also common among ADN programs.

# Table 21. Accommodations Provided for Students with Disabilities Enrolled in Nursing Programs by Program Type\*

rogramo by rogram rype	ADN	LVN-to-	BSN	ELM	All
	ADIN	ADN	Dom		Programs
Exam Accommodations (Modified/Extended Time/Distraction Reduced Space)	92.8%	87.5%	65.9%	57.0%	82.2%
Academic Counseling/Advising	52.7%	12.5%	8.8%	8.1%	36.1%
Disability-Related Counseling/Referral	46.6%	0.0%	7.2%	2.3%	31.3%
Priority Registration	26.6%	50.0%	9.8%	0.0%	19.9%
Note-Taking Services/Reader/Audio Recording/Smart Pen	23.0%	25.0%	8.8%	16.3%	18.2%
Other	2.5%	0.0%	36.7%	50.0%	16.1%
Adaptive Equipment/Physical Space/Facilities	10.5%	0.0%	2.3%	4.7%	7.5%
Assistive Technology/Alternative Format	6.7%	0.0%	3.9%	8.1%	5.9%
Service Animals	0.3%	0.0%	1.3%	0.0%	0.5%
Interpreter and Captioning Services	0.4%	0.0%	0.5%	0.0%	0.4%
Reduced Courseload	0.0%	0.0%	0.3%	0.0%	0.1%
Transportation/Mobility Assistance and Services/Parking	0.0%	0.0%	0.3%	0.0%	0.1%
Total Students	792	8	387	86	1,273

\*Students with declared disabilities may receive more than one accommodation so the number of accommodations may be higher than the number of students with a declared disability.

# Students who Completed a Nursing Program

# Student Completions by Degree Earned

- In 2016-2017, 11,302 students completed a nursing program in California.
- Generic ADN programs graduated the greatest number of students (50%, n=5,599) followed by BSN programs (41%, n=4,666).
- Only two students were reported completing a 30-unit option program.

#### Table 22. Nursing Student Completions by Program Type

	% of Completions	#
ADN	49.5%	5,599
LVN-to-ADN	3.4%	382
BSN	41.3%	4,666
ELM	5.8%	655
Total	100.0%	11,302
ELM Postlicensure		328

# Ethnic Distribution of Students who Completed a Nursing Program in California

- Overall, 63% of students who completed a pre-licensure nursing program were from minority ethnic groups, including 62% of students in an ELM pre-licensure segment. In comparison, 58% of students completing an ELM post-licensure segment were from minority ethnic groups.
- LVN-to-ADN programs have the greatest proportion of graduates from minority ethnic groups (67%), but comprised only 3% of nursing completions overall. ADN programs reported that 65% of their graduates were from minority ethnic groups.
- Generic ADN programs have the greatest share of Hispanic graduates (29%). BSN programs have the largest share of Filipino (9%) graduates. ELM programs have the greatest proportion of African American (10%) graduates. ADN-to-LVN programs had the largest percentage of Asian graduates (32%). ELM post-licensure programs had the largest percentage of white students (43%).

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicensure
Native American	0.7%	0.3%	0.5%	1.3%	0.7%	0.3%
Asian	12.2%	32.3%	22.4%	23.4%	17.6%	23.5%
Asian Indian	1.5%	1.2%	0.7%	0.8%	1.2%	1.3%
Filipino	8.1%	2.5%	8.7%	2.4%	7.9%	3.2%
Hawaiian/Pacific Islander	1.9%	2.2%	0.8%	0.5%	1.4%	0.3%
African American	5.0%	2.8%	3.7%	9.6%	4.7%	5.7%
Hispanic	28.7%	14.3%	18.6%	17.6%	23.5%	18.4%
Multi-race	4.6%	7.8%	4.4%	3.9%	4.6%	4.1%
Other	2.1%	3.7%	0.9%	2.4%	1.7%	0.6%
White	35.1%	32.9%	39.2%	38.3%	36.9%	42.5%
Total	5,486	322	4,407	637	10,852	315
Ethnic Minorities*	64.9%	67.1%	60.8%	61.7%	63.1%	57.5%
# Unknown/ unreported	113	60	259	18	450	18

# Table 23. Ethnic Distribution of Students Who Completed a Nursing Program byProgram Type

\*Ethnic minorities include all reported non-White racial and ethnic groups, including "Other" and "Multi-race"

# Gender Distribution of Students who Completed a Nursing Program

- 21% of all students who completed a pre-licensure nursing program were male.
- ADN and BSN programs had the largest shares of male graduates (21% in each).

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicensure
Male	21.2%	18.3%	20.8%	18.8%	20.8%	14.6%
Female	78.8%	81.7%	79.2%	80.9%	79.2%	85.4%
Other	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%
Total	5,495	382	4,661	655	11,193	328
# Unknown/ unreported	104	0	5	0	109	0

#### Table 24. Gender Distribution of Students who Completed a Nursing Program

# Age Distribution of Students who Completed a Nursing Program

- 64% of nursing graduates in 2016-2017 were younger than 31 years of age when they completed their program.
- People 41 years and older accounted for 10% of graduates from all programs, 13% of ADN graduates, and 12% of LVN-to-ADN graduates.

# Table 25. Age Distribution of Students who Completed a Nursing Program by ProgramType

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicensure
17 – 20 years	1.1%	0.5%	3.5%	1.7%	2.1%	0.0%
21 – 25 years	23.7%	15.2%	44.7%	29.1%	32.3%	4.1%
26 – 30 years	29.4%	36.1%	26.5%	40.6%	29.1%	51.3%
31 – 40 years	33.0%	36.4%	19.1%	21.2%	26.8%	36.0%
41 – 50 years	10.3%	9.9%	4.8%	5.9%	7.8%	6.4%
51 – 60 years	2.3%	1.8%	1.1%	1.2%	1.8%	2.2%
61 years and older	0.1%	0.0%	0.2%	0.3%	0.2%	0.0%
Total	5,491	382	4,471	591	10,935	267
# Unknown/ unreported	108	0	195	64	367	61

# Declared Disabilities among Students who Completed Nursing Programs

- Nursing programs reported that 752 students who completed their programs in 2016-2017 had an accommodation for a declared disability.
- Some programs reported more students receiving a specific accommodation than the overall number of students receiving accommodations; thus, some percentages are greater than 100%.
- Since only 39 schools (30%) reported that they would be able to access and report aggregate student disability data as part of this survey, the number of students with accommodations may be underreported.
- Exam accommodations (98%) was the most commonly provided accommodation, followed by academic counseling and advising (37%).

# Table 26. Accommodations Provided for Students with Disabilities who Completed Nursing Programs by Program Type\*

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Exam Accommodations (Modified/Extended Time/Distraction Reduced Space)	100.0%	100.0%	89.2%	91.4%	97.2%
Academic Counseling/Advising	46.9%	37.5%	9.0%	0.0%	36.4%
Disability-Related Counseling/Referral	33.5%	0.0%	9.6%	0.0%	26.4%
Note-Taking Services/Reader/Audio Recording/Smart Pen	21.6%	12.5%	18.1%	45.7%	21.9%
Priority Registration	20.7%	37.5%	3.6%	0.0%	16.2%
Adaptive Equipment/Physical Space/Facilities	6.5%	0.0%	3.0%	8.6%	5.8%
Other	1.6%	0.0%	7.2%	34.3%	4.3%
Assistive Technology/Alternative Format	3.3%	0.0%	1.8%	8.6%	3.2%
Interpreter and Captioning Services	0.9%	0.0%	0.0%	0.0%	0.7%
Transportation/Mobility Assistance and Services/Parking	0.0%	0.0%	1.2%	0.0%	0.3%
Service Animals	0.0%	0.0%	0.6%	0.0%	0.1%
Reduced Courseload	0.0%	0.0%	0.0%	0.0%	0.0%
Total number of students receiving accommodations	550	8	166	35	759

\*Students with declared disabilities may receive more than one accommodation so the number of accommodations may be higher than the number of students with a declared disability. Respondents sometimes reported more students receiving a specific accommodation than overall number of students receiving accommodations.

# Completion, Retention and Attrition Data

- The overall attrition rate for pre-licensure nursing education programs in California was 16% in 2016-2017.
- BSN programs had the highest attrition rate (20%) and ELM and ADN-to-LVN programs the lowest (7%). Much of the attrition in the BSN category is attributable to a single program.

	,		i Data Ny		1980	
	ADN	LVN-to-ADN (within generic program)	LVN-to- ADN (separate program)	BSN	ELM	All Programs
Students scheduled to complete the program	5,753	686	410	5,546	647	13,042
Completed on-time	4,406	532	377	4,221	577	10,113
Still enrolled	597	40	4	229	23	893
Total attrition	750	114	29	1,096	47	2,036
Dropped out	387	36	10	950	27	1,410
Dismissed	363	78	19	146	20	626
Completed late*	687	87	5	149	25	953
Retention rate**	76.6%	77.6%	92.0%	76.1%	89.2%	77.5%
Attrition rate***	13.0%	16.6%	7.1%	19.8%	7.3%	15.6%

#### Table 27. Completion, Retention and Attrition Data by Program Type

• In 2016-17, programs were asked to provide attrition and retention data by race and ethnicity. Native American students had the highest retention rate (86%) and lowest attrition rate (6%), but their numbers were small. African American students had the lowest retention rates (70%). Filipino students had the highest attrition rate (22%).

Table 28. Completion,	Retention and	Attrition Data	by Race and Ethnicity
-----------------------	---------------	----------------	-----------------------

	Native American	Asian	African American	Filipino	Hispanic	White	Other	Unknown
Students scheduled to complete the program	90	2,227	571	1,165	2,789	4,368	624	1,208
Completed on-time	77	1,654	397	842	2,156	3,523	514	950
Still enrolled	8	185	53	63	245	212	38	89
Total attrition	5	388	121	260	388	633	72	169
Dropped out	3	278	68	198	234	462	45	122
Dismissed	2	110	53	62	154	171	27	47
Completed late*	13	151	60	108	248	294	52	27
Retention rate**	85.6%	74.3%	69.5%	72.3%	77.3%	80.7%	82.4%	78.6%
Attrition rate***	5.6%	17.4%	21.2%	22.3%	13.9%	14.5%	11.5%	14.0%

\*These completions are not included in the calculations for either retention or attrition rates.

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

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

Note: Data for traditional and accelerated program tracks are combined in this table.

Note Four of these programs reported "0" because they are new, and two have a zero total for other reasons.

# Employment of Recent Nursing Program Graduates

- Program directors were asked to report the employment of recent graduates from their program. Program directors may not have accurate information about all graduates so these estimates may have some error.
- Across all programs, 61% of recent RN graduates employed in nursing in October 2017 were reported by program directors to be working in hospitals.
- Graduates of BSN programs were the most likely to work in hospitals (73%), while graduates of ELM programs were the least likely (46%). Graduates of ELM programs were more likely than other graduates to be pursuing additional nursing education (24%) and not yet licensed (24%) compared to 10% of graduates overall.
- Statewide, programs reported that 4% of nursing graduates from the prior academic year were unable to find employment by October 2017, with LVN-to-ADN programs reporting the highest share of recent graduates (13%) unable to find employment.
- An additional 10% of nurses who graduated between 8/1/16 and 7/31/17 had not yet obtained licenses as of October 2017.
- Nursing schools reported that 81% of their recent RN graduates employed in nursing were employed in California.

	ADN	LVN-to- ADN	BSN	ELM	All Programs	ELM Postlicen- sure
Hospital	59.0%	52.9%	72.6%	45.5%	61.1%	55.6%
Pursuing additional nursing education	12.2%	4.7%	2.3%	23.8%	10.3%	0.8%
Not yet licensed	8.0%	17.1%	10.4%	23.9%	10.2%	1.1%
Long-term care facilities	6.2%	6.8%	3.8%	0.1%	5.2%	0.9%
Other healthcare facilities	5.9%	2.2%	3.3%	0.4%	4.6%	16.5%
Unable to find employment	4.6%	13.2%	2.1%	2.1%	4.2%	0.6%
Community/public health facilities	3.0%	3.2%	1.9%	1.1%	2.6%	20.2%
Other setting	1.2%	0.0%	3.7%	3.1%	2.0%	4.2%

# Table 29. Employment of Recent Nursing Program Graduates\*

\*Graduates whose employment setting was reported as "unknown" have been excluded from this table. In 2016-2017, on average, the employment setting was unknown for 14% of recent graduates.

# Student Debt Load

- The overall average debt load of nursing graduates was \$19,118. ELM students had the highest average debt load, and ADN students had the lowest average debt load.
- Private school graduates had an average debt load of \$40,851, while public school graduates averaged \$9,610.

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Average debt load	\$7,562	\$16,690	\$28,860	\$85,830	\$19,118
Private	\$21,404	\$39,403	\$37,720	\$85,340	\$40,851
Public	\$4,981	\$7,605	\$18,734	\$87,300	\$9,610
Number of programs reporting	70	7	30	8	115

#### Table 30. Student Debt Load of Recent Nursing Program Graduates

#### Time to Complete

- Most programs are on a semester schedule (84%) although some are on a quarter schedule (11%). "Other" schedules include eight and 10 week terms, 6-month terms, and combinations of semesters and quarters.
- In 2016-2017, respondents were asked to provide the average time it took for generic and accelerated full-time students to complete their program. ADN directors estimated that it took an average of 6.5 semesters or 7.7 quarters for full-time students to complete a generic program. BSN directors estimated that it took an average of 6.3 semesters or 10.3 quarters to complete a generic program.

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Semester	90.5%	100.0%	73.0%	69.2%	84.4%
Quarter	7.1%	0.0%	16.2%	30.8%	11.4%
Other	2.4%	0.0%	10.8%	0.0%	4.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Number of programs reporting	84	7	37	13	141

#### Table 31. Type of Schedule by Program Type

	ADN	LVN-to- ADN	BSN	ELM min*	ELM max*
Full-Time Generic Students					
Average time to completion, semesters	6.5	2.5	6.3	4.3	4.6
Average time to completion, quarters	7.7	NA	10.3	5.8	6.8
Number of programs reporting	84	6	34	12	12
Full-Time Accelerated Students					
Average time to completion, semesters	2.8	3.0	4.8	NA	NA
Average time to completion, quarters	6.0	NA	8.5	NA	NA
Number of programs reporting	44	1	22	-	-

#### Table 32. Average Time to Completion by Schedule and Program Type

\*Minimum and maximum numbers refer to ELM prelicensure segments.

- In 2016-2017, respondents with ADN programs were asked to give common reasons ADN graduation was delayed.
- The most common reason was that the "student had to repeat one or more courses to pass / progress" (92%), followed by "student had personal issue(s) that required time away from school" (82%).

#### Table 33. Reasons for Delayed Completion, ADN Students Only

Student had to repeat one or more courses to pass/progress	91.6%
Student had personal issue(s) that required time away from school	81.9%
Student changed course of study	7.2%
Other	4.8%
Inadequate academic advising	3.6%
Unable to obtain a required course(s) to progress	3.6%
Does not apply as our program is not a traditional 2 year program, please explain:	1.2%
Required pre-requisite or required course not offered	0.0%
Number of programs reporting	83

# **Faculty Data**

Analysis of faculty data by program type cannot be completed because faculty data are reported by school, not by program type.

# Full-time and Part-time Faculty Data

- On October 15, 2017, there were 4,799 nursing faculty.<sup>2</sup> More than two-thirds were parttime faculty (68%, n=3,253).
- The faculty vacancy rate in pre-licensure nursing programs was 8.1%.

#### Table 34. Total Faculty and Faculty Vacancies\*

	# of Faculty	# of Vacancies	Vacancy Rate
Total Faculty	4,799	424	8.1%
Full-time Faculty	1,546	182	10.5%
Part-time Faculty	3,253	242	6.9%

- In 2016-2017, 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. 47% (n=61) of 131 schools responding agreed. These 61 schools were asked to rank the reason for this shift.
- The top-ranked reason was non-competitive salaries for full-time faculty, followed by a shortage of RNs applying for full-time faculty positions.
- "Other" reasons included retirement of full-time faculty and the desire to improve the ratio of faculty to students.

#### Table 35. Reasons for Hiring More Part-time Faculty

	Average rank*	Programs reporting
Non-competitive salaries for full time faculty	2.45	51
Shortage of RNs applying for full time faculty positions	2.98	48
Insufficient number of full time faculty applicants with required credential	3.42	48
Insufficient budget to afford benefits and other costs of FT faculty	4.08	49
Need for part-time faculty to teach specialty content	4.39	46
Need for faculty to have time for clinical practice	5.62	39
Private, state university or community college laws, rules or policies	5.66	38
Other	5.94	18
To allow for flexibility with respect to enrollment changes	6.22	36
Need for full-time faculty to have teaching release time for scholarship, clinical practice, sabbaticals, etc.	7.03	33

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

<sup>&</sup>lt;sup>2</sup> 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.

• Nearly all full-time and most part-time faculty positions are budgeted positions funded by the school's general fund. Eleven percent of part-time faculty positions are paid entirely with external funding, compared with only 2% of full-time faculty positions.

#### Table 36. Funding of Faculty Positions

	% Full-time	% Part-time
	Faculty	Faculty
Budgeted positions	95.8%	85.0%
100% external funding	2.2%	11.4%
Combination of the above	2.0%	3.6%
Number of faculty	1,546	3,253

• The majority of faculty (55%) teaches clinical courses only. More than one-third (37%) of faculty teaches both clinical and didactic courses, while few faculty teach only didactic courses (9%).

#### Table 37. Faculty Teaching Assignments

	% Full-time Faculty
Clinical courses only	54.5%
Didactic courses only	9.0%
Clinical & didactic courses	36.5%
Number of faculty	4,756

• 92 of 132 schools (70%) reported that faculty in their programs work an overloaded schedule, and 97% (n=89) of these schools pay the faculty extra for the overloaded schedule.

# Faculty for Next Year

 49% of schools reported that their externally funded positions will continue to be funded for the 2017-2018 academic year. If these positions are not funded, schools reported that they would be able to enroll only 10,131 students in pre-licensure RN programs in 2017-2018, which would be a 25% decrease in new enrollments compared to the 13,597 new students that enrolled in RN programs in 2016-2017.

#### Table 38. External Funding for Faculty Next Year

	% Schools
Will continue	48.5%
Will not continue	0.8%
Unknown	10.8%
Not applicable	40.0%
Number of schools reporting	130

# Faculty Demographic Data

• Nursing faculty remain predominantly white (57%) and female (87%). Forty-one percent of faculty is between 41 and 55 years of age and more than one-third (34%) of faculty are over 55 years of age.

#### Table 39. Faculty Ethnicity

Race/Ethnicity	% Faculty
Native American	0.6%
Asian	8.7%
Asian Indian	2.0%
Filipino	7.1%
Hawaiian/Pacific Islander	0.5%
African American	9.4%
Hispanic	11.8%
Multi-race	1.5%
Other	1.1%
White	57.3%
Number of faculty	4,350
Ethnic Minorities*	42.7%
Unknown/unreported	449

\*Ethnic minorities include all reported non-White racial and ethnic groups, including "Other" and "Multi-race".

Gender	% Faculty
Men	13.5%
Women	86.5%
Other	0.0%
Number of faculty	4,592
Unknown/unreported	208
Age	% Faculty
30 years or younger	5.5%
31 – 40 years	19.8%
41 – 50 years	26.0%
51 – 55 years	14.9%
56 – 60 years	14.1%
61 – 65 years	13.0%
66 – 70 years	4.5%
71 years and older	2.2%
Number of faculty	4,255
Unknown/unreported	544

#### Table 40. Faculty Gender and Age

# Faculty Education

- On October 15, 2017, almost all full-time faculty (95%) held a master's or doctoral degree, while only 57% of part-time faculty held either of those degrees.
- 9% of all active faculty (n=426) were reported to be pursuing an advanced degree as of October 15, 2017.

	% Full-time Faculty	% Part-time Faculty
Associate degree in nursing (ADN)	0.1%	7.1%
Baccalaureate degree in nursing (BSN)	2.5%	35.1%
Non-nursing baccalaureate	0.0%	0.8%
Master's degree in nursing (MSN)	59.0%	46.5%
Non-nursing master's degree	2.9%	2.8%
PhD in nursing	15.9%	2.7%
Doctorate of Nursing Practice (DNP)	10.5%	3.1%
Other doctorate in nursing	2.3%	0.6%
Non-nursing doctorate	4.7%	1.3%
Number of faculty	1,513	3,179
Unknown/unreported	33	74

#### Table 41. Highest Level of Education of Faculty\*

\*The sum of full- and part-time faculty by degree category did not equal the total number of faculty reported.

# Recruiting Diverse Faculty

- In 2016-2017 program representatives were asked what strategies they used to recruit diverse faculty.
- The most commonly used strategy was to send job announcements to a diverse group of institutions and organizations (74%), followed by sharing school and program goals and commitments to diversity (67%) and highlighting campus and community demographics (66%).

	% Schools
Send job announcements to a diverse group of institutions and organizations for posting and recruitment	74.0%
Share program/school goals and commitments to diversity	66.9%
Highlight campus and community demographics	66.1%
Share faculty development and mentoring opportunities	52.0%
Use of publications targeting minority professionals (e.g. Minority Nurse)	37.8%
Highlight success of faculty, including faculty of color	27.6%
Showcase how diversity issues have been incorporated into the curriculum	26.0%
Other	9.4%
External funding and/or salary enhancements (e.g. endowed lectureship)	3.1%
Number of schools reporting	130

#### Table 42. Strategies for Recruiting Diverse Faculty

#### Methods Used to Prepare Part-time Faculty to Teach

• Faculty orientations (90%) and program policies (88%) and were the most frequently reported methods used to prepare part-time faculty to teach.

#### Table 43. Methods Used to Prepare Part-time Faculty to Teach

	% Schools
Faculty orientation	89.9%
Program policies	88.4%
Mentoring program	76.0%
Teaching strategies	68.2%
Specific orientation program	67.4%
Administrative policies	63.6%
Curriculum review	61.2%
External training program	10.1%
Other	4.7%
None	0.0%
Number of schools reporting	129

# Faculty Attrition

- Nursing schools reported 171 full-time and 529 part-time faculty members as having retired or left the program in 2016-2017.
- Schools reported that an additional 162 faculty members (88 full-time and 74 part-time) are expected to retire or leave the school in 2017-2018.
- The most frequently cited reason for having a faculty member leave the program in 2016-2017 was retirement (42%), followed by relocation of spouse or other family obligation (18%).
- Workload (3%), workplace climate (2%), and layoffs (0%) were the least common reasons reported for faculty leaving their positions.

	% Schools
Retirement	41.7%
Relocation of spouse or other family obligation	18.1%
Career advancement	15.0%
Termination (or requested resignation)	12.6%
Personal health issues	8.7%
Return to clinical practice	7.9%
Salary/Benefits	6.3%
Resigned for unknown reasons	6.3%
Other	3.9%
Workload	3.1%
Workplace climate	1.6%
Layoffs (for budgetary reasons)	0.0%
Number of schools reporting	127

- In 2016-2017, twenty schools reported that 63 active full-time faculty went from full-time to part-time.
- The main reason schools reported for faculty going from full-time to part-time schedules was preparation for retirement (57%) followed by personal health issues (24%).

# Table 45. Reasons Faculty Go From Full-Time to Part-Time

	% Schools
Preparing for retirement	57.1%
Personal health issues	23.8%
Workload	19.0%
Family obligations	14.3%
Return to clinical practice	9.5%
Workplace climate	4.8%
Other	4.8%
Requested by program due to budgetary reason	0.0%
Number of schools reporting	21

# Faculty Hiring

- 115 schools reported hiring a total of 999 faculty members (188 full-time and 811 parttime) between August 1, 2016 and July 31, 2017.
- Thirty-seven percent (37%, n=360) of these newly hired faculty had less than one year of teaching experience before they took the faculty position.
- The majority of schools (72%) that hired a faculty person in the last year reported that their newly hired faculty had experience teaching in a clinical setting. The second-largest proportion (68%) reported that their newly hired faculty had experience teaching at another nursing school.
- Six schools reported they were under a hiring freeze for active faculty at some point between August 1, 2016 and July 31, 2017, and three of these schools reported that the hiring freeze prevented them from hiring all the faculty they needed during the academic year.

	% Schools
Experience teaching as a nurse educator in a clinical setting	72.2%
Experience teaching at another nursing school	67.8%
Completed a graduate degree program in last two years	60.0%
Experience student teaching while in graduate school	39.1%
No teaching experience	37.4%
Experience teaching in a setting outside of nursing	20.0%
Other	0.9%
Number of schools reporting	115

#### Table 46. Characteristics of Newly Hired Faculty

• The most common reason for hiring new faculty was to replace faculty that had left or retired, followed by the need to fill longstanding faculty vacancies.

#### Table 47. Reasons for Hiring Faculty

	% Schools
To replace faculty that retired or left the program	77.2%
To fill longstanding faculty vacancies (positions vacant for more than one year)	32.5%
Due to program expansion	19.3%
To reduce faculty workload	17.5%
Other	12.3%
Number of schools reporting	114

# Barriers to Recruiting Faculty

- Non-competitive salaries (76%) and an insufficient number of faculty applicants with the required credentials (73%) were the most frequently reported barriers to faculty recruitment.
- 41% of schools reported that the workload responsibilities of faculty were a barrier to recruitment.
- 17% of schools felt that an overall RN shortage was a barrier to recruiting faculty—a decrease from last year when 21% reported this as a barrier.

#### Table 48. Barriers to Recruiting Faculty

	% Schools
Non-competitive salaries	76.3%
Insufficient number of faculty applicants with required credentials	72.5%
Workload (not wanting faculty responsibilities)	40.5%
BRN rules and regulations	28.2%
Private, state university or community college laws, rules or policies	17.6%
Overall shortage of RNs	16.8%
Other	1.5%
No barriers	6.9%
Number of schools reporting	131

#### Faculty Salaries

• On average, full-time faculty with doctoral degrees earn more than those with master's degrees.

# Table 49. Average Annual Salary Paid for Full-Time Faculty by Highest Degree Earned& Length of Academic Appointment

-	Master's Degree		Doctoral Degree		
	Average Low	Average High	Average Low	Average High	
9 months	\$66,396	\$86,599	\$72,474	\$102,600	
10 months	\$67,036	\$115,528	\$83,014	\$107,358	
11 months	\$76,101	\$101,394	\$98,145	\$125,620	
12 months	\$70,727	\$89,438	\$78,918	\$94,386	

# Nursing Program Data

#### Admission Criteria

- Scores on pre-enrollment assessment tests, minimum/cumulative GPA, minimum grade level in prerequisite courses, and completion of prerequisite courses were the most common criteria used to determine if an applicant was qualified for admission to the nursing program.
- Score on a pre-enrollment exam was important for ADN, LVN-to-ADN, and, to a lesser extent, BSN programs.
- A letter of reference, personal statement, and interviews were important factors in admission for many ELM programs, in addition to minimum/cumulative GPA.
- Health-related work experience was important for about nearly half of BSN and ELM programs.
- "Multi-criteria screening as defined in California Assembly Bill 548" was an important factor for 51% of ADN programs and 14% of LVN-to-ADN programs. This legislation applies specifically to community colleges.

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Pre-enrollment assessment test (TEAS, SAT, ACT, GRE)	89.3%	85.7%	74.3%	46.2%	81.3%
Minimum/Cumulative GPA	70.2%	85.7%	88.6%	92.3%	77.7%
Minimum grade level in prerequisite courses	70.2%	42.9%	62.9%	84.6%	68.3%
Completion of prerequisite courses (including recency and/or repetition)	63.1%	57.1%	77.1%	0.0%	60.4%
Science GPA	63.1%	57.1%	51.4%	53.8%	59.0%
Health-related work experience	33.3%	0.0%	45.7%	46.2%	36.0%
Multi-criteria screening as defined in California Assembly Bill 548 (Community Colleges only)	51.2%	14.3%	0.0%	0.0%	31.7%
Letter of reference/recommendation	11.9%	0.0%	37.1%	76.9%	23.7%
Lottery	29.8%	14.3%	2.9%	0.0%	19.4%
Interview	9.5%	0.0%	28.6%	61.5%	18.7%
Community Colleges' Nursing Prerequisite Validation Study - Chancellor's Formula	28.6%	14.3%	0.0%	0.0%	18.0%
Personal statement	11.9%	14.3%	2.9%	76.9%	15.8%
Other	2.4%	0.0%	17.1%	30.8%	8.6%
Geographic location	2.4%	0.0%	22.9%	7.7%	7.9%
None	0.0%	0.0%	0.0%	0.0%	0.0%
Number of programs reporting	84	7	35	13	139

#### Table 50. Admission Criteria by Program Type

### Selection Process for Qualified Applications

- Ranking by specific criteria was the most common method (74%) for selecting students for admission to nursing programs among those who met minimum qualifications. BSN and ELM programs more commonly cited this criterion.
- Random selection was used by generic ADN and LVN-to-ADN programs but was not used by any BSN or ELM programs.
- ELM programs frequently reported using the interview and goal statement as selection criteria.

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Ranking by specific criteria	62.8%	57.1%	94.1%	92.3%	73.5%
Interviews	9.0%	14.3%	32.4%	76.9%	22.0%
Random selection	34.6%	14.3%	0.0%	0.0%	21.2%
Goal statement	3.8%	0.0%	26.5%	76.9%	16.7%
Other	12.8%	14.3%	5.9%	30.8%	12.9%
Modified random selection	20.5%	0.0%	0.0%	0.0%	12.1%
First come, first served from the waiting list	7.7%	0.0%	2.9%	7.7%	6.1%
First come, first served (based on application date for the quarter/semester)	7.7%	0.0%	2.9%	7.7%	6.1%
Number of programs reporting	78	7	34	13	132

### Table 51. Selection Criteria for Qualified Applications by Program Type

#### Difficult to Hire Clinical Areas

- Pediatrics (51%) and Psychiatric/Mental Health (45%) were the clinical areas in which schools had the most difficulty recruiting new faculty.
- 15% of schools reported no difficulty recruiting faculty for any clinical specialty area.

Table 52. Difficult to H	Hire Clinical Areas
--------------------------	---------------------

	% Schools
Pediatrics	50.8%
Psychiatric/Mental Health	44.6%
Obstetrics/Gynecology	42.3%
Medical-surgical	28.5%
Geriatrics	17.7%
No clinical areas	14.6%
Community Health	9.2%
Critical Care	5.4%
Other	1.5%
Number of schools reporting	130

#### Waiting List

- 25 programs reported having total of 2,232 students on a waiting list. Of these programs, 46% keep students on the waiting list until they are admitted, 35% keep students on the waiting list until the subsequent application cycle is complete and all spaces are filled, and 8% keep students on for two application cycles.
- Average time on the waiting list varied by program: students generally spent less than a semester or quarter waiting to get into a BSN or ELM program, but spent an average of up to three quarters or semesters on the waiting list for an ADN program.

### Table 53. Waiting Lists by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Qualified applicants on a waiting list	2,106	85	36	5	2,232
Average number of quarters/semesters to enroll after being placed on the waiting list	2.9	-	0.8	1.0	2.3
Number of programs reporting	17	4	3	1	25

### Capacity of Program Expansion

• Over the next two years, BSN and ELM programs expect to see enrollment growth. ADN and LVN-to-ADN programs anticipate a decline in enrollment over the next two years.

#### Table 54. Current and Projected New Student Enrollment by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
2016-2017 new student enrollment	6,628	376	5,788	803	13,595
Expected new student enrollment given current resources					
2017-2018	6,366	359	7,072	871	14,668
Expected 2017-2018 enrollment as % of 2016-2017 enrollment	96.0%	95.5%	122.2%	108.5%	107.9%
2018-2019	6,508	361	7,182	899	14,950
Expected 2018-2019 enrollment as % of 2016-2017 enrollment	98.2%	96.0%	124.1%	112.0%	110.0%

#### Barriers to Program Expansion

- The principal barrier to program expansion for all program types remains an insufficient number of clinical sites, reported by 76% of programs.
- Non-competitive faculty salaries (53%), insufficient number of qualified clinical faculty (50%), and classroom faculty (43%) were also frequently reported barriers to expansion.
- Of the 135 programs that responded, six programs reported no barriers to expansion (4%).

	ADN	LVN-to- ADN	BSN	ELM	Total
Insufficient number of clinical sites	78.0%	57.1%	76.5%	75.0%	76.3%
Faculty salaries not competitive	53.7%	85.7%	58.8%	16.7%	53.3%
Insufficient number of qualified clinical faculty	51.2%	71.4%	47.1%	33.3%	49.6%
Insufficient number of qualified classroom faculty	42.7%	57.1%	44.1%	33.3%	43.0%
Insufficient funding for faculty salaries	31.7%	57.1%	32.4%	8.3%	31.1%
Insufficient number of physical facilities and space for classrooms	24.4%	28.6%	23.5%	41.7%	25.9%
Insufficient number of physical facilities and space for skills labs	22.0%	14.3%	23.5%	25.0%	22.2%
Insufficient funding for program support (e.g. clerical, travel, supplies, equipment)	18.3%	42.9%	8.8%	8.3%	16.3%
Insufficient number of allocated spaces for the nursing program	12.2%	0.0%	20.6%	16.7%	14.1%
Insufficient support for nursing school by college or university	12.2%	14.3%	8.8%	8.3%	11.1%
Other	6.1%	14.3%	8.8%	16.7%	8.1%
Insufficient financial support for students	6.1%	0.0%	2.9%	8.3%	5.2%
No barriers to program expansion	3.7%	0.0%	5.9%	8.3%	4.4%
Number of programs reporting	82	7	34	12	135

#### Table 55. Barriers to Program Expansion by Program Type

#### Program Expansion Strategies

- 98% (n=101) of the 103 programs that reported a lack of clinical sites as a barrier to program expansion reported at least one strategy to help mitigate this barrier.
- The most frequently-reported strategies to mitigate the lack of clinical sites were use of human patient simulators, twelve-hour shifts, and community based/ambulatory care.

# Table 56. Program Expansion Strategies to Address a Lack of Clinical Sites byProgram Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Human patient simulators	87.3%	50.0%	68.0%	88.9%	81.2%
Twelve-hour shifts	73.0%	50.0%	88.0%	88.9%	77.2%
Community-based /ambulatory care (e.g. homeless shelters, nurse managed clinics, community health centers)	66.7%	50.0%	76.0%	88.9%	70.3%
Weekend shifts	66.7%	100.0%	52.0%	77.8%	65.3%
Innovative skills lab experiences	58.7%	50.0%	64.0%	100.0%	63.4%
Evening shifts	52.4%	75.0%	60.0%	88.9%	58.4%
Regional computerized clinical placement system	46.0%	50.0%	64.0%	77.8%	53.5%
Preceptorships	44.4%	25.0%	40.0%	44.4%	42.6%
Non-traditional clinical sites (e.g. correctional facilities)	19.0%	25.0%	52.0%	88.9%	33.7%
Night shifts	9.5%	0.0%	52.0%	77.8%	25.7%
Other	4.8%	0.0%	4.0%	11.1%	5.0%
Number of programs reporting	63	4	25	9	101

### Denial of Clinical Space and Access to Alternative Clinical Sites

- In 2016-2017 a total of 77 programs (55%) reported that they were denied access to a clinical placement, unit, or shift.
- 40% (n=31) of programs that were denied clinical placement, unit, or shift were offered an alternative.
- The lack of access to clinical space resulted in a loss of 302 clinical placements, units, or shifts, which affected 2,147 students.

#### Table 57. RN Programs Denied Clinical Space by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Programs Denied Clinical Placement, Unit, or Shift	48	3	18	8	77
% of programs	57.1%	42.9%	48.6%	61.5%	54.6%
Programs Offered Alternative by Site	16	0	10	5	31
Placements, Units, or Shifts lost	130	29	110	33	302
Number of programs reporting	84	7	37	13	141

• In addition, 60 programs (43%) reported that there were fewer students allowed for a clinical placement, unit, or shift in 2016-2017 than in the prior year.

#### Table 58. RN Programs That Reported Fewer Students Allowed for Clinical Space

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Fewer Students Allowed for a Clinical Placement, Unit, or Shift	33	3	18	6	60
Number of programs reporting	84	7	37	12	140

• More than two-thirds of programs (69%) reported lost placement sites in Medical/Surgical clinical areas. More than one-third of programs reported lost placement sites in preceptorships (35%) and pediatrics (34%).

#### Table 59. Clinical Area that Lost Placements, Shifts or Units by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Medical/Surgical	60.4%	33.3%	88.9%	87.5%	68.8%
Preceptorship	41.7%	0.0%	22.2%	37.5%	35.1%
Pediatrics	31.3%	100.0%	38.9%	12.5%	33.8%
Obstetrics	18.8%	66.7%	44.4%	37.5%	28.6%
Geriatrics	18.8%	0.0%	38.9%	50.0%	26.0%
Psychiatry/Mental Health	18.8%	0.0%	27.8%	62.5%	24.7%
Critical Care	4.2%	0.0%	22.2%	12.5%	9.1%
Community Health	6.3%	0.0%	16.7%	12.5%	9.1%
Other	4.2%	0.0%	5.6%	0.0%	3.9%
Number of programs reporting	48	3	18	8	77

### Reasons for Clinical Space Being Unavailable

- Staff nurse overload or insufficient qualified staff was the most frequently reported reason why programs were denied clinical space (52%)
- "Displaced by another program" (51%) and "competition for space arising from an increase in the number of nursing students" (50%) were the second and third most important reasons.
- "Displaced by another program" was the top reason for ELM program loss of clinical space.
- Only one program reported being denied space because the facility began charging a fee or another RN program offered to pay a fee for the placement. In a separate question, ten programs (7%) reported providing financial support to secure a clinical placement.

#### Table 60. Reasons for Clinical Space Being Unavailable by Program Type

	ADN	LVN-to- ADN	BSN	LM	All Programs
Staff nurse overload or insufficient qualified staff	52.1%	33.3%	50.0%	62.5%	51.9%
Displaced by another program	50.0%	0.0%	44.4%	87.5%	50.6%
Competition for clinical space due to increase in number of nursing students in region	50.0%	33.3%	55.6%	37.5%	49.4%
Visit from Joint Commission or other accrediting agency	35.4%	0.0%	27.8%	50.0%	33.8%
No longer accepting ADN students*	39.6%	66.7%	0.0%	0.0%	27.3%
Nurse residency programs	20.8%	33.3%	27.8%	50.0%	26.0%
Change in facility ownership/management	20.8%	0.0%	33.3%	37.5%	24.7%
Other clinical facility business needs/changes in policy	18.8%	0.0%	22.2%	37.5%	20.8%
Decrease in patient census	12.5%	33.3%	27.8%	25.0%	18.2%
Closure, or partial closure, of clinical facility	16.7%	0.0%	16.7%	37.5%	18.2%
Clinical facility seeking magnet status	22.9%	33.3%	0.0%	0.0%	15.6%
Other	8.3%	0.0%	27.8%	25.0%	14.3%
Implementation of Electronic Health Records system	4.2%	0.0%	38.9%	12.5%	13.0%
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*	2.1%	0.0%	0.0%	0.0%	1.3%
Number of programs reporting	48	3	18	6	77

\* Not asked of BSN or ELM programs.

 Most programs reported that the lost site was replaced at a different clinical site currently being used by the program. More than half of the programs affected were able to replace the lost space with a new site.

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Replaced lost space at different site currently used by nursing program	53.2%	33.3%	88.9%	62.5%	61.8%
Added/replaced lost space with new site	46.8%	66.7%	61.1%	87.5%	55.3%
Clinical simulation	42.6%	33.3%	33.3%	50.0%	40.8%
Replaced lost space at same clinical site	34.0%	33.3%	33.3%	50.0%	35.5%
Reduced student admissions	10.6%	0.0%	5.6%	12.5%	9.2%
Other	10.6%	0.0%	5.6%	0.0%	7.9%
Number of programs reporting	47	3	18	8	76

# Table 61. Strategies to Address Lost Clinical Space by Program Type

# Alternative Clinical Sites

- 51 programs reported increasing out-of-hospital clinical placements in 2016-2017.
- Skilled nursing/rehabilitation facilities, public health or community health agencies, and surgery centers/ ambulatory care centers were the top alternative out-of-hospital clinical sites reported by these 51 programs.
- Childcare facilities and camps were mentioned by six of the twelve sites that described an "other" placement site.

#### Table 62. Increase in Use of Alternative Out-of-Hospital Clinical Sites by Program

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Skilled nursing/rehabilitation facility	38.2%	0.0%	54.5%	0.0%	37.3%
Surgery center/ambulatory care center	41.2%	50.0%	18.2%	25.0%	35.3%
Public health or community health agency	26.5%	0.0%	72.7%	25.0%	35.3%
Medical practice, clinic, physician office	32.4%	0.0%	36.4%	25.0%	31.4%
Outpatient mental health/substance abuse	23.5%	0.0%	54.5%	50.0%	31.4%
Home health agency/home health service	26.5%	0.0%	54.5%	0.0%	29.4%
School health service (K-12 or college)	23.5%	0.0%	36.4%	25.0%	25.5%
Other	26.5%	50.0%	9.1%	25.0%	23.5%
Hospice	14.7%	0.0%	45.5%	25.0%	21.6%
Urgent care, not hospital-based	14.7%	0.0%	0.0%	0.0%	9.8%
Correctional facility, prison or jail	8.8%	0.0%	9.1%	0.0%	7.8%
Case management/disease management	2.9%	0.0%	27.3%	0.0%	7.8%
Renal dialysis unit	5.9%	0.0%	9.1%	0.0%	5.9%
Occupational health or employee health service	0.0%	0.0%	9.1%	0.0%	2.0%
Number of programs reporting	34	2	11	4	51

### LVN to BSN Education

- Five BSN programs reported LVN-to-BSN tracks that exclusively admit LVN students or differ significantly from the generic BSN program offered at the school.
  - In 2016-2017, programs received 284 qualified applications for 168 admission spaces available for LVN-to-BSN students.
  - Four schools reported admission criteria. Minimum/cumulative GPA and minimum grade level in prerequisite courses as criteria for admission (100%), and science GPA (75%) were the most commonly reported criteria.

#### Table 63. LVN to BSN Admission Criteria

	# LVN-to-BSN Programs
Minimum/Cumulative GPA	4
Completion of prerequisite courses (including recency and/or repetition)	4
Science GPA	3
Minimum grade level in prerequisite courses	1
Geographic location	1
Pre-enrollment assessment test (TEAS, SAT, ACT, GRE)	1
Personal statement	1
Interview	1
Letter of reference/recommendation	1
Holistic review (e.g. residency, language skills, veteran status, other life experiences)	1
Other	1
None	0
Health-related work experience	0
Lottery	0
Number of programs reporting	4

• Ranking by specific criteria (75%) was the most commonly reported method for selecting students for admission to LVN-to-BSN programs.

#### Table 64. LVN to BSN Selection Criteria

	# LVN-to-BSN Programs
Ranking by specific criteria	3
Interviews	1
Goal statement	1
First come, first served from the waiting list	1
Rolling admissions (based on application date for the quarter/semester)	0
Other	0
Number of programs reporting	4

#### LVN-to-ADN Education

- Seven nursing programs exclusively offer LVN-to-ADN education.
- Of the 83 generic ADN programs, 39% (n=32) reported having a separate track for LVNs and 71% (n=59) admit LVNs to the generic ADN program on a space-available basis.
- Twenty-four (29%) generic ADN programs reported having a separate waiting list for LVNs.
- On October 15, 2017, there were a total of 361 LVNs on an ADN program waitlist. These programs reported that, on average, it takes 3.6 quarters/semesters for an LVN student to enroll in the first nursing course after being placed on the waiting list.
- Overall, the most commonly reported mechanisms that facilitate a seamless progression from LVN-to-ADN education are bridge courses and skills lab courses to document competencies.

	ADN	LVN-to- ADN	BSN	All Programs
Bridge course	70.7%	57.1%	34.8%	61.9%
Use of skills lab course to document competencies	54.7%	57.1%	47.8%	53.3%
Credit granted for LVN coursework following successful completion of a specific ADN course(s)	36.0%	42.9%	34.8%	36.2%
Use of tests (such as NLN achievement tests or challenge exams to award credit)	30.7%	28.6%	56.5%	36.2%
Direct articulation of LVN coursework	20.0%	42.9%	34.8%	24.8%
Specific program advisor	16.0%	28.6%	30.4%	20.0%
Other	10.7%	0.0%	13.0%	10.5%
Number of programs reporting	75	7	23	105

#### Table 65. LVN-to-ADN Articulation by Program Type

#### Partnerships

• Eighty nursing programs participate in collaborative or shared programs with another nursing program leading to a higher degree. ADN programs have the greatest number of collaborative programs.

# Table 66. Number of RN Programs that Partner with Other Nursing Programs by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
Programs that partner with another program leading to higher degree	64	5	10	1	80

#### Professional Accreditation

- None of the LVN-to-ADN programs and 35% of ADN programs reported professional accreditation. Most BSN and all ELM programs reported some form of accreditation.
- 35% of ADN programs reported having ACEN accreditation, as did 3% of BSN programs;
   97% of BSN programs and 100% of ELM programs reported having CCNE accreditation.

#### Table 67. Professional Accreditation for Eligible Programs by Program Type

	ADN	LVN-to- ADN	BSN	ELM
ACEN (formerly NLNAC)	35.1%	0.0%	2.7%	0.0%
CCNE*	0.0%	0.0%	97.3%	100.0%
CNEA	0.0%	0.0%	0.0%	0.0%
Not accredited	64.9%	100.0%	0.0%	0.0%
# Unknown/ unreported	0.0%	0.0%	0.0%	0.0%
Number of programs reporting	77	5	37	12

\* NA – Not Applicable, CCNE does not accredit ADN programs.

#### First Time NCLEX Pass Rates

- In 2016-2017, 90% (n=10,004) of nursing students who took the NCLEX for the first time passed the exam.
- The NCLEX pass rate was highest for students who graduated from BSN programs (92%).

#### Table 68. First Time NCLEX Pass Rates by Program Type

	ADN	LVN-to- ADN	BSN	ELM	All Programs
First Time NCLEX* Pass Rate	88.6%	75.8%	91.6%	89.9%	89.5%
# Students that took the NCLEX	5,569	364	4,961	278	11,172
# Students that passed the NCLEX	4,934	276	4,544	250	10,004

\*These data represent nursing students who took the NCLEX for the first time in 2016-17.

- NCLEX pass rates in accelerated programs were similar to those in traditional programs; 89% (n=2,185) of nursing students in an accelerated track who took the NCLEX for the first time in 2016-2017 passed the exam.
- Accelerated ELM programs had a higher average pass rate than their traditional counterparts. Accelerated ADN programs had a lower pass rate than their traditional counterparts. Accelerated BSN programs had roughly the same pass rates as traditional BSN programs.

#### Table 69. NCLEX Pass Rates for Accelerated Programs by Program Type

	ADN	BSN	ELM	All Programs
First Time NCLEX* Pass Rate	68.9%	90.5%	95.2%	89.4%
# Students that took the NCLEX	135	2,245	63	2,443
# Students that passed the NCLEX	93	2,032	60	2,185

\*These data represent nursing students who took the NCLEX for the first time in 2016-17.

#### NCLEX Review

- In 2016-2017, respondents were asked to describe any NCLEX review courses their programs offered, whether pre- or post-graduation.
- 36% of programs reporting (n=51) offered an elective/non-mandatory comprehensive NCLEX review course to students within two to four weeks prior to expected graduation date.
- 48% (n=66) offered an elective/non-mandatory comprehensive NCLEX review course to students after they graduated from the program.
- For the majority of programs offering an NCLEX review course prior to graduation, all program graduates took the course.

# Table 70. Percent of Program Graduates Who Take Comprehensive NCLEX Review Courses

Percent of Students	% of programs	# of programs
100% of students	70.0%	35
75% of students	20.0%	10
50% of students	8.0%	4
<25% of students	2.0%	1
Total	100.0%	50

• At most programs, the comprehensive pre-graduation NCLEX review course was taught by vendor instructors. A number of respondents also indicated that they used online courses.

#### Table 71. Who Teaches NCLEX Review Course?

	% of	# of
	programs	programs
NCLEX prep vendor instructor(s)	86.3%	44
Other	15.7%	8
Program faculty only	9.8%	5
Total		51

 In most programs, the pre-graduation NCLEX review course was a face-to-face class on campus but, as noted previously, a large percentage of programs used online course packages.

#### Table 72. Method of Delivering NCLEX Review Course

	% of programs	# of programs
Face to face on campus	66.7%	34
Online/virtual	15.7%	8
Hybrid	13.7%	7
Face to face off campus	3.9%	2
Total	100.0%	51

• For the majority of programs (56%), the program paid the full price of the pregraduation NCLEX review course for all students who enrolled.

#### Table 73. Who Pays for NCLEX Review Course?

	% of programs	# of programs
Program pays the full price for all students who enroll in the review course (i.e., through budget, scholarship, grant funding, etc.)	56.0%	28
Student pays the full price for the review course offered by the	22.0%	11
Student pays for the review course but receives a price discount	22.0%	11
Total	100.0%	50

- For the 48% of programs who offered their NCLEX review course after graduation, nearly all offered the course within one to four weeks after graduation.
- Respondents were asked why they offered the course after graduation. Most comments indicated that students were better prepared having completed their courses and more able to focus after final course exams. In addition, classroom space was more likely to be available at this time.

#### Table 74. When is the Post-graduation Course Offered?

	% of programs	# of programs
1-4 weeks after graduation	92.4%	61
5-8 weeks after graduation	4.5%	3
More than 8 weeks after graduation	3.0%	2
Total	100.0%	66

#### **Clinical Simulation**

- In 2016-2017, new questions were added to the survey to obtain additional information about program funding for clinical simulation and program planning activities.
- 136 of 141 nursing programs (96%) reported using clinical simulation in 2016-2017.
- Almost half (48%, n=68) of the 141 programs have plans to increase staff dedicated to administering clinical simulation at their school in the next 12 months.
- Half or more of funding for simulation purchases, maintenance, and faculty development and training came from the school's operating budget. A sizable proportion also came from government grants. Relatively little came from industry or private foundations and donors.

# Table 75. Funding Sources for Simulation Purchases, Maintenance, and Faculty Development and Training

	Purchases	Maintenance	Faculty Development/ Training
Your college/university operating budget	49.8%	64.6%	55.5%
Government (i.e. federal/state grants, Chancellor's Office, Federal Workforce Investment Act)	37.6%	27.2%	36.6%
Other	4.1%	1.0%	5.8%
Foundations, private donors	7.6%	6.6%	2.3%
Industry (i.e. hospitals, health systems)	1.3%	0.6%	0.2%
Programs reporting	136	136	136

- 76% (n=104) of these programs had in place simulation policies and procedures to ensure quality and consistent simulation experiences.
- The most common policy or procedure was the development, use and revision of simulation materials for participants, faculty, and staff. The least commonly cited, besides "other", was "required initial and ongoing simulation training for faculty and staff."

#### Table 76. Policies and Procedures to Ensure Quality of Simulation

	% of programs	# of programs
Development, use and revision of simulation materials for participants, faculty, staff	81.7%	85
Roles and responsibilities of faculty, technicians, simulation coordinators/facilitators	76.9%	80
Adherence to simulation related Professional Integrity requirements	76.0%	79
Evaluation mechanisms and requirements for participants, faculty and all aspects of simulation	73.1%	76
Required faculty, staff and participant orientation	72.1%	75
Continuous quality improvement mechanisms used	63.5%	66
Required initial and ongoing simulation training for faculty and staff (i.e. courses, conferences)	51.9%	54
Other participant requirements related to simulation.	36.5%	38
Number of programs reporting	100.0%	104

- About half (51%, n=70) of programs using clinical simulation have a written simulation plan that guides integration of simulation in the curriculum.
- Those with written simulation plans were asked to indicate which elements were included. The most common element selected was course-by-course simulation topics. However, the majority of programs included each of the listed elements, with the least common being abbreviated course-by-course simulation objectives and expected outcomes (no one selected "other").

### Table 77. Elements of Simulation Plan

	% of programs	# of programs
Course by course simulation topics	81.4%	57
How simulation is integrated throughout the curriculum	80.0%	56
Number of hours for each simulation	77.1%	54
Total number of hours for each course	74.3%	52
Abbreviated course by course simulation objectives/expected outcomes	64.3%	45
Other	0.0%	0
Number of programs reporting	100.0%	70

• The most common reason given for why a program with clinical simulation did not yet have a written plan was that faculty was in the process of developing a plan, followed by time or other limitations that delayed the development of the plan. There were a number of write-in answers indicating that lack of a clinical coordinator was a barrier to developing a written plan.

	% of programs	# of programs
Faculty in process of developing a plan	57.6%	38
Time or other limitations have delayed development of a written simulation plan	37.9%	25
Simulation coordinator is developing or assisting faculty with plan development	31.8%	21
Other	13.6%	9
Faculty unaware that use of a written plan is a suggested "best practice"	12.1%	8
No simulation coordinator*	12.1%	8
Number of programs reporting	100.0%	66

\*Answer category derived from write-in answers.

- Only three percent of schools had not integrated recognized simulation standards (i.e. INACSL, NCSBN, NLN, and the Society for Simulation in Healthcare-HHS) in each component of simulation.
- About one-fifth (22%) had integrated simulation standards completely, while 72% had somewhat or mostly integrated these standards.
- Three percent noted that they were not familiar with the standards.

# Table 79. Extent of Integration of Recognized Simulation Standards

	% of programs	# of programs
Not at all	3.0%	4
Somewhat	31.9%	43
Mostly	40.0%	54
Completely	22.2%	30
Not familiar with the standards	3.0%	4
Number of programs reporting	100.0%	135

- One-third (33%, n=45) of respondents agreed that the majority of their clinical courses use 25% of clinical course hours for simulation/skills labs per the regulations CCR 1426 (g) (2) and 1420 (e).
- Those that indicated that the majority of their clinical courses did not use 25% of clinical course hours for simulation/skills labs were asked why. The main reason selected by nearly three-quarters of respondents (72%) was that programs had enough clinical placements or direct patient care learning opportunities available.

#### Table 80. Reasons Why Programs Do Not Comply with CCR 1426(g)(2)

	% of programs	# of programs
Have enough clinical placements available/direct patient care learning opportunities available	72.2%	65
Availability of trained staff/technicians and or faculty limits increased use	51.1%	46
Faculty prefer to use other available clinical training methods	28.9%	26
Available simulation space/equipment/supplies limit increased use	26.7%	24
Costs/funding associated with simulation supplies/maintenance prohibit use or increased use	17.8%	16
Instructional materials are not yet developed/validated	12.2%	11
Other	4.4%	4
Number of programs reporting	100.0%	90

- Respondents were asked identify the areas where simulation activities are used to achieve objectives/learning outcomes.
- The most common area was in critical thinking/decision making/managing priorities of care. The least common was management of legal/ethical situations and "other". However, a large majority of respondents indicated that they were using simulation to achieve learning outcomes and objectives in every category except "other" and legal/ethical situations.

	% of programs	# of programs
Critical thinking/decision making/managing priorities of care	94.1%	127
Preparation for direct clinical patient care	89.6%	121
Application of nursing knowledge/use of the nursing process	88.9%	120
Patient safety/Staff safety and quality of care	88.9%	120
Teamwork/Inter-professional collaboration	86.7%	117
Psychomotor/procedural skills i.e. IV insertion, N/G tube insertion, medication administration	85.9%	116
Communication/crucial conversations	83.0%	112
Manage high risk, low volume care and emergency situations	78.5%	106
Leadership/Delegation/Role clarification	73.3%	99
Guaranteed exposure to critical content areas not available in the direct care setting	68.1%	92
Management of Legal/Ethical situations	47.4%	64
Other	5.2%	7
Number of programs reporting	100.0%	135

#### Table 81. Areas Where Simulation is Used to Achieve Learning Objectives

- Respondents were asked whether their program collects annual data (quantitative and/or qualitative) that show the impact of simulation learning activities on annual NCLEX pass rates year-to-year. Only 8% of programs (n=11) reported doing so.
- These program representatives were asked to describe the quantitative and qualitative measures used. They are listed below.

# Table 82. Quantitative Measures Used to Show Impact of Simulation Learning Activities on NCLEX Pass Rates

	Quantitative Measures
1	Each simulation experience is measured using quantitative tools from the simulation accreditation organization. Simulation is tied to NCLEX content areas such as basic care and comfort.
2	Incorporation of Kaplan and other NCLEX prep activities within the curriculum / Department PLO's / Senior Skill and Simulation Validation
3	SET-M: Simulation Effectiveness Tool - Modified
5	1. Survey Monkey using NLN Question for Faculty and Students 2. NLN student Satisfaction and Self-Confidence in Learning 3. NCLEX Exam Pre-Test Sim 4. Evaluation Survey of the Expected Performance Standards and outcomes post simulation 5. Competency Check-Offs Procedures.
6	The students complete the LROSE (Learning Reflections on the Simulation Experience) survey. It is an evaluation tool initially developed in 2015 with validation & reliability established in 2016. Each academic term an average of XX surveys are completed by nursing students. There are 12 Likert questions measuring perceptions of clinical reasoning & decision-making practices, connection between theory & practice, clinical assessment skills for possible pt outcomes & enhancements of communication with faculty & peers.

# Table 83. Qualitative Measures Used to Show Impact of Simulation Learning Activities on NCLEX Pass Rates

	Qualitative Measures
1	Debriefing and Clinical Evaluation Tool
2	Each simulation experience is measured using qualitative tools from the simulation accreditation organization. Simulation is tied to NCLEX content areas such as basic care and comfort.
3	Student and faculty feedback / Curriculum review with content expert / Curriculum mapping to assure content is introduced and subsequently developed
4	Students are asked what worked well & what can be improved.
5	Survey Monkey required of all students to evaluate program resources, and classroom, clinical, and simulation experiences.

- Respondents were asked whether every simulation session was evaluated by students using standardized, nationally-recognized simulation evaluation tools to measure simulation effectiveness. A little over one-third of programs (36%, n=49) responded affirmatively.
- Those who had students evaluate every simulation session with a nationally-recognized tool were asked to name the tools they used to measure simulation effectiveness. Respondents provided a range of answers, sometimes referring generically to surveys (many created by faculty or staff), debriefs, or check sheets. Some named a source and/or provided the specific name for the tools. That information is summarized below:

Tools Used	Total
NLN/Laerdal tools	7
SET-M	6
QSEN	4
CAE	2
Society for Simulation in Healthcare	2
C-CEI	1
GAS/GRASP	1
Lasater Clinical Judgment Rubric	1
Number of programs reporting	38

### Table 84. Nationally Recognized Tools Used to Evaluate Simulation Courses

- Respondents who did not ask students to evaluate every simulation session with a
  nationally-recognized tool were asked to describe how the program assessed or
  evaluated the effectiveness of simulation in each course. The following table summarizes
  that information, much of which was similar to that provided to the question about tools
  used by those who had students evaluate each course with a nationally-recognized tool.
- A large number of respondents simply noted that they used an "evaluation tool". Many noted using an internally developed survey, often administered via SurveyMonkey or Qualtrics. Many mentioned a debrief session either in conjunction with other modes or on its own. Student feedback was also mentioned, but whether this was written or verbal is unclear. Some included questions about simulation on their course evaluations. Finally, some respondents mentioned assessing student learning via the simulation session itself.

Tools Used	Total
"Evaluation tool"	22
Survey	12
Debrief	12
Course evaluations	12
Skills/SLO assessment	7
Student feedback	4
Checklist	2
LROSE	2
Lasater Clinical Judgment Rubric	1
SET-M	1
Journal	1
Skills practicum	1
Written evaluation	1
Number of programs reporting	76

#### Table 85. Other Tools Used to Evaluate Simulation Courses

- Respondents were asked what types of simulation they used in different topic areas.
- Mannequin-based simulation was the primary form of simulation that programs used in fundamentals, medical/surgical, obstetrics, pediatrics, and geriatrics, although it was used by fewer programs in the area of geriatrics.
- Role-play with other students was used more frequently in psychiatry/mental health, with 62% of programs reporting that they used this mode of simulation in this topic area.
   Standardized patients were also used more in psychiatry/mental health than in other topic areas, with 32% of programs reporting its use in this topic area.
- One quarter of programs did not use simulation in leadership/management courses; and one in five programs did not use simulation in psychiatry/mental health courses.
- Other types of courses in which simulation was used included community health (6 mentions), critical care (2 mentions), and preceptorships (3 mentions).
- Other types of simulation used included Hearing Voices (5 mentions) and task trainers (3 mentions). In addition, some programs used role-play with faculty, online case studies, and mock interviews with root cause analysis.

	Funda- mentals	Med/ Surg	Obstetrics	Pediatrics	Geriatrics	Psychiatry / MH	Leadership Mgmt	Other Type of Course
Mannequin- based	79.4%	93.2%	86.8%	85.6%	67.8%	18.9%	44.7%	18.8%
Computer based scenarios	45.3%	56.8%	45.7%	50.4%	46.6%	31.1%	30.7%	31.3%
Role Play with other students	56.3%	48.5%	32.6%	39.2%	40.7%	62.3%	44.7%	6.3%
Standardized patients (actors)	22.7%	22.7%	18.6%	16.0%	16.9%	32.0%	20.2%	25.0%
Other type of simulation	3.1%	3.0%	3.1%	4.0%	1.7%	6.6%	5.3%	43.8%
None	12.5%	0.8%	5.4%	7.2%	11.9%	19.7%	24.6%	12.5%
Number of programs reporting	131	135	132	128	120	124	117	16

#### Table 86. Type of Simulation Used by Topic Area

- Respondents were asked what types of simulation they planned to use in different topic areas in the next two to three years.
- Mannequin-based simulation was foreseen to be the primary form of simulation that programs used in fundamentals, medical/surgical, obstetrics, pediatrics, and geriatrics, with a projected 9-percentage point increase of its use in geriatrics.
- Role-play with other students was expected to be more frequently used in psychiatry/mental health, as were standardized patients. Programs also anticipated a 19-percentage point increase in the use of mannequin-based simulation in this area.
- In all topic areas except "other", programs anticipated substantial increases in use of computer-based scenarios.
- Overall, programs anticipated using simulation more in all topic areas except "other".
- Other types of simulation activities that programs anticipated using in the future included greater use of virtual reality (5 mentions), Hearing Voices (5), Unfolding Scenario (1) and the Objective Structured Clinical Examination (OSCE) (1).

	Funda- mentals	Med/ Surg	Obstetrics	Pediatrics	Geriatrics	Psychiatry/ MH	Leadership Mgmt	Other Type of Course
Mannequin- based	86.8%	90.9%	85.5%	87.3%	76.9%	38.1%	51.7%	47.1%
Computer based scenarios	62.0%	77.3%	71.0%	73.8%	65.3%	51.6%	48.3%	17.6%
Role Play with other students	58.9%	50.8%	35.1%	46.0%	39.7%	63.5%	55.9%	23.5%
Standardized patients (actors)	36.4%	35.6%	26.7%	24.6%	28.9%	42.9%	28.0%	47.1%
Other type of simulation	6.2%	9.1%	6.9%	9.5%	5.8%	8.7%	7.6%	5.9%
None	3.1%	0.0%	2.3%	3.2%	6.6%	4.8%	10.2%	11.8%
Number of programs reporting	129	132	131	126	121	126	118	17

#### Table 87. Type of Simulation Anticipated in 2-3 Years by Topic Area

### Clinical Training in Nursing Education

- The largest proportion of clinical hours in all programs is in direct inpatient care. The overall proportion is similar across program types.
- Medical/surgical is the content area in which programs use the most hours of clinical simulation.
- Relatively few hours were allocated to clinical simulation (5-7%) and clinical observation (1-2%).

#### Table 88. Average Hours Spent in Clinical Training by Program Type and Content Area

Content Area	Direc	t Patient ( Inpatient			Patient ( Outpatien		Skills Labs		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Medical/Surgical	338.9	253.3	226.9	8.0	10.7	1.4	40.8	20.9	20.5
Fundamentals	82.3	62.7	66.3	5.5	3.3	3.1	54.2	48.5	36.7
Obstetrics	67.3	87.3	79.2	1.6	4.2	0.6	6.8	6.6	7.7
Pediatrics	61.5	86.6	80.0	8.4	5.8	2.7	6.4	6.7	7.2
Geriatrics	69.5	91.6	44.6	5.3	4.0	2.8	3.7	8.9	2.6
Psychiatry/ Mental Health	70.2	89.7	79.2	6.8	9.9	3.3	4.3	3.2	3.2
Leadership/ Management	51.4	75.5	64.5	2.7	1.3	0.0	2.5	1.4	0.3
Other	5.9	59.6	30.9	1.4	19.9	24.6	2.3	4.9	4.3
Total average clinical hours	747.0	806.2	671.7	39.7	59.1	38.4	121.1	101.2	82.5
Number of programs reporting	89	36	13	89	37	13	89	36	13
Content Area	Clini	cal Simul	ation	Clinical Observation			Total Clinical Hours		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Medical/Surgical	26.3	21.7	11.8	4.8	1.2	1.8	418.1	307.9	262.5
Fundamentals	7.4	7.2	2.8	1.8	0.4	0.0	150.2	122.0	108.9
Obstetrics	7.6	8.6	7.4	1.2	1.1	0.9	83.7	107.8	95.8
Pediatrics	6.7	7.5	4.9	3.1	1.1	1.2	86.0	107.7	96.0
Geriatrics	5.1	8.4	2.3	1.1	0.7	0.0	83.6	113.7	52.3
Psychiatry/ Mental Health	4.5	6.9	6.1	1.4	1.1	0.0	87.2	110.5	91.8
Leadership/ Management	2.0	3.8	1.7	1.6	0.9	0.0	58.7	82.8	66.5
Other	0.6	5.3	0.9	0.0	1.3	1.2	10.2	90.8	61.9
Total average clinical hours	60.0	69.6	38.0	15.0	7.8	5.2	977.8	1043.3	835.8
Number of programs reporting	89	36	13	89	36	13	89	36	13

- In each content area and clinical experience, the majority of programs planned to maintain the current balance of clinical training hours over the next 12 months for each clinical experience type and content area listed in the table below.
- In most content areas, if there was a planned change, respondents were more likely to report a planned decrease in clinical hours in direct patient care and an increase in hours in clinical simulation. In medical/surgical, fundamentals, obstetrics, and pediatrics there appeared to be a trend toward increasing hours in outpatient direct care.

Medical/Surgical	Dec	rease hou	urs	м	aintain h	ours	Inc	urs	
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Direct inpatient care	5.6%	10.8%	8.3%	85.6%	83.8%	91.7%	8.9%	5.4%	0.0%
Direct outpatient care	0.0%	0.0%	0.0%	90.0%	77.8%	66.7%	4.4%	2.8%	8.3%
Skills labs	2.2%	2.8%	0.0%	90.0%	86.1%	83.3%	5.6%	2.8%	8.3%
Clinical simulation	1.1%	2.8%	0.0%	91.1%	88.9%	92.3%	7.8%	8.3%	7.7%
Clinical observation	0.0%	0.0%	0.0%	92.2%	80.6%	83.3%	0.0%	0.0%	8.3%
Total clinical hours	2.2%	0.0%	0.0%	88.9%	94.4%	100.0%	8.9%	5.6%	0.0%
Fundamentals	Dec	rease hou	urs	М	aintain h	ours	Inc	crease ho	urs
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Direct inpatient care	3.3%	0.0%	8.3%	90.0%	78.4%	83.3%	3.3%	0.0%	0.0%
Direct outpatient care	1.1%	0.0%	0.0%	88.9%	80.6%	75.0%	2.2%	2.8%	8.3%
Skills labs	2.2%	0.0%	0.0%	93.3%	89.2%	91.7%	4.4%	5.4%	8.3%
Clinical simulation	0.0%	1.1%	0.0%	86.7%	77.8%	92.3%	10.0%	11.1%	7.7%
Clinical observation	0.0%	1.1%	0.0%	91.1%	77.8%	91.7%	0.0%	0.0%	0.0%
Total clinical hours	1.1%	0.0%	0.0%	0.0%	0.0%	100.0%	3.3%	2.8%	0.0%
Obstetrics	Dec	rease hou	urs	М	aintain h	ours	Inc	rease ho	urs
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Direct inpatient care	8.9%	18.9%	16.7%	86.7%	81.1%	83.3%	3.3%	0.0%	0.0%
Direct outpatient care	0.0%	0.0%	0.0%	91.1%	75.0%	75.0%	2.2%	8.3%	8.3%
Skills labs	0.0%	2.8%	0.0%	93.3%	86.1%	83.3%	2.2%	2.8%	16.7%
Clinical simulation	0.0%	2.8%	7.7%	91.1%	91.7%	84.6%	6.7%	5.6%	7.7%
Clinical observation	0.0%	0.0%	0.0%	92.2%	80.6%	91.7%	1.1%	0.0%	0.0%
Total clinical hours	3.3%	2.8%	0.0%	92.2%	94.4%	100.0%	3.3%	2.8%	0.0%
Pediatrics	Dec	rease ho			aintain h	ours	Inc	crease ho	urs
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Direct inpatient care	14.4%	18.9%	16.7%	82.2%	81.1%	83.3%	1.1%	0.0%	0.0%
Direct outpatient care	3.3%	0.0%	0.0%	81.1%	75.0%	66.7%	7.8%	8.3%	16.7%
Skills labs	0.0%	2.8%	0.0%	94.4%	86.1%	83.3%	1.1%	2.8%	16.7%
Clinical simulation	0.0%	2.8%	7.7%	86.7%	88.9%	84.6%	10.0%	8.3%	7.7%
Clinical observation	2.2%	0.0%	0.0%	91.1%	80.6%	91.7%	1.1%	0.0%	0.0%
Total clinical hours	4.4%	2.8%	0.0%	92.2%	94.4%	100.0%	1.1%	2.8%	0.0%

# Table 89. Planned Increase or Decrease in Clinical Hours by Content Area and Type of Clinical Experience \*

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

# Table 89. Planned Increase or Decrease in Clinical Hours by Content Area and Type of Clinical Experience\* (Continued)

Geriatrics	De	crease ho	urs	Ma	aintain hou	ırs	Increase hours			
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	
Direct inpatient care	1.1%	2.7%	0.0%	94.4%	89.2%	100.0%	2.2%	2.7%	0.0%	
Direct outpatient care	2.2%	0.0%	0.0%	0.0% 87.8% 80.6% 83.3% 0		0.0%	5.6%	0.0%		
Skills labs	0.0%	2.8%	0.0%	95.6%	77.8%	91.7%	1.1%	2.8%	0.0%	
Clinical simulation	0.0%	0.0%	0.0%	91.1%	88.9%	84.6%	6.7%	8.3%	15.4%	
Clinical observation	0.0%	0.0%	0.0%	95.6%	80.6%	83.3%	0.0%	0.0%	0.0%	
Total clinical hours	0.0%	0.0%	0.0%	96.7%	97.2%	100.0%	2.2%	0.0%	0.0%	
Psychiatry/ Mental Health	De	crease ho	urs	Ma	aintain hou	ırs	Inc	rease ho	urs	
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	
Direct inpatient care	3.3%	13.5%	0.0%	94.4%	86.5%	100.0%	2.2%	0.0%	0.0%	
Direct outpatient care	1.1%	2.8%	0.0%	91.1%	75.0%	75.0%	1.1%	5.6%	0.0%	
Skills labs	2.2%	2.8%	0.0%	90.0%	80.6%	91.7%	3.3%	0.0%	0.0%	
Clinical simulation	1.1%	2.8%	0.0%	87.8%	80.6%	84.6%	7.8%	11.1%	15.4%	
Clinical observation	1.1%	0.0%	0.0%	94.4%	80.6%	91.7%	1.1%	0.0%	0.0%	
Total clinical hours	2.2%	0.0%	0.0%	93.3%	100.0%	100.0%	4.4%	0.0%	0.0%	
Leadership/ Management	Dec	crease hou	ours Maintain hour			rs	Inc	crease hours		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	
Direct inpatient care	3.3%	8.1%	8.3%	91.1%	86.5%	83.3%	1.1%	0.0%	0.0%	
Direct outpatient care	0.0%	0.0%	0.0%	84.4%	80.6%	75.0%	3.3%	0.0%	0.0%	
Skills labs	0.0%	0.0%	0.0%	86.7%	80.6%	83.3%	1.1%	0.0%	0.0%	
Clinical simulation	0.0%	0.0%	0.0%	84.4%	77.8%	92.3%	4.4%	8.3%	0.0%	
Clinical observation	0.0%	0.0%	0.0%	88.9%	83.3%	83.3%	0.0%	0.0%	0.0%	
Total clinical hours	0.0%	2.8%	0.0%	92.2%	94.4%	100.0%	3.3%	0.0%	0.0%	
Other	Dec	:rease hoເ	urs	Ma	intain hou	rs	Inc	rease hou	urs	
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	
Direct inpatient Care	0.0%	0.0%	0.0%	91.1%	82.9%	90.9%	0.0%	2.9%	0.0%	
Direct outpatient Care	0.0%	0.0%	0.0%	90.0%	88.2%	81.8%	1.1%	0.0%	0.0%	
Skills Labs	0.0%	5.9%	0.0%	90.0%	82.4%	81.8%	0.0%	0.0%	0.0%	
Clinical simulation	0.0%	2.9%	0.0%	88.9%	82.4%	91.7%	1.1%	5.9%	0.0%	
Clinical observation	0.0%	0.0%	0.0%	90.0%	82.4%	90.9%	0.0%	0.0%	0.0%	
Total clinical hours	0.0%	5.9%	0.0%	92.2%	82.4%	100.0%	0.0%	2.9%	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.

- Nine programs of those that responded to these questions reported they have plans to decrease their clinical hours in at least one area.
- The most common reason for decreasing clinical hours was "Students can meet learning objectives in less time", followed by "unable to find sufficient clinical space" and "other".

### Table 90. Why Program is Reducing Clinical Hours

	%
Students can meet learning objectives in less time	66.7%
Unable to find sufficient clinical space	33.3%
Other	33.3%
Insufficient clinical faculty	11.1%
Curriculum redesign or change	0.0%
Need to reduce units	0.0%
Funding issues or unavailable funding	0.0%
Number of programs reporting	9

# RN Refresher Course

In 2016-2017, five nursing programs offered an RN refresher course, and 53 students completed one of these courses.

# **School Data**

Data in this section represent all schools with pre-licensure nursing programs. These questions were not asked for each program type. As a result, this breakdown is not available.

#### Institutional Accreditations

• The most commonly reported institutional accreditations were WASC-JC (61%) and WSCUC (31%).

# Table 91. Institutional Accreditations

	%
Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges (WASC-JC)	Schools 61.4%
WASC – Senior College and University Commission (WSCUC)	30.7%
Other	4.7%
Accrediting Bureau of Health Education Schools (ABHES)	2.4%
Accrediting Commission of Career Schools & Colleges (ACCSC)	1.6%
Higher Learning Commission (HLC)	1.6%
Accrediting Commission of Career Schools and Colleges of Technology (ACCSCT)	0.8%
Accrediting Council for Independent Colleges and Schools (ACICS)	0.8%
Northwest Commission on Colleges and Universities (NWCCU)	0.8%
Number of schools reporting	127

# Nursing Program Directors

• The largest proportion of nursing program directors' time, on average, was spent on managing nursing compliance (16%), managing human resources (8%), and managing the curriculum (8%).

Table 52. Hursing Program Directors Time	% of Time Spent
Manage nursing program compliance	16.2%
Manage human resources	8.4%
Manage curriculum	8.1%
Facilitate student needs and activities	7.6%
Manage student enrollment	7.2%
Manage clinical resources	6.8%
Collaborate with college/district	6.8%
Manage fiscal resources	6.4%
Facilitate staff development	6.3%
Administration of other programs	5.5%
Promote community awareness and public relations	4.5%
Seeking, managing, and obtaining grant funding/fundraising	4.4%
Teaching students	3.7%
Manage college facilities	3.3%
Manage information technology	2.9%
Research	1.2%
Other (please describe)	0.8%
Number of schools reporting	132

#### Table 92. Nursing Program Directors' Time

• RN post-licensure programs, LVN, and CNA programs were the most commonly reported programs also administered by the pre-licensure RN program director. Amongst "other" programs mentioned were medical assisting, respiratory therapy, and medical interpretation.

Table 93	8. Other Programs	Administered by the RM	Program Director
		% of	

	% of Schools
RN Post-Licensure programs	20.5%
LVN	18.9%
CNA	16.7%
Other	15.9%
Graduate programs	12.1%
ННА	10.6%
Health sciences	10.6%
EMT	9.1%
Technician (i.e. psychiatric, radiologic, etc.)	8.3%
Health professions	3.8%
Paramedic	3.8%
Number of schools reporting	132

#### Other Program Administration

#### Assistant Directors

- Nearly all nursing programs (98%) have at least one assistant director. The majority of nursing schools (65%) have one assistant director.
- Larger schools and schools with BSN and ELM programs are more likely to have multiple assistant directors.

#### Table 94. Number of Assistant Directors by Size of School and Program Type\*

	Number of Students in School											
	Le	ss than 1	100		100-199		Мо	ore than 2	200	All Programs		
Number of Assistant Directors	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
None	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%
1 Assistant Director	79.3%	75.0%	100%	68.1%	75.0%	50.0%	46.7%	45.0%	16.7%	68.1%	58.3%	46.2%
2 Assistant Directors	20.7%	0.0%	0.0%	25.5%	25.0%	50.0%	40.0%	25.0%	16.7%	26.4%	22.2%	23.1%
3 Assistant Directors	0.0%	0.0%	0.0%	6.4%	0.0%	0.0%	0.0%	15.0%	50.0%	3.3%	8.3%	23.1%
>3 Assistant Directors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	15.0%	16.7%	2.2%	8.3%	7.7%
Programs reporting	29	4	3	47	12	4	15	20	6	91	36	13
Percent of Program Type by School Size	31.9%	11.1%	23.1%	51.6%	33.3%	30.8%	16.5%	55.6%	46.2%	65.0%	25.7%	9.3%
Average # of hours allotted /week**	10.8	11.5	19	11.5	19.7	17.3	18.2	45.8	61.3	14.1	35.5	36.1
Average # of hours spent / week**	10.7	11.0	19.3	14.5	20.9	25.4	19.7	48.3	67.3	14.1	35.7	43.3

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM). \*\*Average hours reported are for all staff and not per person.

- On average, assistant directors have fewer hours allotted to administering the nursing • program than they actually spend administering it. However, the number of hours allocated and spent varies by both program type and school size.
- On average, schools with ADN programs share fewer assistant directors and fewer • hours allotted per assistant director than schools with other types of programs.

oonoon ana riogra		•										
		Number of Students in School										
	Les	s than	100	100-199			More than 200			All Programs		
Assistant Directors	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Asst director 1	9.9	10.3	19.3	8.5	17.8	26.8	17.8	17.3	20.0	10.0	16.4	21.9
Asst director 2	12.6	0.0	0.0	11.8	25.3	18.0	15.0	42.8	40.0	13.0	36.3	25.3
Asst director 3	0.0	0.0	0.0	44.0	0.0	0.0	0.0	55.3	55.3	44.0	55.3	55.3
All other assistant directors	0.0	0.0	0.0	0.0	0.0	0.0	40.5	117.3	142.0	40.5	117.3	142.0
Number of programs reporting	27	3	3	42	12	4	14	20	6	83	35	13
Average # of hours allotted /week**	10.8	11.5	19	11.5	19.7	17.3	18.2	45.8	61.3	14.1	35.5	36.1

#### Table 95. Average Number of Assistant Director Hours Allotted per Week by Size of School and Program Type\*

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM. \*\*Average hours reported are for all staff and not per person.

#### Table 96. Average Number of Assistant Director Hours Spent per Week by Size of School and Program Type\*

		Number of Students in School											
	Les	Less than 100			100-199			re than 2	200	All Programs			
Assistant Directors	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	
Asst director 1	10.6	11.0	19.3	9.7	16.3	28.8	18.1	19.2	20.0	11.0	16.8	22.6	
Asst director 2	9.7	0.0	0.0	19.7	34.7	22.0	16.5	44.8	40.0	15.9	41.0	28.0	
Asst director 3	0.0	0.0	0.0	50.7	0.0	0.0	0.0	51.3	51.3	50.7	51.3	51.3	
All other assistant directors	0.0	0.0	0.0	0.0	0.0	0.0	34.5	138.3	190.0	34.5	138.3	190.0	
Number of programs reporting	28	3	3	44	12	4	15	20	6	87	35	13	
Average # of hours spent / week**	10.7	11.0	19.3	14.5	20.9	25.4	19.7	48.3	67.3	14.1	35.7	43.3	

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM. \*\*Average hours reported are for all staff and not per person.

• The largest proportion of assistant director time is spent teaching students (33%) followed by managing nursing program compliance (6%) and managing curriculum (6%).

	% of Time Spent
Teaching students	32.8%
Manage nursing program compliance	6.0%
Manage curriculum	5.9%
Facilitate student needs and activities	4.9%
Facilitate staff development	4.7%
Manage clinical resources	4.3%
Manage student enrollment	3.9%
Manage human resources	2.9%
Collaborate with college/district	2.5%
Manage information technology	1.8%
Promote community awareness and public relations	1.8%
Manage college facilities	1.6%
Research	1.4%
Manage fiscal resources	0.7%
Seeking, managing, and obtaining grant funding/fundraising	0.6%
Administration of other programs	0.5%
Other (please describe)	0.3%
Number of schools reporting	131

# Table 97. Nursing Program Assistant Directors' Time

- All but two schools reported clerical staff.
- Schools with BSN and ELM programs generally had more clerical staff: 32% of schools with ADN programs had one clerical staff compared to 8% of schools with BSN programs and 0% of schools with ELM programs. Only 10% of schools with ADN programs had four or more clerical staff compared to 41% of schools with BSN and 54% of schools with ELM programs.
- Programs in larger schools were more likely to have more clerical staff and ELM and BSN programs were more likely to be in larger schools.
- Consequently, programs in larger schools had more clerical hours available. ADN clerical workers averaged 24 hours per week per staff member, BSN 28, and ELM 40, indicating a large number of part-time staff, which might include student workers.

	Number of Students in School											
	Le	ss than <sup>-</sup>	100	100-199			Мо	re than 2	200	All Programs		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
None	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	4.8%	0.0%	1.1%	2.7%	0.0%
1 clerical staff	48.3%	50.0%	0.0%	31.9%	8.3%	50.0%	0.0%	0.0%	0.0%	31.9%	8.1%	0.0%
2 clerical staff	31.0%	0.0%	66.7%	27.7%	25.0%	25.0%	26.7%	4.8%	0.0%	28.6%	10.8%	30.8%
3 clerical staff	10.3%	25.0%	0.0%	23.4%	33.3%	25.0%	33.3%	9.5%	0.0%	20.9%	18.9%	0.0%
4 clerical staff	0.0%	25.0%	0.0%	6.4%	16.7%	100%	26.7%	19.0%	16.7%	7.7%	18.9%	15.4%
>4 clerical staff	10.3%	0.0%	33.3%	8.5%	16.7%	0.0%	13.3%	61.9%	83.3%	9.9%	40.5%	53.8%
Number of programs reporting	2.0	2.3	3.3	2.3	3.3	3.8	3.2	7.6	10.8	2.4	5.6	6.9
Average hours per week**	47.2	78.8	45.0	64.1	95.6	106.7	87.9	213.7	277.1	62.4	157.8	170.6

#### Table 98. Number of Clerical Staff by Size of School and Program Type\*

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM.

\*\*Average hours reported are for all staff and not per person.

туре	1											
		Number of Students in School										
	Less than 100			100-199			More than 200			All Programs		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
1 clerical staff	33.3	45.0	0.0	36.6	30.0	0.0	0.0	0.0	0.0	35.0	37.5	0.0
2 clerical staff	59.9	0.0	50.0	65.1	62.7	62.5	47.5	60.0	0.0	60.6	62.0	56.3
3 clerical staff	68.3	100.0	0.0	56.8	88.5	0.0	101.0	90.0	0.0	70.3	90.6	0.0
4 clerical staff	0.0	80.0	0.0	106.7	105.0	70.0	112.0	129.5	80.0	109.7	115.4	75.0
>4 clerical staff	55.0	0.0	60.0	138.8	182.5	200.0	100.0	260.9	316.6	102.2	250.5	263.3
Programs reporting	29	3	3	46	12	4	15	20	6	90	35	13
Average hours per week**	47.2	78.8	45.0	64.1	95.6	106.7	87.9	213.7	277.1	62.4	157.8	170.6

# Table 99. Average Number of Clerical Staff Hours by Size of School and Program Type\*

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM). \*\*Average hours reported are for all staff and not per person.

• Respondents were asked to report on the adequacy of the amount of clerical support at their schools. Respondents at ADN programs were the most likely to report that the amount of clerical support was somewhat or very inadequate.

91

35

13

Table 100. Adequacy of Amount of Clencal Support												
	ADN	BSN	ELM									
Very adequate	38.5%	42.9%	30.8%									
Somewhat adequate	42.9%	48.6%	61.5%									
Somewhat inadequate	11.0%	8.6%	7.7%									
Very inadequate	7.7%	0.0%	0.0%									

#### Table 100. Adequacy of Amount of Clerical Support

Number of programs reporting

#### **Clinical Coordinators**

- 85% (n=112) of schools that reported had at least one staff person working as a clinical coordinator or on clinical coordination tasks.
- Schools with ELM programs (100%) and BSN programs (97%) were more likely to report having clinical coordinators on staff than were ADN programs (79%)

#### Table 101. Number of Clinical Coordinators by Size of School and Program Type\*

		Number of Students in School										
	Less than 100			100-199			More than 200			All Programs		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
No clinical coordinator	27.6%	25.0%	0.0%	23.9%	0.0%	0.0%	0.0%	0.0%	0.0%	21.1%	2.7%	0.0%
1 clinical coordinator	34.5%	25.0%	33.3%	28.3%	33.3%	50.0%	33.3%	28.6%	0.0%	31.1%	29.7%	30.0%
2 clinical coordinators	6.9%	0.0%	33.3%	23.9%	41.7%	50.0%	33.3%	33.3%	66.7%	20.0%	32.4%	70.0%
>2 clinical coordinators	31.0%	50.0%	33.3%	23.9%	25.0%	0.0%	33.3%	38.1%	33.3%	27.8%	35.1%	0.0%
Programs reporting	29	4	3	46	12	4	15	21	0	90	37	7
Average hours per week**	18.1	21.7	53.3	19.9	57.8	30.0	21.8	80.5	76.7	19.5	68.0	56.9

Number of Students in Schoo

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM).

\*\*Average hours reported are for all staff and not per person.

 Schools with BSN and ELM programs overall reported more hours per clinical coordinator per week on average (14-20 hours per week) than did schools with ADN programs (7 hours per week).

<b>3</b>	Number of Students in School											
	Less than 100			100-199		More than 200		All programs		ms		
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Clinical Coordinator 1	13.9	25.0	40.0	7.2	31.3	30.0	15.6	28.5	0.0	11.1	29.2	40.0
Clinical Coordinator 2	25.0	0.0	60.0	21.6	50.8	30.0	23.8	45.7	47.5	21.1	47.8	44.3
All other clinical coordinators	21.3	20.0	60.0	33.2	104.7	0.0	27.0	150.0	135.0	27.7	119.5	110.0
Number of programs reporting	29	4	3	46	12	4	15	20	6	90	36	13
Average hours per week**	18.1	21.7	53.3	19.9	57.8	30.0	21.8	80.5	76.7	19.5	68.0	56.9

Table 102. Average Number of Clinical Coordinator Hours by Size of School and Program Type\*

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN & an ELM).

\*\*Average hours reported are for all staff and not per person.

 Respondents were asked to report on the adequacy of the amount of clinical coordination support at their schools. Respondents at ADN programs were the most likely to report that the amount of clinical coordination support was somewhat or very inadequate.

	ADN	BSN	ELM
Very adequate	23.9%	36.1%	23.1%
Somewhat adequate	38.6%	50.0%	69.2%
Somewhat inadequate	17.1%	8.3%	7.7%
Very inadequate	20.5%	5.6%	0.0%
Number of programs reporting	88	36	13

## Table 103. Adequacy of Amount of Clinical Coordination Support

### **Retention Specialists**

- Thirty-one percent (n=41) of schools reported having a student retention specialist or coordinator on staff exclusively dedicated to the nursing program.
- Student retention specialists/coordinators worked an average of 19 hours per week.

# Table 104. Retention Specialists and Average Number of Retention Specialist Hours by Size of School and Program Type\*

		Number of Students in School										
	Les	Less than 100		100-199		More than 200			All Programs			
	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM	ADN	BSN	ELM
Have a retention specialist	17.2%	0.0%	0.0%	46.8%	16.7%	0.0%	33.3%	33.3%	66.7%	35.2%	25.0%	30.8%
Average Hours per week**	19.1	0.0	0.0	16.8	10.5	0.0	24.4	24.6	22.3	18.4	21.4	22.3
Programs reporting	30	4	2	45	12	3	13	20	6	88	36	11

\*Student data was collected by program while staff numbers were collected by school. Student and staff counts are reported here by program except for schools that include multiple programs. In those cases, the number of students was combined and the same data were reported for both programs. Eight schools reported two programs (a BSN and an ELM). \*\*Average hours reported are for all staff and not per person

#### Factors Impacting Student Attrition

- Academic failure and personal reasons continue to be reported as the factors with the greatest impact on student attrition.
- 49% (n=62) of the 130 nursing schools that reported factors impacting student attrition reported that academic failure had the greatest impact on student attrition, while 34% (n=43) of schools reported that personal reasons had the greatest impact on student attrition.

## Table 105. Factors Impacting Student Attrition

	Average Rank*
Academic failure	1.9
Personal reasons(e.g. home, job, health, family)	2.1
Financial need	3.4
Clinical failure	3.2
Change of major or career interest	4.5
Transfer to another school	5.6
Number of schools reporting	130

\*The lower the ranking, the greater the impact on attrition (1 has the greatest impact on attrition, while 8 has the least impact).

## Recruitment and Retention of Underrepresented Groups

- 34% of schools (n=44) reported being part of a pipeline program that supports people from underrepresented groups in applying to their nursing programs.
- The strategies most commonly used by schools to recruit and admit students from groups underrepresented in nursing were outreach, such as high school job fairs and community events (70%), followed by admission counseling (61%), and additional financial support (48%).
- The strategies most commonly used by schools to support and retain underrepresented students are student success strategies such as mentoring, remediation, and tutoring (92%); academic counseling (79%); and additional financial support such as scholarships (57%).

	% Schools
Outreach (e.g. high school fairs, community events)	70.1%
Admission counseling	61.4%
Additional financial support (e.g. scholarships)	48.0%
Holistic review (e.g. residency, language skills, veteran status, other life experiences)	40.9%
Multi-criteria screening as defined in California Assembly Bill 548	38.6%
Open house	32.3%
No need. We already have a diverse applicant pool and no additional strategies are needed.	18.9%
New admission policies instituted	12.6%
Other	7.1%
Informational sessions	3.1%
Pre-entry course or camp	2.4%
Number of schools reporting	127

## Table 106. Strategies to Recruit and Admit Underrepresented Students

## Table 107. Strategies to Support and Retain Underrepresented Students

	% Schools
Student success strategies (e.g. mentoring, remediation, tutoring)	91.5%
Academic counseling	79.2%
Additional financial support (e.g. scholarships)	56.9%
Wellness counseling	29.2%
Program revisions (e.g. curriculum revisions, evening/weekend program)	13.1%
Other	10.0%
Additional child care	6.2%
No need, students from groups underrepresented in nursing are successful without any additional strategies	6.2%
Number of schools reporting	130

- Most schools reported that they provided training for faculty to support the success of at-risk students in their nursing programs (74%, n=98).
  - The most common training included faculty development and orientation (94%), faculty mentoring and peer mentoring programs (74%), training on various student success initiatives (65%), cultural diversity training (64%), and training on disabilities and accommodations (62%).

## Access to Prerequisite Courses

- 49 nursing schools (37%) reported that access to prerequisite science and general education courses is a problem for their pre-licensure nursing students. These schools reported strategies used to address access to prerequisite courses.
- Adding science course sections and offering additional prerequisite courses on weekends, evenings and in the summer, and agreements with other schools for prerequisite courses were the most common methods used to increase access to prerequisite courses.

	% Schools
Adding science course sections	63.3%
Offering additional prerequisite courses on weekends, evenings, and summers	61.2%
Agreements with other schools for prerequisite courses	59.2%
Accepting online courses from other institutions	34.7%
Transferable high school courses to achieve prerequisites	30.6%
Providing online courses	30.6%
Other	8.2%
Prerequisite courses in adult education	4.1%
Number of schools reporting	49

#### Table 108. Access to Prerequisite Courses

## Restricting Student Access to Clinical Practice

- 91 nursing schools reported that pre-licensure students in their programs had encountered restrictions to clinical practice imposed on them by clinical facilities.
- The most common types of restricted access students faced were to the clinical site itself, due to a visit from the Joint Commission or another accrediting agency, bar coding medication administration, and access to electronic medical records.
- Schools reported that the least common types of restrictions students faced were direct communication with health care team members and alternative setting due to liability.

# Table 109. Common Types of Restricted Access in the Clinical Setting for RN Students by Academic Year

	Very Uncommon	Uncommon	Common	Very Common	N/A	# Schools
Clinical site due to visit from the Joint Commission or other accrediting agency	8.8%	24.2%	35.2%	29.7%	2.2%	91
Bar coding medication administration (i.e. Pyxis)	11.0%	20.9%	40.7%	24.2%	2.2%	91
Electronic medical records	22.2%	38.9%	21.1%	15.6%	3.3%	90
Automated medical supply cabinets (i.e. OmniCell)	11.0%	22.0%	36.3%	20.9%	7.7%	91
Health and safety requirements (i.e. drug screening, background checks)	19.1%	46.1%	21.3%	9.0%	4.5%	89
Patients related to staff nurse preferences or concerns about their additional workload	4.5%	20.2%	34.8%	42.7%	0.0%	89
Glucometers	38.5%	41.8%	7.7%	4.4%	5.5%	91
IV medication administration	24.7%	32.6%	10.1%	7.9%	24.7%	89
Alternative settings due to liability (i.e. home health visits)	13.5%	41.6%	31.5%	6.7%	5.6%	89
Other	26.1%	28.4%	22.7%	20.5%	3.4%	88

- The majority of schools reported that student access was restricted to electronic medical records due to insufficient time to train students (66%) and liability (53%).
- Schools reported that students were most frequently restricted from using medication administration systems due to liability (77%) and insufficient time to train students (37%).

# Table 110. Share of Schools Reporting Reasons for Restricting Student Access to Electronic Medical Records and Medication Administration

	Electronic Medical Records	Medication Administration
Liability	52.6%	77.4%
Insufficient time to train students	65.8%	36.9%
Staff fatigue/burnout	34.2%	29.8%
Staff still learning and unable to assure documentation standards are being met	46.1%	25.0%
Cost for training	26.3%	13.1%
Other	7.9%	13.1%
Patient confidentiality	27.6%	6.0%
Number of schools reporting	76	84

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

• Schools compensate for training in areas of restricted student access by providing training in simulation lab (88%) and in the classroom (56%) and ensuring that all students have access to sites that train them in the area of restricted access (55%).

# Table 111. How the Nursing Program Compensates for Training in Areas of Restricted Access

	% Schools
Training students in the simulation lab	87.9%
Training students in the classroom	56.0%
Ensuring all students have access to sites that train them in this area	54.9%
Purchase practice software, such as SIM Chart	45.1%
Other	11.0%
Number of schools reporting	91

• The most common clinical practice areas in which students faced restrictions were Medical/Surgical, Pediatrics, and Obstetrics.

	% Sebeele
Medical/Surgical	Schools 86.8%
Pediatrics	82.4%
Obstetrics	75.8%
Critical Care	63.7%
Psychiatry/Mental Health	61.5%
Geriatrics	36.3%
Community Health	24.2%
Other Department	2.2%
Number of schools reporting	91

## Table 112. Clinical Area in Which Restricted Access Occurs

## Collection of Student Disability Data

• In 2016-2017, schools were asked if they collect student disability data as part of the admission process. Thirty percent of respondents reported that they did so and 18% did not know.

## Table 113. Schools' Collection of Disability Data

	% Schools
Yes	29.5%
No	52.3%
Don't Know	18.2%
Number of schools reporting	132

## Funding of Nursing Program

• On average, schools reported that 80% of funding for their nursing programs comes from the operating budget of their college or university, while 14% of funding comes from government sources.

	% Schools
Your college/university operating budget	80.2%
Government (i.e. federal grants, state grants, Chancellor's Office, Federal Workforce Investment Act)	13.5%
Foundations, private donors	2.3%
Industry (i.e. hospitals, health systems)	2.1%
Other	1.9%
Number of schools reporting	133

### Table 114. Funding of Nursing Programs

#### **APPENDICES**

### APPENDIX A – List of Survey Respondents by Degree Program

#### ADN Programs (84)

American Career College American River College Antelope Valley College Bakersfield College **Brightwood College** Butte Community College Cabrillo College California Career College\* Cerritos College Chabot College Chaffey College Citrus College City College of San Francisco CNI College (Career Networks Institute) College of Marin College of San Mateo College of the Canyons College of the Desert College of the Redwoods College of the Sequoias Contra Costa College Copper Mountain College Cuesta College Cypress College De Anza College East Los Angeles College El Camino College El Camino College - Compton Center Evergreen Valley College Fresno City College Glendale Career College\* Glendale Community College Golden West College Grossmont College Hartnell College Imperial Valley College Long Beach City College Los Angeles City College Los Angeles County College of Nursing and Allied Health Los Angeles Harbor College Los Angeles Pierce College Los Angeles Southwest College

Los Angeles Trade-Tech College Los Angeles Valley College Los Medanos College Mendocino College Merced College Merritt College Mira Costa College Modesto Junior College Monterey Peninsula College Moorpark College Mount Saint Mary's University -Los Angeles Mount San Antonio College Mount San Jacinto College Napa Valley College Ohlone College Pacific Union College Palomar College Pasadena City College Porterville College **Rio Hondo College** Riverside City College Sacramento City College Saddleback College San Bernardino Valley College San Diego City College San Joaquin Delta College San Joaquin Valley College Santa Ana College Santa Barbara City College Santa Monica College Santa Rosa Junior College Shasta College Shepherd University Sierra College Solano Community College Southwestern College Stanbridge College Ventura College Victor Valley College Weimar Institute West Hills College Lemoore Yuba College

## LVN-to-ADN Programs Only (7)

Allan Hancock College Carrington College College of the Siskiyous Gavilan College

## BSN Programs (37)<sup>3</sup>

American University of Health Sciences Azusa Pacific University **Biola Universitv** California Baptist University Chamberlain College Concordia University Irvine **CSU** Bakersfield CSU Channel Islands CSU Chico CSU East Bay CSU Fresno CSU Fullerton CSU Long Beach **CSU** Los Angeles CSU Northridge CSU Sacramento CSU San Bernardino CSU San Marcos **CSU** Stanislaus

Mission College Reedley College at Madera Community College Center Unitek College

Dominican University of California Holy Names University Loma Linda University Mount Saint Mary's University – Los Angeles National University Point Loma Nazarene University Samuel Merritt University San Diego State University San Francisco State University Simpson University Sonoma State University The Valley Foundation School of Nursing at San Jose State University of California Irvine University of California Los Angeles University of Phoenix University of San Francisco West Coast University Western Governors University

## ELM Programs (13)<sup>4</sup>

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

University of California Irvine\* University of California Los Angeles University of California San Francisco University of San Diego - Hahn School of Nursing University of San Francisco Western University of Health Science

\*New programs in 2016-2017

<sup>&</sup>lt;sup>3</sup> United States University had a BSN program in 2015-2016, but now has an RN to BSN only.

<sup>&</sup>lt;sup>4</sup> CSU Dominguez Hills and CSU Fullerton listed ELM programs in 2015-2016, but as of December 2017, neither of these programs is accepting students and neither submitted data for 2016-2017. UC Irvine submitted information on an ELM program this year, but not in 2015-2016.

# **APPENDIX B – Definition List**

# The following definitions apply throughout the survey whenever the word or phrase being defined appears unless otherwise noted.

Phrase	Definition
Active Faculty	Faculty who teach students and have a teaching assignment during the time period specified. Include deans/directors, professors, associate professors, assistant professors, adjunct professors, instructors, assistant instructors, clinical teaching assistants, and any other faculty who have a current teaching assignment.
Adjunct Faculty	A faculty member that is employed to teach a course in a part-time and/or temporary capacity.
Advanced Placement Students	Pre-licensure students who entered the program after the first semester/quarter. These students include LVNs, paramedics, military corpsmen, and other health care providers, but do not include students who transferred or were readmitted.
Assembly Bill 548 Multicriteria	Requires California Community College (CCC) registered nursing programs who determine that the number of applicants to that program exceeds the capacity and elects, on or after January 1, 2008 to use a multicriteria screening process to evaluate applicants shall include specified criteria including, but not limited to, all of the following: (1) academic performance, (2) any relevant work or volunteer experience, (3) foreign language skills, and (4) life experiences and special circumstances of the applicant. Additional criteria, such as a personal interview, a personal statement, letter of recommendation, or the number of repetitions of prerequisite classes or other criteria, as approved by the chancellor, may be used but are not required.
Assistant Director	A registered nurse administrator or faculty member who meets the qualifications of section 1425(b) of the California Code of Regulations (Title 16) and is designated by the director to assist in the administration of the program and perform the functions of the director when needed.
Attrition Rate	The total number of generic and/or accelerated students who withdrew or were dismissed from the program and who were scheduled to complete the program between August 1, 2015 and July 31, 2016, divided by the total number of generic and/or accelerated students who were scheduled to complete during the same time period.
Census Data	Number of students enrolled or faculty present on October 15, 2016.
Clinical Placement	A cohort of students placed in a clinical facility or community setting as part of the clinical education component of their nursing education. If you have multiple cohorts of students at one clinical facility or community setting, you should count each cohort as a clinical placement.

Phrase	Definition
Direct Patient Care	Any clinical experience or training that occurs in a clinical setting and serves real patients, including managing the care, treatments, counseling, self-care, patient education, charting and administration of medication. Include non-direct patient care activities such as working with other health care team members to organize care or determine a course of action as long as it occurs in the clinical setting to guide the care of real patients.
Clinical Simulation	Provides a simulated nursing care scenario that 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. Simulation can include experiences with standardized patients, mannequins, role- playing, computer simulation, or other activities.
Collaborative / Shared Education	A written agreement between two or more nursing programs specifying the nursing courses at their respective institutions that are equivalent and acceptable for transfer credit to partner nursing programs. These partnerships may be between nursing programs offering the same degree or between an entry degree nursing program(s) and a higher degree nursing program(s). These later arrangements allow students to progress from one level of nursing education to a higher level without the repetition of nursing courses.
Completed on Schedule Students	Students scheduled on admission to complete the program between August 1, 2015 and July 31, 2016 and completed the program on schedule.
Contract Education	A written agreement between a nursing program and a health care organization in which the nursing program agrees to provide a nursing degree program for the organizations employees for a fee.
Distance Education	Any method of presenting a course where the student and teacher are not present in the same room (e.g., internet web based, teleconferencing, etc.).
Donor Partners	Hospitals or other entities that fund student spaces within your nursing program, including contract education arrangements.
Entry-level Master's (ELM)	A master's degree program in nursing for students who have earned a bachelor's degree in a discipline other than nursing and do not have prior schooling in nursing. This program consists of pre-licensure nursing courses and master's level nursing courses.
Evening Program	A program that offers all program activities in the evening i.e. lectures, etc. This does not include a traditional program that offers evening clinical rotations.
Full-time Faculty	Faculty that work 1.0 FTE, as defined by the school.

Phrase	Definition
Generic Pre- licensure Students	Students who begin their first course (or semester/quarter) of approved nursing program curriculum (not including prerequisites).
Hi-Fidelity Mannequin	A portable, realistic human patient simulator designed to teach and test students' clinical and decision-making skills.
Home campus	The campus where your school's administration is based.
Hybrid program	Combination of distance education and face-to-face courses.
Institutional Accreditation	Accreditation of the institution by an agency recognized by the United States Secretary of Education (as required by the BRN) to assure the public that the educational institution meets clearly defined objectives appropriate to education.
LVN 30 Unit Option Students	LVNs enrolled in the curriculum for the 30-unit option.
LVN to BSN Program	A program that exclusively admits LVN to BSN students. If the school also has a generic BSN program, the LVN to BSN program is offered separately or differs significantly from the generic program.
Part-time Faculty	Faculty that work less than 1.0 FTE and do not carry a full-time load, as defined by school policy. This includes annualized and non-annualized faculty.
Professional Accreditation	Voluntary and self-regulatory advanced accreditation of a nursing education program by a non-governmental association.
Readmitted Students	Returning students who were previously enrolled in your program
Retention Rate	The total number of generic and/or accelerated students who completed the program on schedule between August 1, 2015 and July 31, 2016 divided by the total number of generic and/or accelerated students enrolled who were scheduled to complete during the same time period.
Satellite/ Alternate campus	A campus other than your home campus that is approved by the BRN as an alternate/secondary location, operates under the administration of your home campus, is in a county other than where your home campus is located, is in California, and enrolls pre-licensure registered nursing students.
Screened applications	The number of applications selected from the total applicant pool to undergo additional screening to determine if they were qualified for admission to the nursing program between 8/1/15 and 7/31/16.
Shared Faculty	A faculty member is shared by more than one school, e.g. one faculty member teaches a course in pediatrics to three different schools in one region.

Phrase	Definition
Skills Lab	Excluding simulation, any clinical experience or training that occurs that does not include real patients and is not directly related to the support of real patients. Includes practicing on other students, actors, mannequins, etc. Do not include activities such as communicating with health care team members to organize care for real patients.
Students Scheduled on Admission to Complete	Students scheduled on admission to complete the program between August 1, 2015 and July 31, 2016.
Students Who Were Dismissed From the Program	Students who were required to leave the program prior to their scheduled completion date occurring between August 1, 2015 and July 31, 2016 due to an ineligibility determined by the program such as academic failure, attendance or other disqualification.
Students Who Withdrew from the Program	Students who voluntarily left the program prior to their scheduled completion date occurring between August 1, 2015 and July 31, 2016 due to personal and/or financial reasons.
Time Period for the Survey	August 1, 2015 and July 31, 2016. For those schools that admit multiple times a year, combine all student cohorts.
Traditional Program	A program on the semester or quarter system that offers most courses and other required program activities on weekdays during business hours. Clinical rotations for this program may be offered on evenings and weekends.
Transfer Students	Students in your programs that have transferred nursing credits from another pre-licensure program. This excludes RN to BSN students.
Validated Prerequisites	The nursing program uses one of the options provided by the California Community College Chancellor's Office for validating prerequisite courses.
Waiting List	A waiting list identifies students who qualified for the program, were not admitted in the enrollment cycle for which they applied, and will be considered for a subsequent enrollment cycle without needing to reapply.
Weekend Program	A program that offers all program activities on weekends, i.e. lectures, clinical rotations, etc. This does not include a traditional program that offers clinical rotations on weekends.

## **APPENDIX C – BRN Nursing Education and Workforce Advisory Committee**

#### **Members**

Tanya Altmann, PhD, RN BJ Bartleson, RN, MS, NEA-BC Judith G. Berg, MS, RN, FACHE Audrey Berman, PhD, RN Stephanie L. Decker Denise Duncan, BSN, RN/Carol Jones Brenda Fong Sabrina Friedman, EdD, DNP, FNP-C, PMHCSN-BC, FAPA Jeannine Graves, MPA, BSN, RN, OCN, CNOR Marketa Houskova, RN, BA, MAIA Loucine Huckabay, PhD, RN, PNP, FAAN, Kathy Hughes Saskia Kim/ Victoria Bermudez

Judy Martin-Holland, PhD, MPA, RN, FNP Pat McFarland, MS, RN, FAAN/ Susan Odegaard Turner Sandra Miller, MBA Robyn Nelson, PhD Linda Onstad-Adkins/ Fiona Castleton

Stephanie R. Robinson, RN, MHA Joanne Spetz, Ph.D. Studies UCSF Stacie Walker

Peter Zografos, PhD, RN

#### **Ex-Officio Member**

Dr. Joseph Morris, PhD, MSN, RN Janette Wackerly, MBA, RN,

#### **Organization**

California State University, Sacramento California Hospital Association/North HealthImpact Samuel Merritt University Kaiser Permanente National Patient Care **UNAC/UHCP** Community Colleges Chancellor's Office UCLA School of Nursing Health Center at the Union Rescue Mission Sutter Cancer Center American Nurses Association\California California State University, Long Beach SEIU California Nurses Association/ National Nurses United University of California, San Francisco Association of California Nurse Leaders

Assessment Technologies Institute West Coast University Health Professions Education Foundation, OSHPD Fresno City College Phillip R. Lee Institute for Health Policy

Health Workforce Development Division, OSHPD Mt. San Jacinto College

California Board of Registered Nursing Supervising Nursing Education Consultant, California Board of Registered Nursing