



# California Community Colleges Nursing Educational Programs Legislative Report

California Community Colleges Chancellor's Office | Sonya Christian, Chancellor



June 23, 2023

The Honorable Gavin Newsom Governor of California State Capitol Sacramento, CA 95814

#### RE: Report on California Community College Nursing Programs for 2020-21, 2021-22

Dear Governor Newsom:

I would like to present to you the Chancellor's Office report on California community college nursing programs for the 2020-21 and 2021-22 academic years.

This report provides information on funding for nursing programs, admission criteria, statistics on student attrition and license exam passage rates, among other data. I hope you will find it to be a useful summary of the state of California's community college nursing programs.

If you or your staff have any questions about this report, please feel free to contact Interim Vice Chancellor Sandra Sanchez at SSanchez@cccco.edu.

Bornza Christian

Sincerely, Sonya Christian Chancellor

Enclosure: Report

## 2020-21; 2021-22 CALIFORNIA COMMUNITY COLLEGES NURSING EDUCATIONAL PROGRAMS LEGISLATIVE REPORT

#### **Prepared By**

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### **EXECUTIVE SUMMARY**

In California, the supply of registered nurses in the state has not kept up with the demand. The state has made efforts to increase the number of nurses to meet the projected need. Investing in public higher education is essential to increasing the supply of nurses. California Community Colleges nursing programs contribute significantly to the nursing workforce, graduating about half of the state's nurses and satisfying about 21% of the state's demand for nurses (California Board of Registered Nursing, 2020b).

To support system nursing program growth, the Nursing Enrollment Growth and Retention Program (NEGRP) legislation was passed to facilitate the expansion of associate degree for nursing (ADN) programs and the improvement in completion rates in those programs (CA Education Code 78261). This report shows how California community college nursing programs use their grants to support their students and demonstrates the impact they subsequently had on their student outcomes, one of the fundamental purposes of the grant program. Specifically, this report responds to the reporting requirements outlined in Education Code, section 78261 and provides a progress update for 2020-21 and 2021-22. In 2020-21 and 2021-22, 98.7 percent (76 of 77 CCC ADN programs) received a total of \$13,225,755 in nursing support grants.

The report organizes the requirements through the main phases of a nursing student journey, including (1) assessment; (2) enrollment; (3) retention and completion; and (4) licensure. Here are some of the main findings from these reporting areas:

- Assessment
  - **2020-21:** 7,295 of the 8,215 students passed (88.8%), 920 students failed to meet proficiency levels
  - **2021-22:** 5,744 of the 6,403 students passed (89.7%), 659 students failed to meet proficiency levels
- Enrollment
  - O 2020-21: 28,336 headcount enrollments
  - **2021-22:** 28,488 headcount enrollments
- Retention & Completion
  - **2020-21:** 89.5% retention rate; 71.6% completion rate
  - **2021-22:** 91.7% retention rate; 79.5% completion rate
- Licensure
  - **2020-21:** 4,292 of the 4,716 nursing graduates passed the National Council Licensing Exam (NCLEX) (91%)
  - **2021-22:** 5,167 of the 5,891 nursing graduates passed the NCLEX licensure exam (87.7%)

To improve California community college nursing programs in subsequent years, the Chancellor's Office recommends:

- Identify and scale evidence-based successful practices from system nursing programs;
- Establish peer learning methods to share promising practices among system nursing programs;
- Leverage the use of innovative learning opportunities with nursing programs;
- Improve data collection and accountability to continuously improve programs;
- Identify "second-chance" credentials (degrees and certificates) that are closely aligned with nursing but can serve as off-ramps for students who don't meet the nursing proficiency requirements or who do not complete the program.

To achieve these recommendations, the Chancellor's Office has identified how the Legislature could further support the success of California community college nursing students:

- Allow system nursing programs to also use the Nursing Enrollment Growth and Retention funds for continuous improvement purposes;
- Provide policy solutions to address the nursing faculty shortage;
- Increase access to clinical sites by incentivizing healthcare facilities to provide rotations to California community colleges;
- Reconsider the frequency and form of future legislative reports.

### **INTRODUCTION**

California community college nursing programs are essential to addressing the nursing shortage and provide a source of high-wage, high-demand occupations for California community college students. California provides the highest employment level of registered nurses in the US and is the top paying state in the country with an hourly mean wage of \$64.10 and an annual mean wage of \$133,340 (Bureau of Labor Statistics, 2022a). Thus, registered nursing is a path that promotes upward mobility and family-sustaining wages for California community college students.

The California Nurse Education Initiative, established in 2005, was designed to make progress in addressing the state's nursing shortage. With ongoing funding, California nursing programs at community colleges have expanded or maintained their enrollment capacity.

However, enrollment has decreased significantly by 6.3% from 2019-20 to 2020-21 due to the COVID-19 pandemic and the decrease in clinical training experiences made available by hospitals and other health care facilities. Most clinical settings were closed to students. Despite the unavailability of clinical sites to students, California community college nursing programs quickly identified innovative ways to continue clinical experiences for nursing students to meet the critical and growing need for nurses in the state. With the COVID-19 shutdown, essentially all theory courses were required to quickly convert to virtual. The

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Board of Registered Nursing (BRN) granted emergency waivers to allow alternate clinical experiences, asynchronous clinical experiences and up to 50% clinical in a non-direct patient care area.

The supply of nurses relies heavily on the state's higher education system, specifically California community college nursing programs, which train and supply a large proportion of the nurses in California. California community college Associate Degree for Nursing (ADN) programs account for 55.4% of the total nursing schools in the state (77 of 139 nursing schools), graduate about half of the state's nurses and satisfy about 21% of the state's demand for nurses (California Board of Registered Nursing, 2020b).

The California Community Colleges serves more than 1.8 million students each year and is the largest and most diverse system of public higher education in the nation. The state's 116 community colleges have multiple missions, including to provide workforce training, ensure basic skills education and prepare students to transfer to four-year postsecondary institutions.

Having a pipeline of prepared and qualified nurses is integral to the functioning of the healthcare field in California. For nearly a decade, California has experienced nursing shortages, particularly in rural communities. Nursing shortages can have devastating consequences on both the overall healthcare system and for patients. California employers suffer by paying more for traveling nurses to fill staffing gaps and must then also increase wages to attract permanent employees (Yang & Mason, 2022). The consequences also trickle down to patients, including increased health care costs and decreased quality of patient care (i.e., Blume, Dietermann, Kirchner-Heklau, Winter, Fleischer, Kreidl, Meyer, & Schreyogg, 2021).

This report responds to Education Code Section 78261(g), which mandates that the Chancellor's Office provide specific data pertaining to nursing programs. Supplemental data beyond the reporting requirements are also provided, when necessary, to provide a more complete picture of the student journey within our programs. The reporting requirements and supplemental data are grouped in the steps of the nursing student journey, from preparation and enrollment to completion and licensure. In subsequent sections, this report will share:

#### Assessment

- The number of students taking diagnostic assessments (**Reporting requirement**)
- The number of students failing to meet proficiency levels as determined by diagnostic assessment tools (**Reporting requirement**)

#### Enrollment

• The number of students enrolled in the nursing program. (Reporting requirement)

#### **Retention & Completion**

- The retention rates of colleges receiving Nursing Enrollment Growth & Retention Program (NEGRP) grants (**Supplemental data**)
- The number of students who completed the associate degree nursing program (**Reporting requirement**)

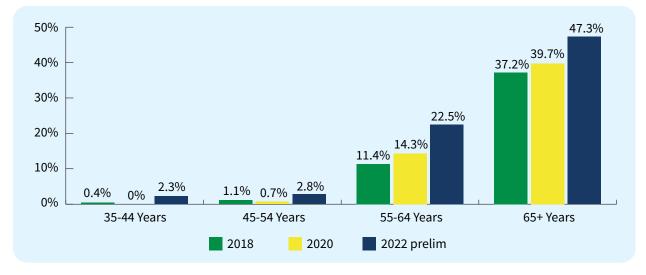
#### Licensure

• The number of students who pass the National Council Licensure Examination (NCLEX) (**Reporting requirement**)

Further, subdivision (h) of Education Code Section 78261 indicates that data reported to the Chancellor's Office must be disaggregated by **age, gender, ethnicity and language spoken at home.** These data inform actions the Chancellor's Office will take in response and recommendations that the legislature can contribute to improved outcomes.

#### **STATE OF CALIFORNIA**

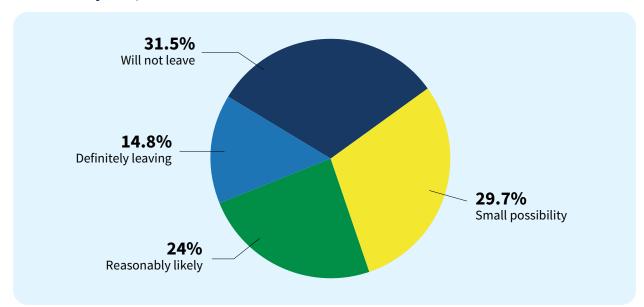
While California has experienced shortages for over a decade, the COVID-19 pandemic further perpetuated the shortages within the state with some RNs leaving because of the high stress and emotional toll of their jobs. In addition, older RNs have left nursing and a large proportion of older RNs intend to retire or quit within the next two years compared with 2018 (Spetz, Chu, & Blash, 2022). The nursing workforce's long anticipated "silver tsunami" is here, with deferred retirements no longer being deferred. Figure 1 shows that the percentage of employed California resident RNs who plan to retire or leave in the next two years has been increasing across all age groups, compared to 2018.



# Figure 1. Percentage of employed California Resident RNs who plan to retire or leave in the next two years, 2018-22.

Source: Spetz, Chu, & Blash, 2022.

Further, many RNs plan to change jobs within the next two years. As Figure 2 shows, in 2022, 24 percent of RNs said it was "reasonably likely" they would leave their principal nursing position in the next two years and 14.8 percent said they were "definitely leaving."



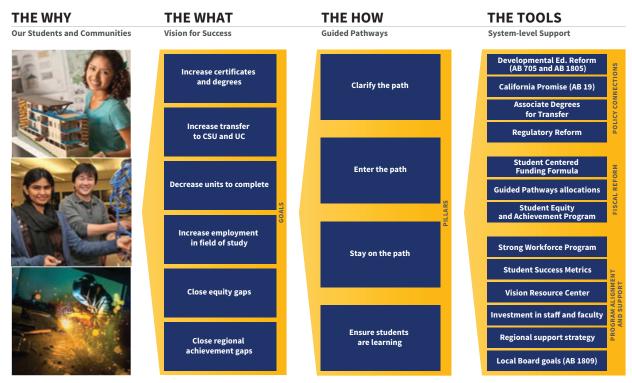


Source: Spetz, Chu, & Blash, 2022.

The need for RNs is expected to grow in the future with the increasing and aging population in the US. Thus, the demand for new RNs in California is and will continue to be high. A report from the University of California San Francisco Health Workforce Research Center on Long-Term Care estimates that a shortage of 40,567 full-time RNs is projected to persist until 2026 (Spetz, Chu, & Blash, 2021). Given the current and projected shortages, RN job openings are expected to grow quickly in the next few years, making nursing a viable and high-wage career path (Bureau of Labor Statistics, 2022b).

#### **CALIFORNIA COMMUNITY COLLEGES**

The Vision for Success, the system's academic master plan, and the Guided Pathways initiative (providing academic pathways to careers and living wage jobs) are the primary guideposts for the California Community Colleges. Figure 3 shows highlights the major components and goals of the Vision for Success visually.



#### Figure 3. Aligning Resources & Programs to Put Students First Infographic.

Source: Chancellor's Office.

The ADN programs contribute substantially to the Vision for Success metrics in terms of wage growth, employment in the field of study and transfer to a four-year university. However, there are mismatches between the demand for RNs, the capacity of California community college nursing programs, and the supply and resulting size of the RN workforce. While an ADN is not the only pathway to RN licensures in California, California community college ADN programs need to meet more of the state nursing demand. There have been decreases in new enrollments and graduation from RN education programs since the 2018-19 academic year. The California Board of Registered Nursing's 2020-21 Annual School Report noted several reasons California nursing schools cited for the reduced enrollment. The top reason in 2020-21 was that they were unable to secure clinical placements for all students (55.9%).

The pandemic has exacerbated enrollment issues in system nursing programs, with programs having to decrease their enrollments, skip new cohorts of students, reduce their class sizes and quickly shift their instruction to online modalities to reduce virus transmission. The most cited COVID-19 related reason for enrollment declines was decreasing the size of an admissions cohort (California Board of Registered Nursing, 2021).

Despite low enrollments within California community college nursing programs over the last decade, there is not a shortage of qualified students who are highly interested in enrolling in nursing programs. In 2020-21, the number of qualified applications received by California nursing programs has increased by an estimated 43.7% over the last ten years, from 38,665 in 2011-12 to 55,551 in 2020-21. Additionally, 2020-21 marked the largest percent of qualified applications over the past 10 years (California Board of Registered Nursing, 2021). With the increased interest, the number of spaces available for new students is nursing programs has

remained relatively even over the past ten years, with slight fluctuations, creating greater demand than nursing programs are able to provide to qualified students. In 2020-21, 25.8% of California nursing programs reported filling more admission spaces than were available.

Of students who are accepted and enroll in California community college nursing programs, the graduation rate was negatively impacted from 2020-2021 (4.7% decrease), meaning that many students who filled the limited spaces within system nursing programs did not graduate and enter the workforce. Fortunately, the statewide average completion rate has recovered to pre-pandemic levels, but further expansion of California community college nursing program capacity is needed to contribute to the high demand for nurses in California.

Given the past and current conditions within California and system nursing programs, our state's nursing workforce and students would benefit from making nursing education more accessible and able to generate more qualified potential nurses. Public nursing education programs must be supported by policymakers to ensure an ongoing pipeline of nurses into the health care system. This report will outline in more detail the specific supports needed by the system to increase capacity and improve student outcomes going forward.

Colleges with nursing programs receive funding through community college general apportionment, which is based upon the number of students enrolled in each college's program. The COVID-19 pandemic and the rapid transition to social and physical distancing requirements disrupted substantially face-to-face instruction for all institutions. The Chancellor's Office did not want the colleges to lose funds during the COVID-19 pandemic. Therefore, the colleges have received the same allocation amount as prior year, providing a "hold harmless" environment which established fiscal stability as a top concern and priority.

#### NURSING ENROLLMENT GROWTH & RETENTION PROGRAM

The apportionment funding for the Nursing Enrollment Growth and Retention Program (NEGRP) is based upon the additional number of students enrolled or those maintaining the capacity of nursing enrollments in each program at each college. During the COVID-19 pandemic, the community college districts were protected under the emergency conditions and allowances because the Chancellor's Office did not want districts to lose funding due to the unintended negative impacts of the pandemic on their nursing programs. Therefore, colleges received the same allocation amount as the prior year, or were "held harmless," making fiscal stability a top policy and priority of the system. Colleges can continue to apply for emergency conditions to receive same protections as they continue to recover post-pandemic.

Outlined by the Education Code Section 78261, colleges can use the grant funds for the following purposes:

- 1. Achieve moderate program attrition levels, or
- 2. Provides comprehensive diagnostic assessment, pre-nursing preparation, and program-based support to students.

Bakersfield College provides an example of how colleges have used funds to increase the success of students in their program. Bakersfield College developed specific remediation plans for students, including successful completion of an Academic Development Class series, passing a pathophysiology course and an assessment study plan. Bakersfield College continues to develop their system to better track why reasons students fail to succeed in nursing programs. In addition, the program maintains student support programs including peer mentoring, tutoring, counseling, early alert and campus referrals. The nursing program has a designated educational advisor who provides support services not limited to academic advising, but also inclusive of financial aid, and other referral/support strategies/advising. Specifically, the program hired 10 student tutors and a part-time student success coach.

Seventy-six colleges received grants for enrollment growth. The colleges are using these funds to provide support for nursing program enrollment and equipment needs. The equipment purchased is only intended to be used for increasing the number of nursing students served. During 2020-21, all 76 colleges that requested enrollment growth funds also received some funds for diagnostic and support services, pre-entry coursework and other services to reduce attrition. This is an indicator of the collective interest and need for colleges to increase retention and improve student outcomes in their nursing programs.

#### **METHODOLOGY**

The Chancellor's Office Workforce and Economic Development Division staff and the Research and Data Accountability Unit staff of the Digital Innovation and Infrastructure Division collected and analyzed the data shared in this report. The sources include:

- California Community Colleges Chancellor's Office Management Information System (COMIS);
- Nursing Final Report Expenditures Survey;
- COMIS Data Mart: http://datamart.cccco.edu/;
- California Board of Registered Nursing: http://www.rn.ca.gov/; and,
- Assessment Technologies Institute Test of Essential Academic Skills (ATI TEAS).

### **KEY FINDINGS**

As shown in the visual below (Figure 4), the key findings directly address the reporting requirements outlined in Education Code Section 78261 and are organized to show the nursing student journey and its associated steps sequentially. The goal of these key findings is to construct a clearer picture of the entire student journey so we can use the data to identify both successes and pain points within the California community college nursing programs to inform future improvement for nursing student outcomes.

#### Figure 4. Organizational Structure of Reports' Key Findings.



For each area, the data required will be reported along with subsequent interpretation and analysis of the information to evaluate the progress of California community college nursing programs more fully and inform future actions.

#### **PRE-ENTRY COURSEWORK**

This section addresses the following data:

- The number of students failing to meet proficiency levels that undertake pre-entry preparation classes aggregated and disaggregated by race/ethnicity, age, gender, disability accommodation, and language spoken at home (Reporting requirement)
- The number of students who successfully complete pre-entry preparation coursework aggregated and disaggregated by race/ethnicity, age, gender, disability accommodation and language spoken at home (Reporting requirement)

The Chancellor's Office is unable to report these data because there are no unique identifiers tied to students before entering nursing programs. Students' participation in pre-entry coursework is difficult to track because students who take pre-entry coursework are not necessarily only nursing students.

#### ASSESSMENT

This section includes the following data:

- The number of students taking diagnostic assessments (Reporting requirement)
- The number of students failing to meet proficiency levels as determined by diagnostic assessment tools (**Reporting requirement**)

The Assessment Technologies Institute Test of Essential Academic Skills (ATI TEAS) is designed to assess a student's preparedness entering the health science fields. The ATI TEAS is comprised of 170 multiple choice questions to test basic academic skills in four content areas: reading, math, science and English. The Chancellor's Office requires a minimum individual composite score of 62% on ATI TEAS, indicating that the learner has the academic skills necessary for successful completion of the nursing curriculum.

Diagnostic assessment tests are included as part of the selection process for nursing programs. In 2020-21, of the 8,211 students assessed, 7,295 students received a proficiency score and 920 students failed to meet proficiency levels as determined by the assessment, or an 88.8% pass rate. In 2021-22, of the 6,403 students assessed, 5,744 students received a proficiency score and 659 students failed to meet proficiency levels

# as determined by the assessment, or an 89.7% proficiency rate, a nearly 1% increase from the previous year.

The Chancellor's Office disaggregated the data to determine if gender, age, ethnicity, disability accommodation and language spoken at home disproportionately impacted a students' success on assessment testing. This report displays disproportionate impact using percentage point gap (PPG). PPG methodology compares the percent of students in a disaggregated subgroup who succeed in an outcome with the percent of all students who succeed in the same outcome. For example, as shown in Table 3, students ages 50 and older are 9% less likely to pass than all students taking the exam. According to this methodology, a '-3 percentage point gap or less' is evidence of disproportionate impact. Though this is an arbitrary designation, this serves as a reasonable strategy for identifying unequal outcomes.

Tables 1 through 8 show the PPG findings for assessment testing for 2020-21 and 2021-22 in the areas of gender, age, ethnicity and language spoken at home. For each student characteristic, the assessment data will be reported, analyzed and interpreted.

#### Gender

In both 2020-21 and 2021-22, there were no disproportionate impacts on assessment pass rate found based on gender.

Gender	Grand Total	Passed	Percent of Total	PPG
Male	1,534	1,439	93.8%	+5%
Female	6,271	5,497	87.7%	-1.1%
Not Listed	406	359	88.4%	-0.4%

#### Table 1: Assessment Test Pass Rate & PPG by Gender, 2020-21.

Data Source: ATI TEAS database.

#### Table 2: Assessment Test Pass Rate & PPG by Gender, 2021-22.

Gender	Grand Total	Passed	Percent of Total	PPG
Male	1,095	1,040	95.0%	5.3%
Female	4,612	4,080	88.5%	-1.2%
Not Listed	696	624	89.7%	0

#### Age

Disproportionate impacts on assessment pass rate were identified based on age in 2020-21 and 2021-22. As shown in Table 3, **in 2020-21, students ages 35 years and older are significantly less likely** to pass the assessment than all students. As a student gets older, the PPG from all students taking assessment test increases, 35-39 (-4.4 percent), 40-49 (-5%), and 50 and older (-7.3%). As shown in Table 4, **in 2021-22, the disproportionate** 

# impact is still experienced with the gap increasing by 2% for 40-49-year-old students (-7%) and increasing by 3.1% for students aged 50 and older (-10.4%). However, the disproportionate impact for 35-39-year-old students was eliminated in 2021-22.

With decreasing numbers of high school graduates in California, the estimated 6.8 million Californians ages 25-54 with a high school education and no associate or bachelor's degree are an untapped opportunity to bolster enrollment in California community college nursing programs and fulfill workforce needs (California Competes, 2021a). The data require examination as to why older adults are at a disadvantage in the diagnostic assessments and how California community college nursing programs can better support their success early in the selection process.

Age	Grand Total	Passed	Percent of Total PPG	
< 20	228	201	88.2%	-0.6%
20 - 24	1,917	1,771	92.4%	+3.6%
25 - 29	1,465	1,315	89.8%	+1%
30 - 34	1,040	913	87.8%	-1%
35 - 39	652	550	84.4%	-4.4%
40 - 49	474	397	83.8%	-5%
50 and older	119	97	81.5%	-7.3%
No Record	2,316	2,051	88.6%	-0.2%

#### Table 3: Assessment Test Pass Rate & PPG by Age, 2020-21.

Data Source: ATI TEAS database.

#### Table 4. Assessment Test Pass Rate & PPG by Age, 2021-22.

Age	Grand Total	Passed	Percent of Total	PPG
< 20	252	239	94.8%	+5.1%
21 - 24	1,975	1,816	91.9%	+2.2%
25 - 29	1,445	1,299	89.9%	+0.2%
30 - 34	1,125	1,009	89.7%	0
35 - 39	710	626	88.2%	-1.5%
40 - 49	572	473	82.7%	-7%
50 and older	116	92	79.3%	-10.4%
No Record	208	190	91.3%	4.6%

#### **Race/Ethnicity**

In 2020-21, there were disproportionate impacts on assessment pass rate found based on race/ethnicity. Table 5 shows the greatest disproportionate impact was for African American students with **African American students being 10.6% less likely to pass the assessment than all test takers.** Students whose race was unknown/non-respondent were the next race/ethnicity group that showed a disproportionate impact of 3.7%. However, due to the lack of information, we cannot make any conclusions as to the racial/ethnic makeup of the students who comprise this group. Finally, Hispanic students showed a small but significant disproportionate impact test than all test takers.

In 2020-21 and 2021-22, there were disproportionate impacts on assessment pass rate found based on race/ethnicity. Table 5 shows the highest disproportionate impact in 2020-21 was on African American students, showing that African American students were 13.6% less likely to pass the assessment test than all test takers. Hispanic students were also disproportionately impacted with Hispanic students being 5.5% less likely to pass the assessment than all test takers. Table 6 shows the highest disproportionate impact was again on African American students, showing that African American students were 6% less likely to pass the assessment test than all test takers. This shows improvement for African American students' pass rate, reducing the disproportionate impact gap by 7.6% from 2020-21. In addition, Hispanic students' disproportionate impact gap had a slight improvement, reducing the disproportionate impact gap by 0.1%. Yet, there are further improvements that can be made to close the disproportionate impacts experienced by African American and Hispanic test takers. Diversity, Equity, Inclusion and Accessibility (DEIA) and anti-racism are high priorities for the Chancellor's Office. The California Community Colleges continues to break down barriers to racial justice and equity for our students. The Chancellor's Office's commitment to these DEIA efforts will drive our advocacy to further examine these disproportionate impacts experienced by our underrepresented students with ATI.

Ethnicity	Grand Total	Passed	Percent of Total	PPG
African American	427	321	75.2%	-13.6%
American Indian/ Alaskan Native	37	36	97.3%	8.5%
Asian	1,566	1,1417	90.5%	+1.7%
Filipino	47	47	100%	+11.2%
Hispanic	2,781	2,316	83.3%	-5.5%
Other Non-White	55	55	100%	+11.2%

#### Table 5: Assessment Test Pass Rate & PPG by Race/Ethnicity, 2020-21.

Ethnicity	Grand Total	Passed	Percent of Total	PPG
Pacific Islander	*	*	N/A	N/A
White Non-Hispanic	2,068	1,980	95.7%	+6.9%
Unknown/ Non-Respondent	1,222	1,115	91.2 percent	+2.4%

\*Suppressed – fewer than 10 students. Data Source: ATI TEAS Database.

#### Table 6: Assessment Test Pass Rate & PPG by Race & Ethnicity, 2021-22.

Ethnicity	Grand Total	Passed	Percent of Total	PPG
African American	300	251	83.7%	-6%
American Indian/ Alaskan Native	31	30	96.8%	7.1%
Asian	1,158	1,046	90.3%	0.6%
Filipino	48	48	100%	10.3%
Hispanic	2,220	1,872	84.3%	-5.4%
Other Non-White	52	50	96.2%	6.5%
Pacific Islander	*	*	*	*
White Non-Hispanic	1,549	1,479	95.5%	5.8%
Unknown/ Non-Respondent	1,043	967	92.7%	3%

\*Suppressed – fewer than 10 students. Data Source: ATI TEAS Database.

#### Language Spoken at Home

In both 2020-21 and 2021-22, there were disproportionate impacts on Spanish-speaking students. Table 7 shows that **in 2020-21 students who speak Spanish at home are 16.9% less likely to pass the assessment test compared to all students who took the assessment test.** Table 8 shows that in 2021-22 **students who speak Spanish at home are 12.5% less likely** to pass the assessment than all test takers, a 4.4 percent improvement from 2020-21. With a significantly increasing Hispanic population in California, the data shows a critical need for the colleges and nursing programs to increase support for Spanish-speaking students. **The disproportionate impact based on speaking Spanish at home is much greater than the disproportionate impact experienced by ethnically Hispanic students in 2021-22 (5.4%).** This gap has been addressed in the system with AB 705 for English as a Second Language (ESL). This ensures that a student who is enrolled in ESL instruction will enter and complete degree and transfer requirements in English within three years. The Chancellor's Office also ensures students receive additional concurrent support to increase their likelihood of completing requirements in timely manner.

Language Spoken at Home	Grand Total	Passed	Percent of Total	PPG
Arabic	*	*	N/A	N/A
Chinese	*	*	N/A	N/A
English	6,999	6,282	89.8%	+1%
Farsi	*	*	N/A	N/A
Other	68	62	91.2%	+2.4%
Russian	*	*	N/A	N/A
Spanish	334	240	71.9%	-16.9%
Tagalog	*	*	N/A	N/A
No Response	758	660	87.1%	-1.7%

#### Table 7. Assessment Test Pass Rate & PPG by Language Spoken at Home, 2020-21.

\*Suppressed – fewer than 21 students. Data Source: ATI TEAS Database.

#### Table 8: Assessment Pass Rate & PPG by Language Spoken at Home, 2021-22.

Language Spoken at Home	Grand Total	Passed	Percent of Total	PPG
Chinese	*	*	N/A	N/A
English	5,349	4,837	90.4%	+0.7%
Farsi	*	*	N/A	N/A
Other	37	37	100%	10.3%
Russian	*	*	N/A	N/A
Spanish	254	196	77.2%	-12.5%
Tagalog	*	*	N/A	N/A
No Response	747	658	88.1%	-1.6%

\*Suppressed – fewer than 21 students. Data Source: ATI TEAS Database.

#### ENROLLMENT

This section will include the following data:

• The number of students enrolled in the nursing program. (Reporting requirement)

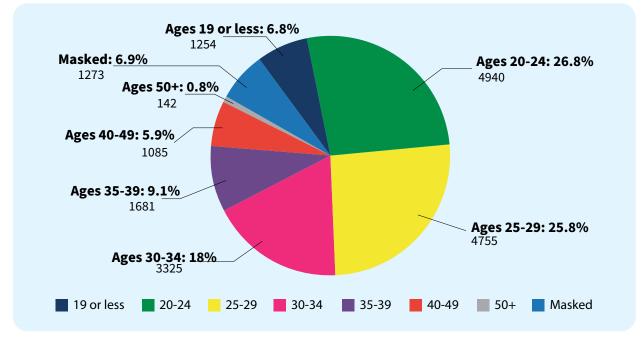
In 2020-21, colleges had a headcount enrollment of 28,336 nursing students, a decline of 6.3% from the previous academic year. In 2021-22, colleges had a headcount enrollment of 28,488 nursing students, a small 0.5% increase from the previous academic year. The pandemic appears to have had a significant negative impact on enrollment in nursing programs in 2020-21 with nursing programs slowly recovering in 2021-22. There were many reasons that led to the large drop in student headcount, such as personal and family illnesses and lack of student access to clinical settings. Even though a shortage of clinical site availability became apparent during the pandemic due to clinical site closures to students, access to clinical sites has long been an issue for nursing programs and has restricted further nursing program enrollment growth. Table 7 shows the historical headcount trends between academic years 2016-17 and 2020-21.

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Count	29,771	30,629	31,133	30,241	28,336	28,488
Percent Change	0	2.9%	1.6%	- 2.9%	- 6.3%	0.5%

#### Table 9. CCC RN Program Student Headcount Five Year Trend.

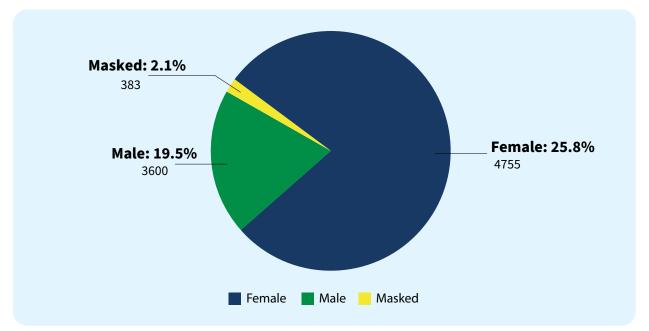
Source: Chancellor's Office Datamart; Community College Pipeline Launchboard.

# Figure 5. California Community College RN Programs Headcount Enrollment by Age in 2020-21.



Data Source: Community College Pipeline Launchboard.

As Figure 5 shows, more than half (59.6%) of enrolled students were ages 25+. This is slightly above the share of total enrolled students who were ages 25+ (42%). This may be explained by the time it takes to complete prerequisites and admission requirements prior to entering nursing programs.

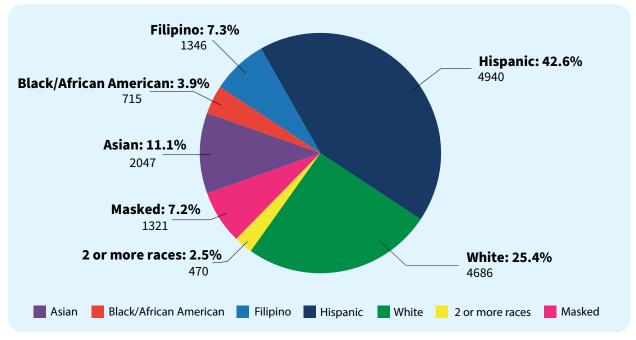




Data Source: Community College Pipeline Launchboard.

Females are disproportionately represented (78.4%) among enrolled students. Historically, this gender gap has slowly improved in California community college ADN programs. Similarly, this gender gap is experienced across all nursing programs. However, California community college ADN nursing programs will continue to examine the demographics of their cohorts and identify ways to equitably select qualified nursing students.





Data Source: Community College Pipeline Launchboard.

About 42% of enrolled students are Hispanic, which is proportionate to the Hispanic student population within the overall California community college system (46.6%). Conversely, Black/African American students are a small minority (3.9%) of students enrolled in nursing programs. Like many other programs, significant equity gaps exist in nursing programs. Increasing equity is a central tenet of the Vision for Success, which is guiding all districts to examine policies and practices that perpetuate equity gaps, and guiding the Chancellor's Office to examine structures that perpetuate racism. This work will continue in earnest until gaps such as these are closed.

At the time of this report, the nursing student enrollment data for 2021-22 disaggregated by age, gender, and race/ethnicity is not yet publicly available in Launchboard.

#### **RETENTION & COMPLETION**

This section includes the following data:

- The retention rates of colleges receiving Nursing Enrollment Growth and Retention Program (NEGRP) grants (**Supplemental data**)
- The number of students who completed the associate degree nursing program (**Reporting requirement**)

Nearly all (97.5%) students in 2020-21 passed their courses without failure or withdrawal. This is the highest overall course success rate in the past five years (see Figure 8), with trend data showing that nursing students are successfully completing their courses at higher rates. This may have been impacted by the increased emphasis and development of holistic student

supports funded by the nursing program grant, both inside and outside the classroom. Nursing students are at-risk for stress and anxiety and must be equipped with coping skills for optimal success (Jeffreys, 2012; Pitt, Powis, Levett-Jones, & Hunter, 2012).

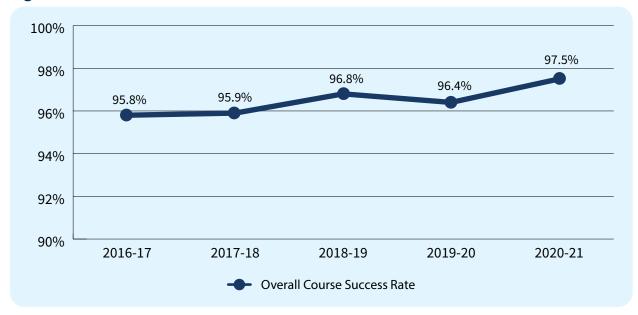


Figure 8. Overall Course Success Rate Five Year Trend.

Data Source: Community College Pipeline Launchboard.

Until 2021-22, the retention rate for students in California community college nursing programs had steadily increased over the past four years. In 2021-22, the retention rate was 89.5%, which was a 2.2% decrease from the previous year, 2020-21, where the retention rate was 91.7%. This drop may be attributed to the aftereffects of the pandemic on nursing programs and students.

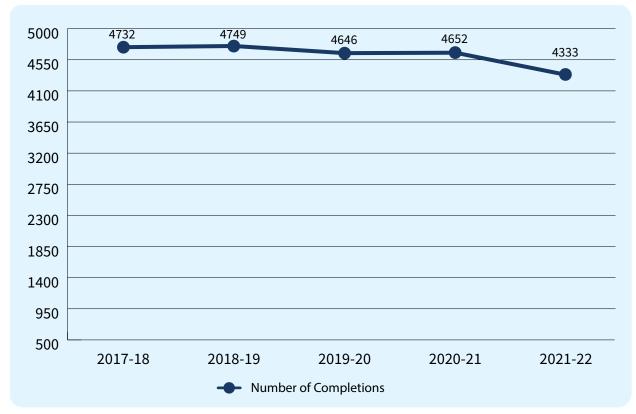
Table 10. California Community College Nursing Programs Retention Rate Five Year
Trend.

	2017-18	2018-19	2019-20	2020-21	2021-22
Average Retention Rate (all colleges receiving grant)	87.3%	88.6%	91.3%	91.7%	89.5%
percent Change	0	1.3%	2.7%	0.4%	-2.2%

Data Source: California Board of Registered Nursing.

In 2020-21, 4,652 students completed the California community college associate degree nursing programs. In 2021-22, 4,333 students completed the California community college associate degree nursing programs. As shown in Figure 9, the number of students who complete their degree has remained relatively flat with a slight decrease over time. There is a more notable drop in completion in 2021-22 than in the previous four years. This is an inverse trend to what was observed in the course success rates. The Chancellor's Office

plans to investigate why students are completing courses but not completing the entire program and moving onto licensure and the workforce at the same rate.





Data Source: California Board of Registered Nursing.

#### Table 11. Nursing Programs Average Completion Rate Five Year Trend.

	2017-18	2018-19	2019-20	2020-21	2021-22
Average Retention Rate (all colleges receiving grant)	72.4%	73.2%	76.3%	71.6%	79.5%
percent Change	0	+0.8%	+3.2%	-4.7%	+7.9%

#### LICENSURE: NATIONAL COUNCIL LICENSING EXAM (NCLEX)

This section will include the following data:

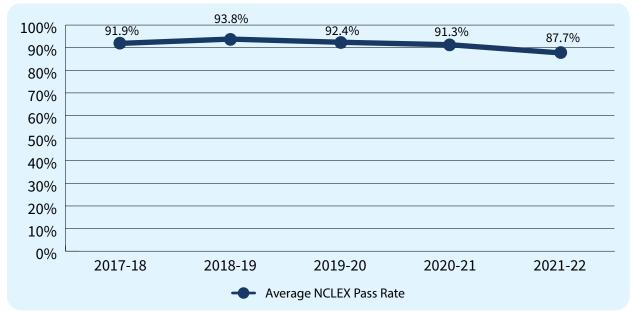
• The number of students who pass the National Council Licensure Examination (NCLEX) (**Reporting requirement**)

The NCLEX is a standardized test that is required for nursing graduates to successfully pass

to become a registered nurse in the United States. The NCLEX tests students' aptitude for application and analysis using the knowledge gained in nursing school to make sound judgments.

In 2020-21, California community college nursing programs had a **91% overall NCLEX pass** rate, with 4,292 total nursing graduates who passed. Most of the colleges (82%, or 63 out of 77 colleges) achieved pass rates above the 85% overall pass rate. Further, there were nine colleges achieving 100% pass rates. In 2021-22, California community college nursing programs had an 87.7% overall NCLEX pass rate, with 5,891 total nursing graduates who passed.

Historically, the NCLEX pass rate of nursing programs receiving grants has remained flat from 2017-18 through 2020-21 (see Figure 10). While the NCLEX pass rate in 2020-21 was high, it was the lowest compared to the past three academic years. This decline may be a result of the pandemic and its effects on the number of clinical placements, which reduced the amount of hands-on experience nursing students typically have. Also, the quick transition to online education may have negatively impacted faculty and students.



# Figure 10. California community college Nursing Programs NCLEX Pass Rate Five Year Trend.

Data Source: California Board of Registered Nursing.

#### **ACTIONS WE'RE TAKING**

The Chancellor's Office is committed to data-informed continuous improvement, focusing foremost on actions that increase racial equity in programs that lead to jobs with growth prospects and living wages, like nursing. The data included in this report are providing the Chancellor's Office with insight and guidance to improve student success in the California community college nursing programs. For example, the Chancellor's Office is leading the following activities to support colleges:

- Identify and scale evidence-based successful practices from system nursing programs;
- Establish peer learning methods to share promising practices among system nursing programs;
- Leverage the use of innovative learning opportunities with nursing programs;
- Improve data collection and accountability to continuously improve programs;
- Identify "second-chance" credentials (degrees and certificates) that are closely aligned with nursing but can serve as off-ramps for students who don't meet the nursing proficiency requirements or who do not complete the program.

# Identify and scale evidence-based successful practices from California community college nursing programs

Many California community college nursing programs are exemplars and have implemented successful practices to improve student outcomes in their ADN programs. In addition, there are innovative practices that colleges put in place because of the pandemic that should be explored further. These evidence-based successful practices can be gathered from reports colleges already complete and from proactively reaching out to high-achieving nursing programs. The Chancellor's Office will identify how these practices can be scaled and how we can best support colleges to do so. In turn, the system can determine policy changes that must be made accordingly.

# Establish peer learning methods to share best practices among California community college nursing programs

California community college nursing programs all have a shared interest in reducing attrition and increasing completion rates of their students. Thus, successful practices need to be more intentionally elevated, documented, and shared broadly throughout the system. Chancellor's Office wants to provide more peer learning opportunities for nursing program faculty, such as through Institutional Effectiveness Partnership Initiative (IEPI) and systemwide webinars.

#### Leverage the use of innovative learning opportunities within nursing programs

Despite the many challenges that nursing programs faced due to the pandemic, there were many creative solutions that emerged to meet the student learning outcomes and meet the requirements of the Board of Registered Nursing. Most notably, programs had to quickly find ways for nursing students to learn and complete clinical experiences through non-direct patient care. To address the challenges posed by the COVID-19 pandemic, nursing programs were temporarily allowed to increase the use of clinical experiences with non-direct patient care from 25 to 50% of clinical training (California Competes, 2021). Faculty and equipment costs can be prohibitively expensive, which can limit colleges' ability to expand teaching capacity in high-return fields such as nursing (Holzer, 2021). Programs also developed innovative clinical opportunities. For example, Sacramento City College nursing program provided 692 volunteer nursing hours and gave 25,000 COVID-19 vaccines.

Rather than the nursing programs returning to "normal," the Chancellor's Office will be seeking to identify ways that our programs can leverage lessons learned and identify valuable virtual learning opportunities. There is a need for standards set for nursing education simulation and virtual reality clinical experiences. After the pandemic, the healthcare field is embracing alternative methods of patient care, such as telehealth, which shifts the competencies they seek in nurses. This would allow for programs to not only respond to industry needs, but also build their capacity and provide additional appropriate environments for students to learn. This could increase student success and retention especially for nursing students who tend to be older and could benefit from increased flexibility and different modalities. Moving forward, colleges will be encouraged to evaluate innovative modalities such as virtual learning opportunities to ensure that students are receiving comparable, high quality clinical and classroom experiences as in-person opportunities.

#### Improve data collection and accountability to continuously improve programs

To better evaluate California community college nursing programs, the Chancellor's Office is more closely reviewing the data points that colleges are required to report. While there are specific reporting requirements outlined in Education Code 78261, leaders are identifying additional data points that would be valuable to collect from system nursing programs. These requests must be balanced against the already-broad raft of data colleges are asked to provide and must only be made for data that the Chancellor's Office will use for continuous improvement of nursing programs or to fulfill reporting requirements. New data will enable the Chancellor's Office to examine student outcomes at each phase of the nursing student journey: assessment, enrollment, retention, program completion and NCLEX completion. This will allow Chancellor's Office to construct a more robust narrative about the state of our nursing programs and the support needed to improve outcomes across the state.

#### Identify "second chance" credentials (degrees and certificates) that are closely aligned with nursing but can serve as off-ramps for qualified students who are not accepted to a nursing program or students who don't meet nursing proficiency levels.

Being that nursing programs are extremely competitive and there are many students who do not make it through the various stages of the application and enrollment process, it is important to identify "second chance" credentials that are closely aligned with nursing. Figure 11 shows the high proportion of qualified applications that are not accepted due to a limited number of spots available in RN programs. Of the 41,547 total rejected applications, it stands to reason that there is a significant group of qualified students who may have not been accepted to any nursing program but have foundational skills gained through prenursing coursework that can be applied toward another credential related to nursing and within the healthcare field.

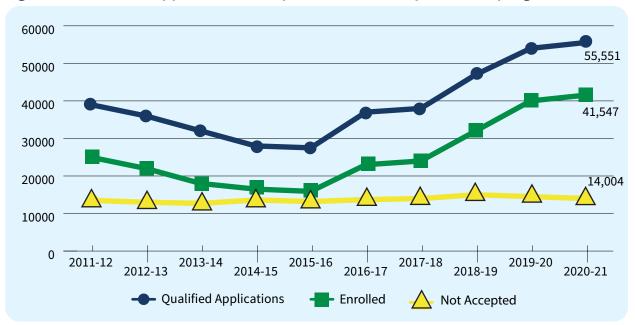


Figure 11. Qualified applications accepted and not accepted to RN programs.

Source: California BRN Annual Schools Report 2020-21.

Even if students do not make it in or through the program, they may still have an interest in the healthcare industry where there is significant demand. Colleges must provide viable alternative career pathways to these students who have already invested significant time and money into becoming qualified for the nursing program. To streamline paths for students, colleges must identify off-ramps and other credentials students may be interested in pursuing more clearly. Many California community colleges have other high-value credentials available within the health science and allied health fields that will lead students into highwage jobs. In addition, these credentials could also serve as future on-ramps for nursing program graduates who may want to upskill in the future.

#### **SUPPORT WE NEED**

Based on the findings included in this report, the Chancellor's Office suggests four ways that the legislature could further support the success of system nursing students:

- Allow California community college nursing programs to also use the Nursing Enrollment Growth and Retention funds for continuous improvement purposes;
- Provide policy solutions to address the nursing faculty shortage;
- Increase access to clinical sites by incentivizing healthcare facilities to provide rotations to California community colleges;
- Reconsider the frequency and form of future legislative reports.

#### Allow California community college nursing programs to also use the Nursing Enrollment Growth and Retention funds for continuous improvement purposes

While enrollment growth is important, California's health workforce benefits when students are supported to persist and complete. System nursing programs need flexibility to use the Nursing Enrollment Growth and Retention fund to continuously improve their programs. They need support and funding to strategically plan and put measures and structures in place that can lead to future growth. For example, programs could use funding to support the ongoing infrastructure of virtual learning opportunities such as equipment, technology, software, curriculum upgrades, and faculty professional development. Enhancements such as these will increase capacity, which will lead to future enrollment growth, and allow programs to respond to ever-evolving student and industry needs.

#### Provide policy solutions to address the nursing faculty shortage

One of the greatest challenges that prevents the California Community Colleges from addressing California's healthcare workforce needs is a shortage of nursing faculty. The California Board of Registered Nursing (2020a) stated that nursing programs cited lost funding and insufficient faculty as two key reasons that enrollment has been decreasing. If the faculty shortage continues, programs will continue to either decrease enrollment or maintain current enrollment with no growth.

Community colleges' ability to recruit and retain nursing faculty is impacted by several factors including salary, retirements, and a limited pool of applicants. As salaries for faculty are not comparable to the salaries of other nursing jobs, system nursing programs struggle to find and retain qualified and diverse faculty to teach in their programs. In what ways can the California community colleges attract a qualified nurse to leave practice and take a community college faculty position at a lower pay rate? Further, a "silver tsunami" of retiring faculty is occurring, with limited replacements available.

Nursing programs are struggling to recruit candidates because applicant pools are limited. This is especially limiting the California Community Colleges ability to attract diverse candidates to its faculty ranks (see the Chancellor's Office efforts to diversify faculty across the system). Thus, statewide support to address this nursing faculty shortage would be helpful to build the supply of nursing instructors who are qualified to teach in nursing programs. A number of other states, such as Maryland and Hawaii, have launched statewide initiatives that promote the training of more nursing educators. Several states, such as Colorado and Georgia, offer tax incentives for nurses serving in these teaching roles. Statelevel policy solutions could be considered to support the growth of faculty in California community college nursing programs and ultimately increase the number of nurses who enter the workforce.

# Increase access to clinical sites by incentivizing healthcare facilities to provide rotations to California community colleges

Clinical site availability emerged as a major pain point for system nursing program growth. The pandemic exacerbated the lack of availability of clinical placements, but it was a problem before the pandemic, and continues to be an issue. Nursing programs maintain connections with local employers, which are critical to securing clinical placements for students. Ultimately, however, the availability of clinical placements is outside the control of nursing programs. Nursing students need to have exposure to direct patient care. The Legislature can help by providing healthcare facilities with incentives to invest in future nurses.

#### Reconsider the frequency and form of legislative reporting

The Chancellor's Office is committed to continuous improvement and reports to the legislature are an important way that we document our actions. However, cumulative, annual reports are lengthy, and compliance driven. With some flexibility to submit shorter, interim reports, the Chancellor's Office may be able to provide more in-depth insights into the needs of our nursing programs and their students.

### CONCLUSION

The Nursing Enrollment Growth and Retention Program (NEGRP) has provided over \$13.3 million in funding between 2020-2022 to support the growth and success outcomes of California community college ADN nursing programs. These nursing programs have made progress towards recovering from the effects of the pandemic in terms of assessment, enrollment, and completion rates. The Chancellor's Office is working to further improve student outcomes within system nursing programs. In the coming years, the NEGRP aims to build on the progress made by colleges to develop a more robust supply of nurses from the nursing programs into California's nursing workforce.

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