

Trends in New York State Registered Nurse Graduations, 2019-2022

BACKGROUND

Registered nursing continues to be the largest licensed health care profession nationally and in New York State.^{1,2} Despite continued growth in the number of licensed registered nurses (RNs) in New York State,² providers across all health care settings (hospitals, long-term care, ambulatory care, and home care) report difficulty recruiting and retaining RNs.^{3,4} Newly trained nurses entering the workforce are turning over more quickly than they have in the past.^{4,5} Stressful working conditions exacerbated by staffing shortages have contributed to RNs leaving their jobs; some have retired, while others have pursued better paying and, in some instances, less stressful employment opportunities both in and out of health care.^{6,7}

At the same time, RN education programs also face challenges in their efforts to maintain production of new graduates. New York State deans and directors (deans) of nursing programs report an increasing number of faculty departures, and researchers report that an increasing number of faculty retirements are having the potential to reduce the number of students admitted to the programs, especially since filling vacant faculty lines has become increasingly difficult.⁸ Nursing education programs also face shortages of clinical preceptors and limits on available clinical trainings slots.^{7,9}

The annual survey of deans of New York State's RN nursing programs conducted by the Center for Health Workforce Studies (CHWS) provides critical information on the production of RNs in the state that can assist stakeholders to better understand the relationship between RN production and the supply of the state's nursing workforce. This brief describes findings from the most recent survey of nursing education programs.

METHODS

In the summer and fall of 2022, CHWS surveyed the deans of all 134 RN nursing programs in New York State, including associate degree nursing (ADN) programs, pre-licensure baccalaureate nursing (BSN) programs, and BSN-completer programs.* The survey was in the field for approximately 12 weeks, with a 54% response rate. The survey asked about program applications and acceptances, an assessment of the job market for newly trained RNs, faculty recruitment and retention issues, the use of simulation for clinical training, and the impact of COVID-19 on the educational programs and on the job market for newly trained RNs. Data on the number of RN graduations were obtained from the New York State Education Department (NYSED) and graduations for 2022 were imputed based on historical data for those programs which had not yet reported 2022 graduations to NYSED. Graduations of New York State residents from the 2 New York State online only programs (Excelsior College and Empire State University (formerly known as SUNY Empire State College)) were obtained directly from the 2 programs. These data were analyzed and are presented in this research brief by region,[†] degree type, and sponsorship, including City University of New York (CUNY), State University of New York (SUNY), and private schools.

* BSN completers are those RNs already holding an RN diploma or ADN degree who obtained a BSN.

† The 10 New York State Department of Labor regions were used in this analysis.

FINDINGS

Statewide, the number of RN graduations rose between 2019-2022, though a few regions saw declines in RN graduations.

Between 2019-2022, new RN graduations[‡] in New York State increased by just over 12% (Table 1). The largest increase in new RN graduations occurred in New York City, followed by the Hudson Valley and Long Island regions. In contrast, the number of new RN graduations declined in some upstate regions, including the North Country, Southern Tier, and Mohawk Valley regions during the same time period.

BSN-completer graduations also increased between 2019-2022, though at a slightly lower rate than new RN graduations (Table 2). The largest increases in BSN-completer graduations occurred in the Southern Tier and Finger Lake regions. The 2 online programs (Excelsior College and Empire State University) and the Mohawk Valley region saw the greatest decline in BSN-completer graduations during the same time period.

TABLE 1. New RN Graduations 2019-2022 in New York State, by Region

Region	Academic Year				Change 2019-22	
	2019	2020	2021	2022	Number	Percent
Capital District	473	515	505	526	53	11.2%
Central New York	416	505	530	490	74	17.8%
Finger Lakes	879	901	783	884	5	0.6%
Hudson Valley	980	917	1,162	1,350	370	37.8%
Long Island	1,350	1,479	1,476	1,576	226	16.7%
Mohawk Valley	331	374	339	318	-13	-3.9%
New York City	3,390	4,022	3,887	3,894	504	14.9%
North Country	407	355	345	335	-72	-17.7%
Southern Tier	384	414	420	351	-33	-8.6%
Western New York	858	756	983	893	35	4.1%
Online Only	124	138	235	145	21	16.9%
Totals	9,592	10,376	10,665	10,762	1,170	12.2%

Sources: NYSED, Excelsior College, and Empire State University.

[‡] RN graduations that qualify for licensure, including RN diplomas, ADN, BSN and master's degrees.

TABLE 2. BSN-Completer Graduations 2019-2022 in New York State, by Region

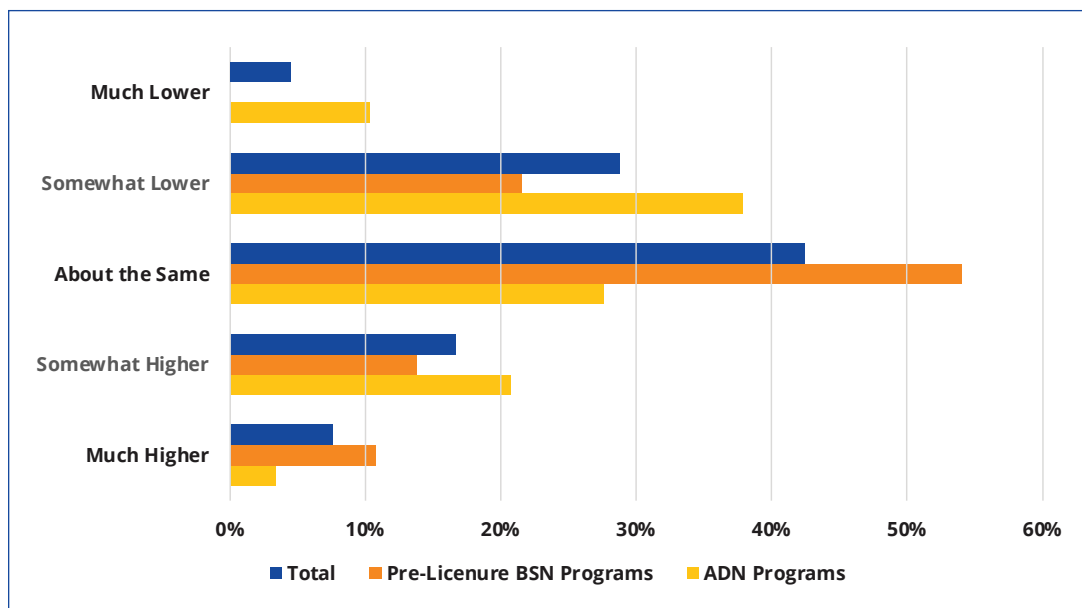
Region	Academic Year				Change 2019-22	
	2019	2020	2021	2022	Number	Percent
Capital District	56	32	66	56	0	0.0%
Central New York	118	103	105	136	18	15.3%
Finger Lakes	303	348	264	432	129	42.6%
Hudson Valley	41	33	34	128	87	212.2%
Long Island	173	118	183	161	-12	-6.9%
Mohawk Valley	171	139	103	96	-75	-43.9%
New York City	482	480	341	458	-24	-5.0%
North Country	66	97	82	51	-15	-22.7%
Southern Tier	0	76	283	252	252	N/A
Western New York	288	270	297	235	-53	-18.4%
Online Only	253	193	184	151	-102	-40.3%
Totals	1,951	1,889	1,942	2,156	205	10.5%

Sources: NYSED, Excelsior College, and Empire State University.

Over 40% of deans from ADN and pre-licensure BSN programs who responded to the survey indicated that applications to their programs remained the same in 2022, compared with 2021.

Forty-two percent of respondents from ADN and pre-licensure BSN programs indicated that applications remained the same in 2022, compared to 2021, including 54% of pre-licensure BSN programs and 28% of ADN programs (Figure 1). One-third of respondents indicated that applications were somewhat lower or much lower.

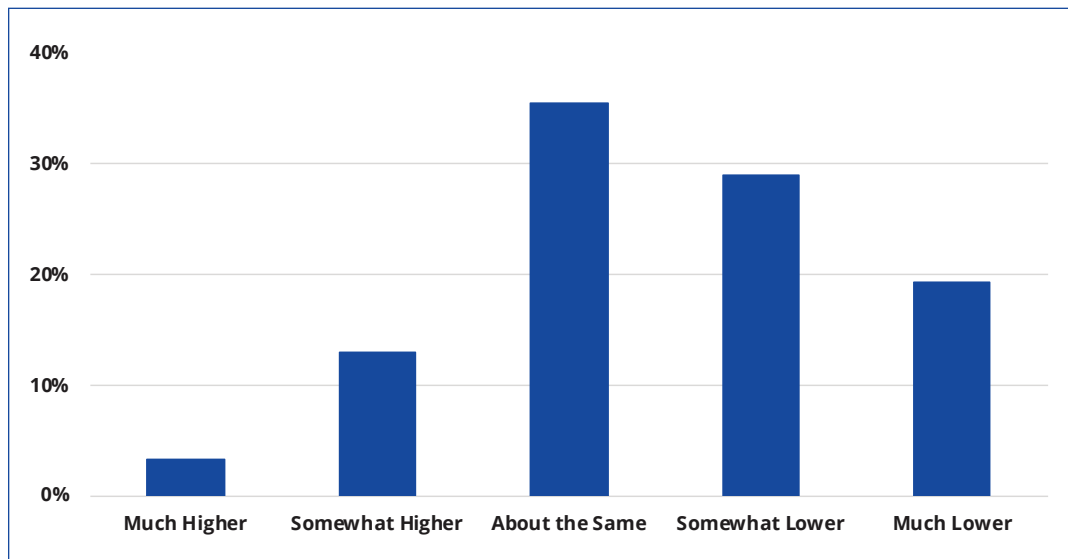
FIGURE 1. Change in The Number of Applications to New York State RN Education Programs in 2022, Compared to 2021, by Degree Type



Nearly half of deans from BSN-completer programs reported that applications in 2022 were somewhat lower or much lower compared to 2021.

Almost 50% of deans from BSN-completer programs reported that applications were either somewhat or much lower in 2022, compared to 2021 (Figure 2). Another 36% reported that applications were about the same during the same time period.

FIGURE 2. Change in Number of Applications to New York State BSN-Completer Programs, 2021-2022



A higher percentage of deans from privately sponsored RN education programs reported increases in applications in 2022 over 2021, compared to CUNY- or SUNY-sponsored programs.

Nearly 38% of deans from privately sponsored programs⁵ reported that applications were somewhat higher or much higher in 2022, compared to 2021 (Table 3). In contrast, only 20% of deans from CUNY programs and 13% of deans from SUNY programs reported that applications were somewhat higher or much higher. Just under one-third of privately sponsored programs reported applications were about the same, compared to 80% of CUNY programs and 44% of SUNY programs.

TABLE 3. Change in Number of Applications to New York State Nursing Education Programs in 2022, Compared to 2021, by Program Sponsorship

	CUNY	SUNY	Private	Total
Much Higher	0.0%	4.3%	12.5%	7.4%
Somewhat Higher	20.0%	8.7%	25.0%	16.2%
About the Same	80.0%	43.5%	31.3%	44.1%
Somewhat Lower	0.0%	34.8%	28.1%	27.9%
Much Lower	0.0%	8.7%	3.1%	4.4%

⁵ Includes for-profit and not-for-profit schools that are not government sponsored.

The majority of deans reported that acceptances were about the same in 2022, compared to 2021.

Two-thirds of deans from pre-licensure BSN programs reported no change in the number of acceptances in 2022, compared to 2021 (Table 4). Additionally, 52% of deans of ADN programs and BSN-completer programs reported no change in the number of acceptances.

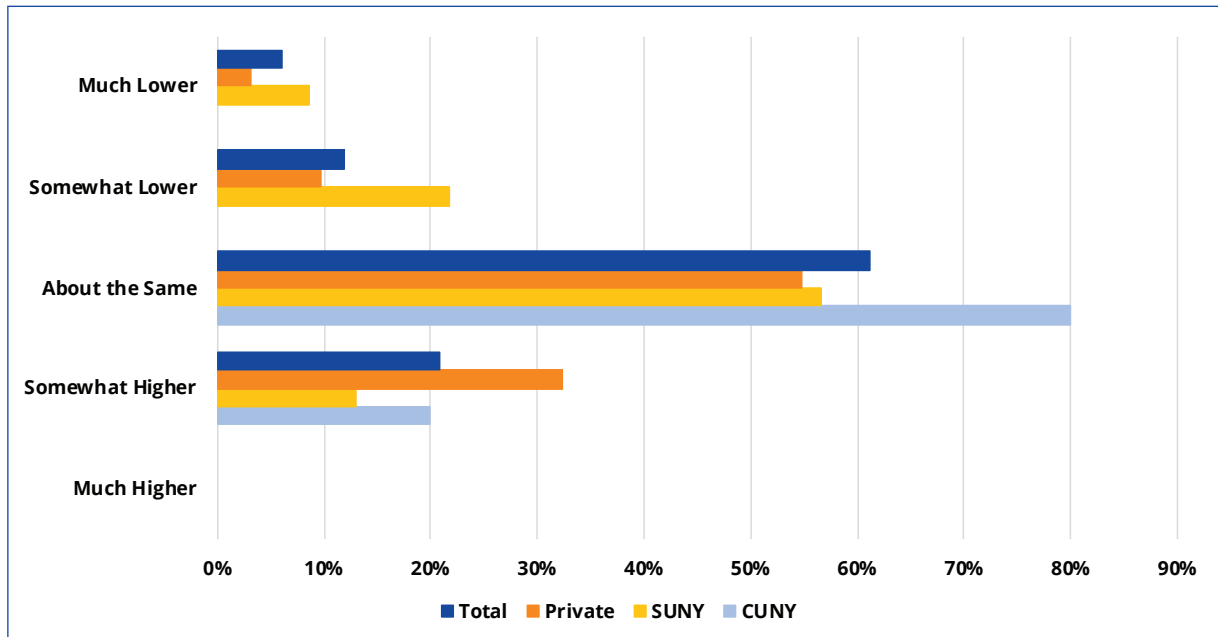
TABLE 4. Change in Number of Acceptances to New York State Nursing Education Programs, 2022 Compared to 2021, by Degree Type

	ADN Programs	BSN Programs	
		Licensure Qualifying	Completers
Much Higher	0.0%	0.0%	0.0%
Somewhat Higher	24.1%	19.4%	12.9%
About the Same	51.7%	66.7%	51.6%
Somewhat Lower	17.2%	8.3%	19.4%
Much Lower	6.9%	5.6%	16.1%

Deans of privately sponsored nursing education programs were more likely to report that acceptances in 2022 were somewhat higher or much higher, compared to 2021.

One-third of deans from privately sponsored programs reported that acceptances were either somewhat or much higher in 2022 compared to the previous year (Figure 3). Only 20% of CUNY deans and 13% of SUNY deans reported acceptances were somewhat higher or much higher. In contrast, nearly one-third of deans of SUNY-sponsored programs reported acceptances were either somewhat or much lower.

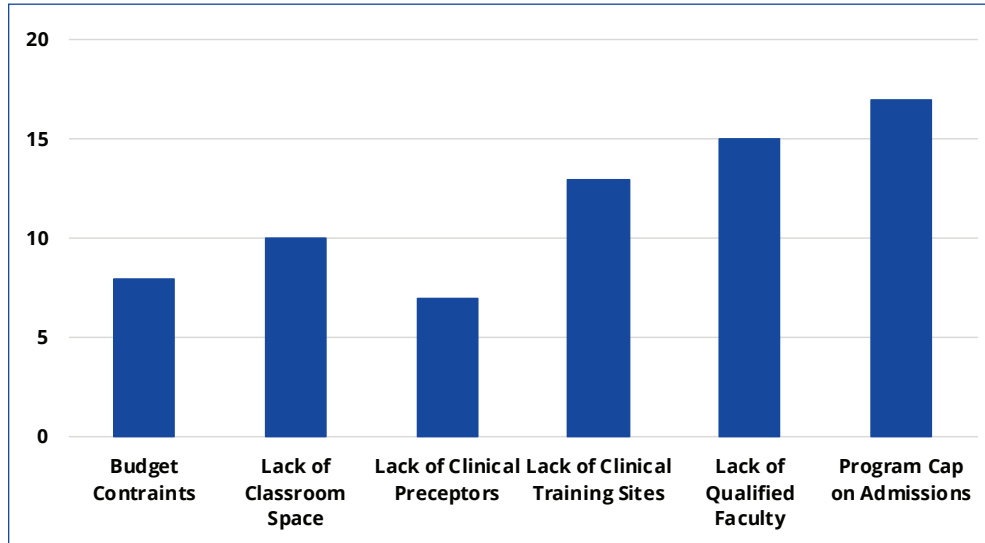
FIGURE 3. Change in Number of Program Acceptances to New York State Nursing Education Programs in 2022 Compared to 2021, by Sponsorship



Almost half of nursing deans reported turning away qualified applicants, citing program admission caps, faculty vacancies, and lack of clinical training slots as the main reasons.

Nearly half of deans who responded to the survey reported turning away qualified applicants. The main reasons cited included a cap on program admissions, faculty vacancies, and lack of clinical training sites (Figure 4).

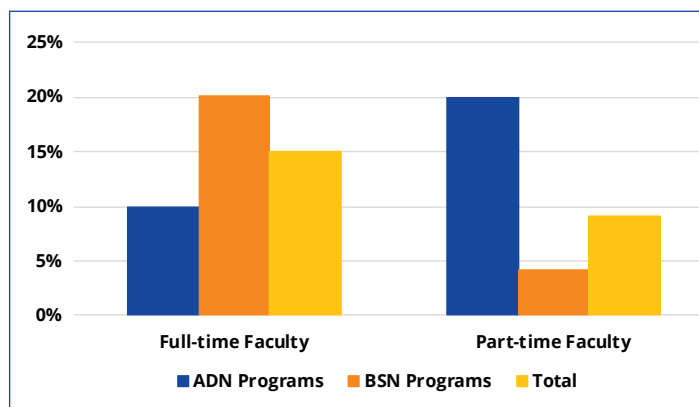
FIGURE 4. Reasons for Turning Away Qualified Applicants from New York State Nursing Education Programs, 2022



The deans of nursing programs reported, on average, a 15% vacancy rate for full-time faculty in the 2022 academic year.

Respondents to the survey reported, on average, a vacancy rate of 15% for full-time faculty and 9% for part-time faculty in the 2022 academic year (Figure 5). Deans of BSN programs reported, on average, a 20% vacancy rate for full-time faculty while deans of ADN programs reported, on average, a 20% vacancy rate for part-time faculty.

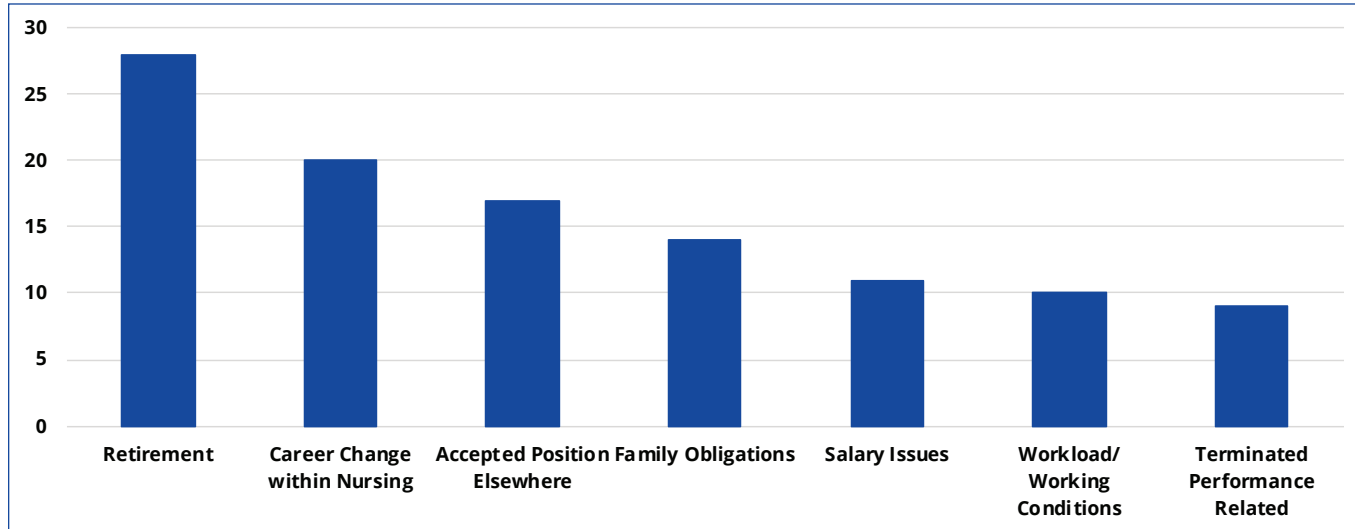
FIGURE 5. Faculty Vacancy Rates for Full-time and Part-time Faculty for 2022 at New York State Nursing Education Programs, by Degree Type



Deans reported that retirement contributed substantially to faculty departures.

Deans of nursing programs indicated that a key reason for faculty departures was retirement (Figure 6). Other reasons included career changes as well as accepting nursing faculty positions elsewhere (Figure 6).

FIGURE 6. Main Reasons for Faculty Leaving Their Positions From New York State Nursing Education Programs



Deans reported that offering higher salaries was a key strategy for recruiting to fill full-time faculty positions.

In the 2021-2022 academic year, deans of nursing programs reported offering salary increases to new hires and recruiting BSNs actively completing master’s degrees as principal strategies for filling vacant faculty positions (Table 5).

TABLE 5. Strategies Used by New York State Nursing Programs to Fill Vacant Full-time Faculty Positions

	Prior to the Pandemic	2022 Academic Year
Converted Part-time to Full-time Positions	9	7
Faculty Grants	3	6
Hired BSNs Completing their Master's	14	18
Research Assistance	3	5
Salary Increases	11	20

Just over half of respondents indicated that the COVID-19 pandemic reduced the amount of direct clinical experiences that their students had in the 2022 academic year.

Fifty-two percent of respondents indicated that the COVID-19 pandemic reduced the amount of direct clinical experiences that student nurses had in the 2022 academic year (Table 6). Over 58% of ADN deans and 47% of pre-licensure BSN deans indicated that the COVID-19 pandemic reduced the amount of direct clinical experience for their students. Deans from CUNY and SUNY schools were more likely to report that the COVID-19 pandemic reduced the amount of direct clinical experience for their students compared to deans from private schools (Table 7).

TABLE 6. Percent of Deans That Indicated COVID-19 Reduced Direct Clinical Experience for New York State Nursing Students in the 2022 Academic Year, by Degree Type

	ADN Programs	BSN Programs	Total
No	41.9%	47.2%	44.8%
Yes	58.1%	47.2%	52.2%
Unsure	0.0%	5.6%	3.0%

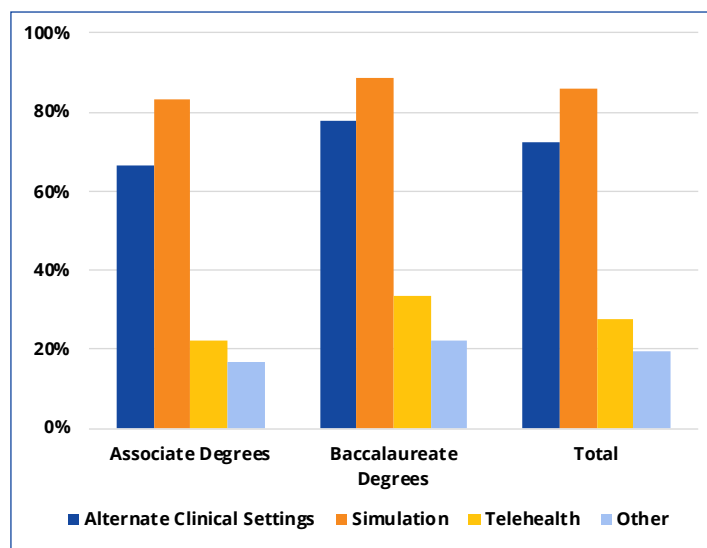
TABLE 7. Percent of Deans That Indicated COVID-19 Reduced Direct Clinical Experience for New York State Nursing Students in the 2022 Academic Year, by Sponsorship

	CUNY	SUNY	Private	Total
No	20.0%	45.8%	48.4%	44.8%
Yes	80.0%	54.2%	48.4%	52.2%
Unsure	0.0%	0.0%	3.2%	3.0%

In the 2022 academic year, simulation and alternate clinical settings were used to assist nursing students to meet their clinical training requirements.

Over 85% of deans who reported that the pandemic reduced the amount of direct clinical experience for students in the 2022 academic year used simulation to meet clinical training requirements (Figure 7). Additionally, about 72% of deans reported using alternate clinical settings to meet their students’ clinical training requirements in 2022.

FIGURE 7. Alternatives to Direct Clinical Experiences for New York State Nursing Students, by Degree Type



The vast majority of nursing deans reported many jobs for their graduates.

Deans from nursing programs reported that, overall, there were many jobs for newly trained RNs, especially in hospitals and nursing homes (Table 8). Ninety-five percent of the deans also indicated that the COVID-19 pandemic increased demand for RNs.

TABLE 8. Perception of Job Market for Newly Trained RNs, by Setting and by Degree Type

	Overall	Hospitals	Nursing Homes	Home Health Care	Ambulatory Care
Baccalaureate	92.0%	100.0%	95.7%	86.4%	68.2%
Associate	92.3%	92.3%	100.0%	84.6%	76.9%

LIMITATIONS

Graduations from New York State RN educational programs do not provide a complete picture of the number of new RN graduates who could potentially work in the state, since some New Yorkers may be completing their nursing educations in programs located outside of New York State.

DISCUSSION

There is strong demand for RNs currently as well as projected growing future demand for them.¹⁰ There is an urgent need to monitor New York State's educational pipeline in nursing as most licensed RNs in the state trained in New York State. Statewide, there was a 12% increase in the number of RN graduations in New York State between 2019-2022. However, not all regions of the state saw an increase in the number of new RN graduates over that time period. In addition, nearly half of nursing deans reported turning away qualified applicants from their programs, citing faculty vacancies and limits on clinical training slots as reasons for doing so. These challenges could, in the near term, result in fewer admissions and fewer graduates, which could widen the RN supply/demand gap.

Nursing deans reported a drop in the number of applications to their BSN-completer programs. This is a trend that bears watching as licensed RNs are required by law to obtain a BSN within 10 years of initial licensure. Additional research of existing data is needed to better understand this issue.

CONCLUSION

RNs are an integral part of the health care delivery system in New York State, providing patient care in a variety of health care settings. Growing demand for RNs is expected to continue over the next decade. It is important to monitor the RN education pipeline as well as to understand the issues faced by nursing education programs that could adversely impact the production of new RNs. Data from this research can be used to inform programs and policies to assure the steady production of RNs in New York State.

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Established in 1996, CHWS is an academic research center based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The research conducted by CHWS supports and promotes health workforce planning and policymaking at local, regional, state, and national levels.