Trends in New York Registered Nurse Graduations, 1996-2005

CHWS
Center for Health Workforce Studies

School of Public Health
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New York State Registered Nursing Graduations, 1996 – 2005

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NEW YORK STATE REGISTERED NURSING GRADUATIONS, 1996 - 2005

BACKGROUND

To better understand trends affecting the supply of registered nurses (RNs) in New York State, the Center for Health Workforce Studies at the School of Public Health, University at Albany (the Center) annually surveys RN education programs in the state. The brief survey includes questions on applications, acceptances, and graduations for the current year as well as projected graduations through 2005. This report summarizes the responses to the survey, which was conducted in the fall of 2003.

Of the 107 nursing programs in New York State, 97 responded to the survey for a 91% response rate. Data for the 10 non-respondents were imputed from responses to previous surveys; consequently, the following data reflect enrollment and graduations of all registered nursing programs in the state. It is important to note that *not all RN graduations represent new registered nurses* as many RNs who have completed an associate degree or diploma program return to school to obtain a bachelors degree in nursing (BSN). Based on survey responses, the Center estimates that approximately 29% of 2003 bachelor degree graduates were already RNs. This translates into approximately 13% of all RN program graduates in the state.

While not every RN educated in New York State in the state will become licensed and practice in New York State, and some RNs practicing in New York were educated outside of the state, RNs educated in New York are by far the single largest source of RNs practicing in the state. A recent survey of RNs in the state conducted by the State Education Department found that over 78% of licensed RNs had completed their nursing education in the state.[1]

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KEY FINDINGS

1. **After six years of decline, the number of RNs graduating in New York State in 2003 increased by 8% over the number of RN graduations in 2002.**

It is estimated that over 5,500 individuals graduated from registered nursing education programs in New York State in 2003. This represents the first increase in RN graduations in six years with nearly 400 more graduates than there were in 2002. Even with this increase, the number of graduates in 2003 was 28% lower than the number in 1996, when the number of nursing graduates was at an all time high for the state.

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[1] New York State Education Department, Office of the Professions and Fiscal Analysis and Research Unit, Registered Nurses in New York State, 2002, Volume 1: Demographic, Educational, and Workforce Characteristics, September 2003.

2.   RN graduations are projected to continue to rise in 2004 and 2005.

In both 2004 and 2005, RN graduations are projected to rise by more than 1,000 each year. The number of RN graduates in 2005 is projected to be more than 36% higher than the number of RN graduates in 2003. Despite this increase in RN graduations, the projected number of new graduates will be 2.3% lower than the number in 1996.

3.   Graduations from associate degree RN programs are projected to increase by almost 38% between 2003 and 2005, while graduations from bachelor degree RN programs is projected to rise by 33% over the same time period.

Between 1996 and 2002, associate degree RN graduations decreased by more than 35% while bachelor degree RN graduations decreased by more than 26%. Associate degree RN program graduations began increasing in 2003 and are projected to increase by nearly 38% between 2003 and 2005. Bachelor degree RN program graduations are projected to begin rising in 2004 and will increase by 33% between 2003 and 2005 (Table 1 and Figure 1).

Table 1
New York State RN Graduations by Degree Type, 1996 to 2005

| Degree Type	Actual Graduations								Projected Graduations	
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Associates	4,447	4,102	3,763	3,381	3,015	2,885	2,877	3,353	4,045	4,615
Bachelors	3,062	2,911	2,780	2,792	2,437	2,437	2,248	2,158	2,472	2,872
Diploma	176	94	13	4	4	12	3	3	14	20
Total	7,685	7,107	6,556	6,177	5,456	5,334	5,128	5,514	6,531	7,507

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Figure 1
New York State RN Graduations by Degree Type, 1996 to 2005
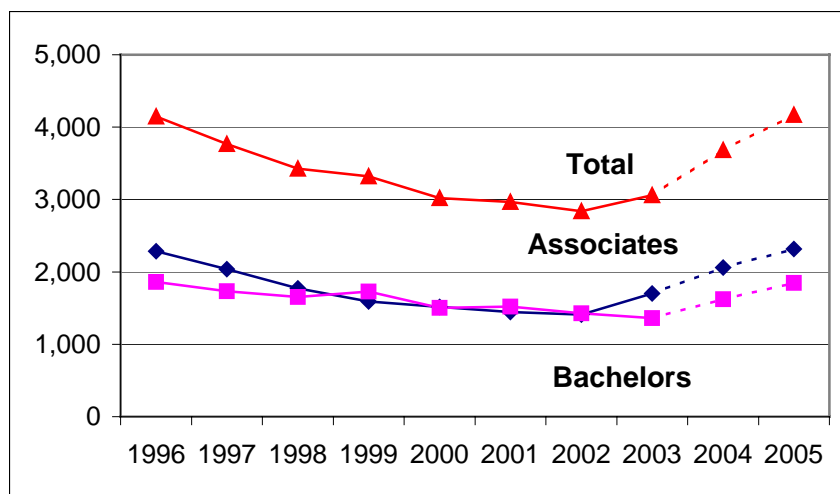
4. **For the third consecutive year, both associate and bachelor degree programs report a significant increase in applications and acceptances to their programs. Based on this, graduations are expected to rise for the next several years.**

Over 92% of associate degree programs and nearly 65% of bachelor degree programs reported an increase in the number of applications in 2003 compared to 2002. This was the third consecutive year that nursing education programs reported an increasing number of applicants over the prior year. Additionally, 60% of associate degree programs and almost 64% of bachelor degree programs reported an increase in acceptances (Figure 2).

Figure 2
Percentage Change in the Number of Applications and Acceptances
By Degree Type Between 2002/03 and 2003/04
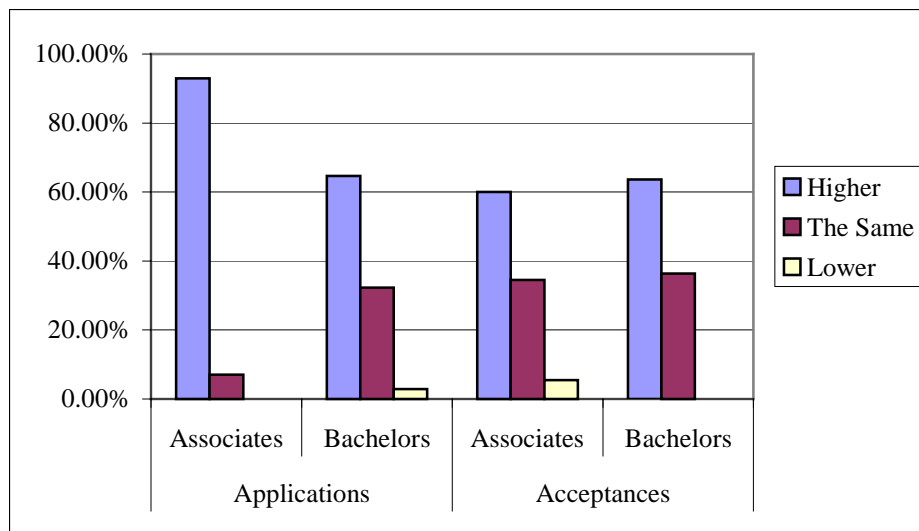
5.   Nearly half of RN education programs that responded to the survey (49%) reported that they turned away qualified applicants in 2003.

Forty-nine percent of the respondents (48) indicated they turned away qualified applicants, compared to 47% of the respondents (45) in 2002 that reported turning away qualified applicants. Sixty-six percent (33) of programs that reported turning away qualified applicants cited lack of faculty as the reason. Programs also reported that a limited number of clinical sites and lack of classroom space were other reasons for turning away qualified applicants. Of those RN education programs that cited lack of faculty as the reason for turning away qualified applicants, 70% were publicly sponsored programs and 85% of them were associate degree programs (Table 2).

Table 2
Reasons for Turning Away Qualified Applicants By Sponsor and by Degree Type

Reason for Turning Away Qualified Applicant	Total	Sponsor		Degree Type	
		Public	Independent	Associates Degree	Bachelors Degree
Lack of Faculty	33	23	10	28	5
Lack of Training Sites	4	3	1	3	1
Lack of Financial Aid	2	1	1	1	1
Other	9	7	2	6	3
Totals	48	34	14	38	10

6.   Between 2003 and 2005, increases in RN graduations are projected for all regions of New York State.

All regions in New York State experienced a decline in RN graduations between 1996 and 2003, ranging from a low of 2% for Northeastern New York to a high of 47% for the NY-Penn region. All regions but one had increases in RN graduations between 2002 and 2003 and all are projected to have increases in graduations between 2003 and 2005, with the Western New York region having the highest rate of growth at over 64%. Despite these dramatic increases, only four regions are projected to have a higher number of RN graduations in 2005 than in 1996 (Figure 3 and Table 3).

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Figure 3
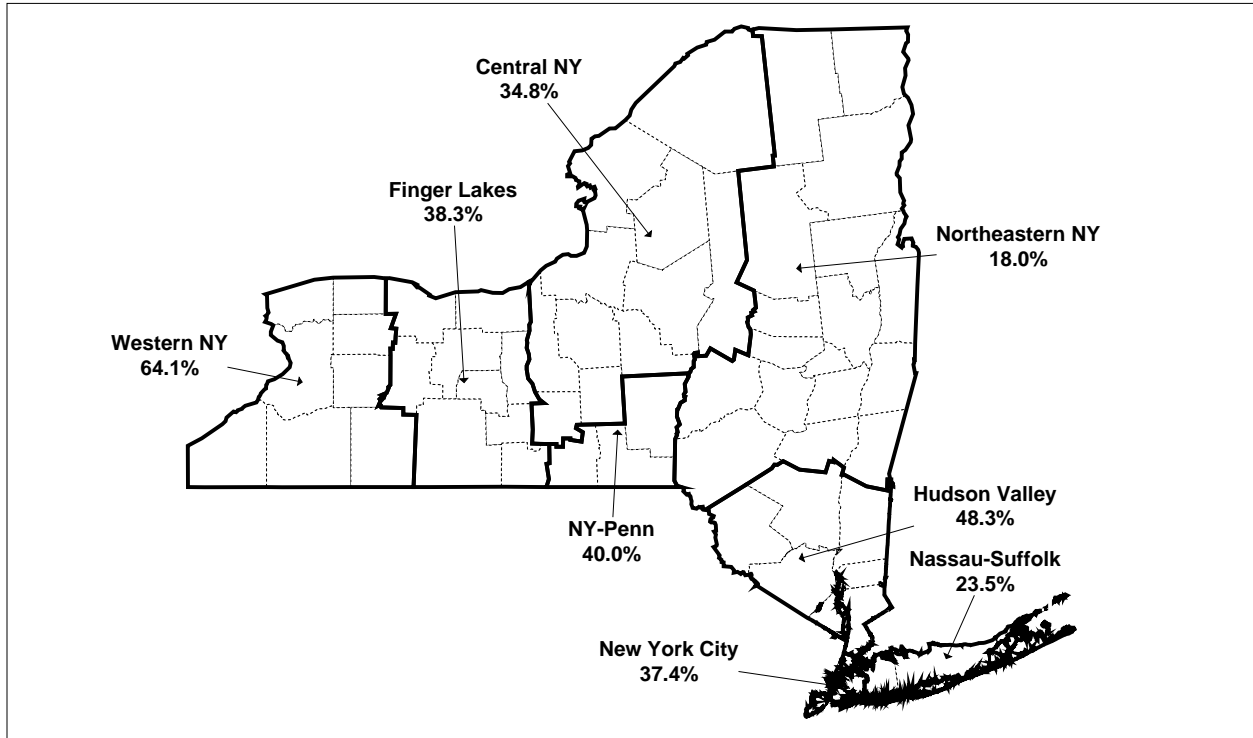**Projected Percentage Increase in RN Graduations, 2003 – 2005, by HSA Region**

Table 3
Percent Change in the Number of RN Graduations by Region

HSA Region	1996	2002	2003	Projected		Percent Change		
				2004	2005	1996 to 2003	2003 to 2005	1996 to 2005
Western New York	890	535	473	573	776	-46.8%	64.1%	-12.8%
Finger Lakes	654	442	488	549	675	-25.4%	38.3%	3.2%
Central NY	961	666	749	940	1,010	-22.1%	34.8%	5.1%
NY-Penn	92	45	50	60	70	-45.7%	40.0%	-23.9%
Northeastern NY	641	531	628	668	741	-2.0%	18.0%	15.6%
Hudson Valley	1,058	616	656	909	973	-38.0%	48.3%	-8.0%
New York City	2,258	1,544	1,621	1,902	2,227	-28.2%	37.4%	-1.4%
Long Island	937	677	784	870	968	-16.3%	23.5%	3.3%

7.   Between 2002 and 2003, both public sector and independent RN education program graduations increased and are projected to increase further between 2003 and 2005.

Between 1996 and 2003, both public (SUNY, CUNY, and Excelsior College[2]) and independent program (including hospital-based nursing programs) RN graduations decreased by nearly 27% and more than 30%, respectively. Both public sector graduations and independent program graduations in 2003 were higher than in 2002, 8% and 6% respectively. Graduations in both sectors are projected to increase significantly between 2003 and 2005, with public sector growth projected to be nearly 35% and independent sector growth projected to be nearly 38% (Figure 4).

Figure 4
Change in RN Graduations in Public and Independent Nursing Programs

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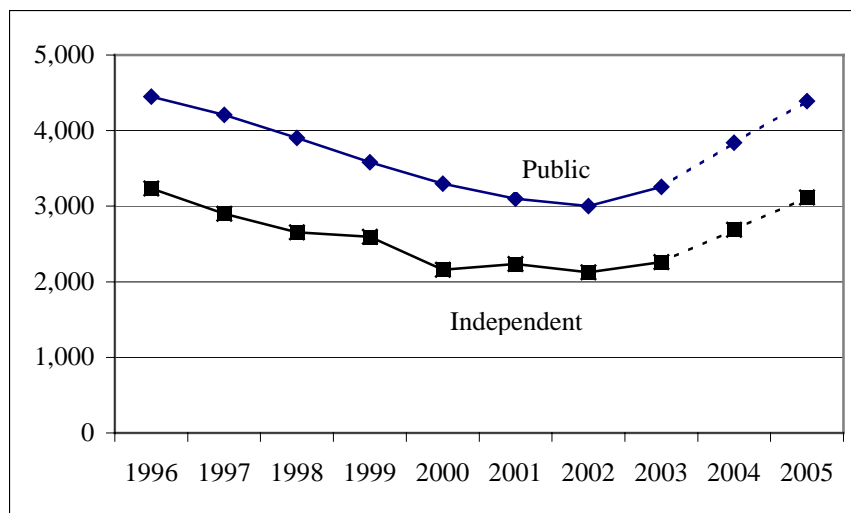
[2] Excelsior College is a New York State program that provides distance-based education for students across the country. Only the estimated number of graduates from New York State is included in this report.

DISCUSSION

While increased enrollments in RN education programs and renewed interest in nursing as a career have fueled an increase in nursing graduations, it remains unclear whether this current increase in graduations can both replace those leaving the field and fill newly created jobs while addressing the current shortage of nurses.

The federal Bureau of Labor Statistics (BLS) forecasts that over 1.1 million new nurses will be needed in the United States between 2002 and 2012. Registered nursing is one of the 10 occupations projected to have the largest number of new jobs.[3] The federal government estimated that New York State had a shortage of over 16,000 RNs, or 11%, in 2000 and is projecting a shortage of over 12,500 RNs, or 8%, by 2005. However, by 2010, the shortage is projected to exceed 17,000 RNs, or 10% of the nursing workforce and increase to almost 30,000, or 16%, by 2015[4].

While current levels of production may be sufficient to meet short-term demand for RNs, increased production will be needed to prevent future shortages. Demand for RNs will be driven by a number of factors, including the aging of the population, the aging of the nursing workforce, trends in health care financing and emerging technologies in health care. BLS projects that health sector employment will grow more than twice as fast as the non-health care sector between 2002 and 2012. The net effect of these factors is that the need for new RNs is likely to rise by the end of the decade.

One factor affecting future supply is the capacity of nursing programs to produce more graduates. The current survey found that many New York State nursing programs are currently at capacity, which speaks favorably about interest in nursing as a career, but raises additional concerns about whether existing programs can accommodate the increased interest. Problems relating to recruitment and retention of faculty must be considered in order to ensure that RN education programs can accommodate the number of New Yorkers seeking to become much-needed RNs. Indeed, as a poor economy and increased salaries attract more potential RN candidates, the capacity of RN education programs may prove to be a substantial barrier to assuring an adequate supply of RNs in the coming decade.

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[3] [3] Daniel E. Hecker, Occupational Employment Projections to 2012, Monthly Labor Review, February, 2004.
[4] *Projected Supply, Demand, and Shortages of Registered Nurses: 2000 – 2020,* Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis, July 2002.