

A Profile of New York State Nurse Practitioners

Highlights

- There are 57.2 patient care nurse practitioners* (NPs) per 100,000 population statewide, but they are unevenly distributed regionally.
- Patient care NPs who are Hispanic/Latino are underrepresented in the NP workforce compared to their presence in the state's population.
- More than half of the state's patient care NPs are 50 years of age or older.
- The vast majority of patient care NPs report holding a master's degree or higher as their highest NP degree.
- Nearly half of patient care NPs in the state work in health centers and hospital outpatient clinics.
- Over 38% of patient care NPs work in primary care[†] and another 6% work in behavioral health.[‡]

Background

Nurse practitioners (NPs) are registered nurses with advanced education and clinical experience who provide a wide array of health services. They play increasingly important roles as health care providers as their numbers grow and as NP education programs offer a wide array of clinical specialties. The number of licensed nurse practitioners in New York State has grown dramatically over the last 4 years, from 20,846 in 2014 to 25,407 in 2018, increasing by nearly 22%. At the same time, demand for NPs is increasing, particularly in primary care and behavioral health. Since 2015, all NPs in New York State are required by law to provide additional information to the state at the time of their triennial re-registration. The requested information primarily focuses on demographic, educational, and practice characteristics and is designed to support more effective health workforce planning in the state.

Methods

This brief, prepared by the Center for Health Workforce Studies (CHWS), is based on an analysis of information provided by NPs who reregistered between September 1, 2015, and March 31, 2018 and who provide patient care in New York. The analysis examines supply and distribution as well as key demographic, educational and practice characteristics of these NPs.

NPs in New York State are licensed as registered nurses and certified in one or more of 16 NP specialties. After exclusions for multiple certifications, out of state practices, and NPs who are not clinically active, 9,783 survey responses were analyzed (Table 1).

* This analysis only reports on nurse practitioners who provide patient care in New York.

† For the purposes of this analysis, a primary care NP is one who works in a federally qualified health center or in another ambulatory setting (eg, hospital outpatient clinic, physician office, independent NP practice) with a primary care focus (eg, family practice, general practice, general internal medicine, obstetrics and gynecology, or general pediatrics).

‡ NPs are considered to work in behavioral health if they hold an NP certification in mental health.

Table 1. Counts of Patient Care NPs in New York State

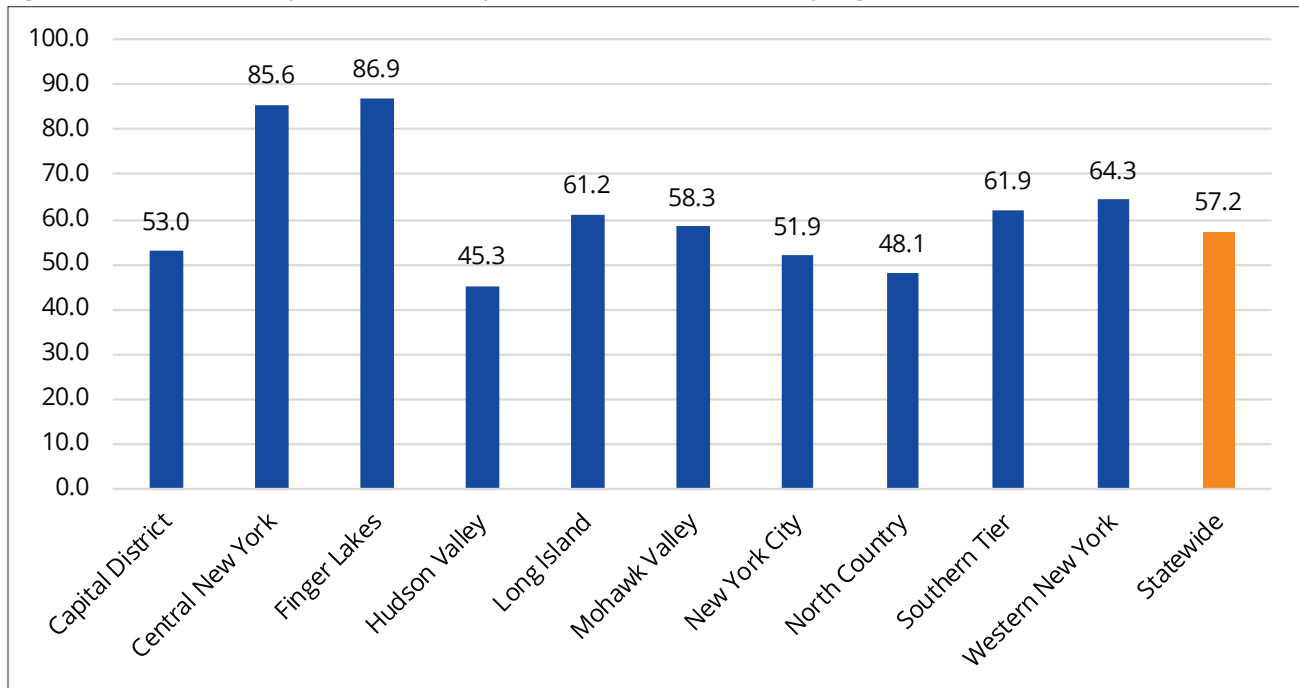
Category	Count
Total NP Surveys Received	16,232
Exclusions	
Duplicates	-1,734
Out of State Practice	-1,375
Inactive NPs	-1,758
Not Providing Patient Care	-1,582
Total Surveys Analyzed	9,783

Findings

There are 57.2 patient care nurse practitioners* (NPs) per 100,000 population statewide, but they are unevenly distributed regionally.

There were 57.2 patient care NPs per 100,000 population statewide (Figure 1). The Finger Lakes and Central New York regions had the most NPs per 100,000 population with 86.9 and 85.6, respectively. In contrast, Hudson Valley and North Country regions had the least number of NPs per 100,000 population at 45.3 and 48.1, respectively.

Figure 1. Estimated Count of Patient Care NPs per 100,000 in New York State by Region



Patient care NPs who are Hispanic/Latino are underrepresented in the NP workforce compared to their presence in the state's population.

The percentage of patient care NPs who are Hispanic/Latino (5%) was lower than their proportion in the state's population (19%) (Figure 2). In contrast, NPs who are White, non-Hispanic were overrepresented in the profession, comprising nearly 70% of all patient care NPs compared to their presence in the state's population (56%). New York City's NP workforce is the most diverse, while the North Country region is the least diverse (Table 2).

* This analysis only reports on nurse practitioners who provide patient care in New York.

Figure 2. Race/Ethnicity of Patient Care NPs Compared to the New York State's Population

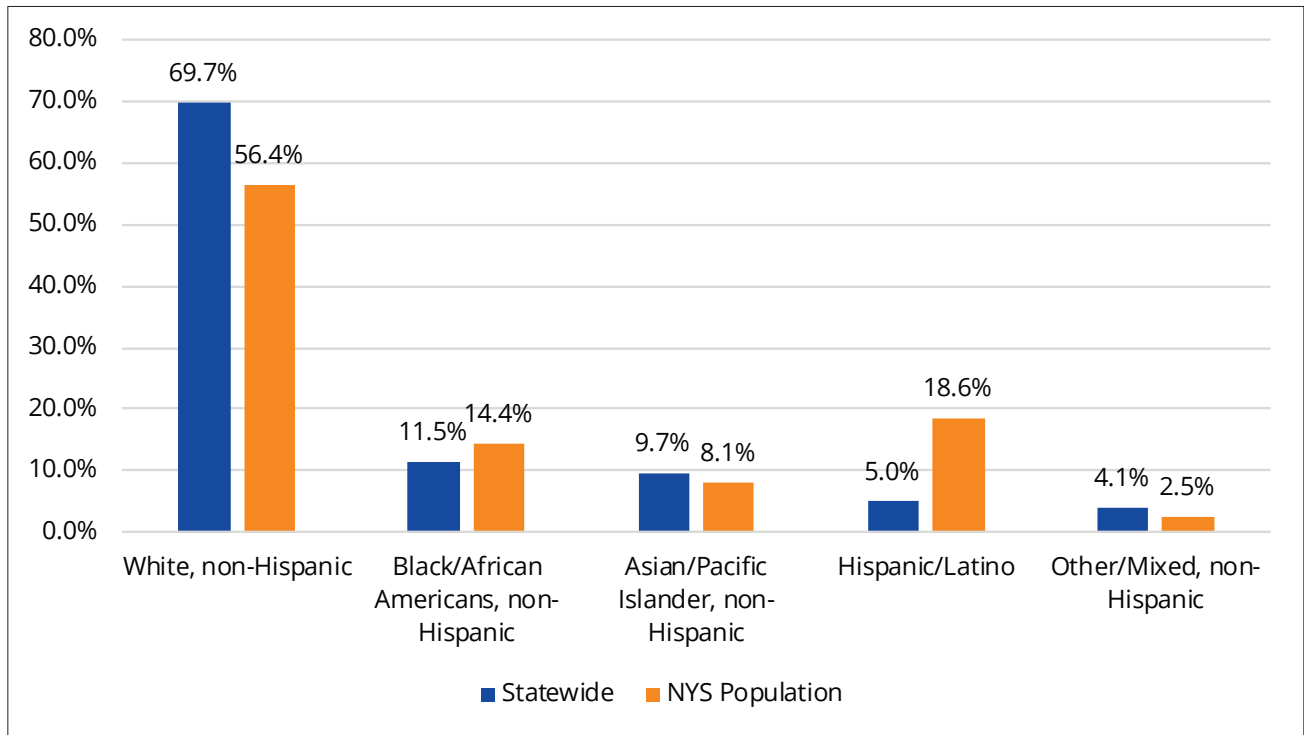


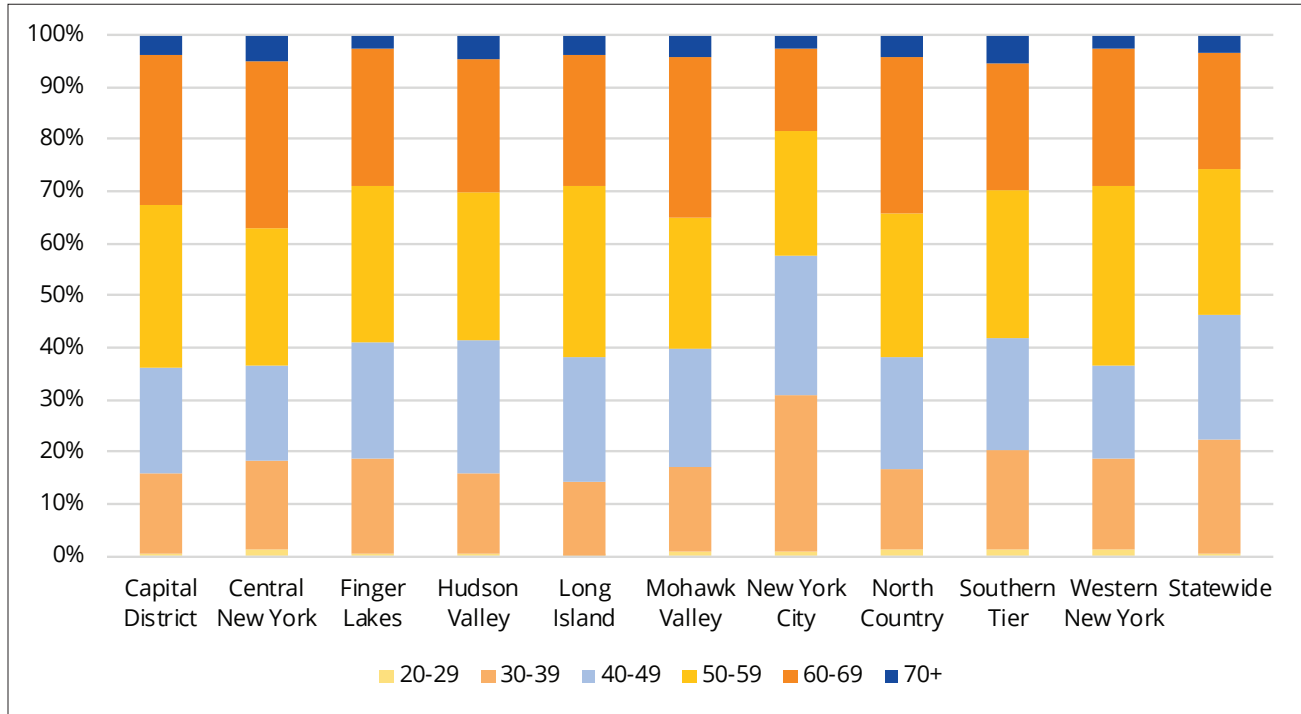
Table 2. Race/Ethnicity of Patient Care NPs by Region

Region	Non-Hispanic				Hispanic/Latino
	White	Black/ African American	Asian/ Pacific Islander	Other/ Mixed	
Capital District	91.1%	3.0%	2.4%	2.4%	1.0%
Central New York	90.1%	1.4%	1.6%	4.2%	2.3%
Finger Lakes	90.5%	2.9%	1.4%	3.5%	1.4%
Hudson Valley	74.6%	7.6%	7.2%	4.1%	6.1%
Long Island	70.2%	11.2%	8.5%	3.8%	5.8%
Mohawk Valley	91.8%	2.4%	3.7%	1.2%	0.8%
New York City	48.2%	20.8%	17.8%	5.3%	7.5%
North Country	93.8%	1.1%	0.6%	2.3%	2.3%
Southern Tier	92.1%	1.8%	2.6%	1.8%	1.5%
Western New York	91.7%	2.6%	1.6%	2.1%	1.9%
Statewide	69.5%	11.5%	9.7%	4.0%	5.0%

More than half of the state’s patient care NPs are 50 years of age or older.

Statewide, the median age of patient care NPs in New York was 51, with nearly 28% of them between 50 and 59 years old and another 26% of them 60 years of age or older (Figure 3). The Capital District, Western New York, and Central New York regions had the highest percentages of NPs 50 years of age or older (64%, 64%, 61%, respectively), while New York City had the lowest percentage of NPs 50 years of age or older (42%).

Figure 3. Patient Care NPs by Age Cohort and by Region



The vast majority of patient care NPs report holding a master’s degree or higher as their highest NP degree.

Slightly more than 80% of patient care NPs held a master’s degree as their highest NP degree, and another 11% held a post master’s certificate as their highest degree (Table 3). Six percent of patient care NPs held a doctoral degree as their highest NP degree.

Table 3. Types of NP Degrees and/or Certificates Held by New York NPs

Degree Type	Statewide
Certificate	3.3%
Masters	80.1%
Post Masters	10.7%
Doctorate	5.6%
Other	0.2%

Nearly half of patient care NPs in the state work in health centers and hospital outpatient clinics.

Statewide, almost 45% of patient care NPs worked in health centers or in hospital outpatient clinics (Table 4). A much smaller percentage of NPs worked in hospital inpatient and emergency departments (16%), and physician practices (15%). Nearly 4% of patient care NPs worked in independent NP practices.

Fifty-three percent of patient care NPs in the Mohawk Valley region worked in health centers or hospital outpatient clinics, followed by 52% in the New York City region. In contrast, only 33% of patient care NPs in the Hudson Valley region worked in health centers and hospital outpatient clinics. In the Western New York region, 26% of patient care NPs worked in physician practices, followed by 22% in both the Capital District and Hudson Valley regions.

Table 4. Principal Work Settings of Patient Care NPs in New York State by Region

Principal Work Setting	Percentage of NPs										
	Capital District	Central New York	Finger Lakes	Hudson Valley	Long Island	Mohawk Valley	New York City	North Country	Southern Tier	Western New York	Statewide
Health Center/Hospital Outpatient	38.7%	43.2%	45.2%	32.7%	36.0%	52.5%	51.9%	50.3%	49.1%	37.8%	44.7%
Hospices	0.2%	0.0%	0.6%	0.4%	0.7%	0.4%	0.3%	0.0%	0.0%	0.5%	0.4%
Hospital Inpatient/EDs	13.6%	14.9%	16.9%	14.5%	18.1%	8.3%	18.0%	7.0%	6.9%	15.3%	16.1%
NP Practices	5.3%	2.5%	2.2%	5.7%	6.5%	2.5%	2.6%	4.7%	4.8%	3.3%	3.7%
Nursing Home Long-term Care	4.3%	3.9%	6.7%	6.6%	3.4%	5.8%	4.7%	2.9%	5.7%	3.9%	4.8%
Physician Practices	22.0%	21.7%	14.2%	22.0%	19.7%	16.1%	7.5%	18.7%	19.8%	26.3%	15.2%
Public Health Department	0.6%	1.2%	1.0%	1.1%	0.9%	0.0%	0.6%	0.6%	1.2%	1.1%	0.8%
Urgent Care Centers	1.6%	2.0%	1.6%	2.9%	0.5%	2.9%	0.7%	4.1%	1.2%	0.9%	1.2%
Other	13.6%	10.7%	11.6%	14.0%	14.2%	11.6%	13.9%	11.7%	11.4%	10.9%	13.1%

Over 38% of patient care NPs work in primary care* and another 6% work in behavioral health.†

Just over 38% of patient care NPs in New York worked in primary care and another 6% worked in behavioral health (Table 5). The North Country region (64%) had the highest percentage of NPs practicing in primary care, followed by the Mohawk Valley (52%) region, while the Finger Lakes (33%) and Long Island (35%) regions had the lowest percentage of NPs practicing in primary care. The Capital District (10%) region had the highest percentage of NPs working in behavioral health, while the North Country (3%) region had the lowest.

* For the purposes of this analysis, a primary care NP is one who works in a federally qualified health center or in another ambulatory setting (eg, hospital outpatient clinic, physician office, independent NP practice) with a primary care focus (eg, family practice, general practice, general internal medicine, obstetrics and gynecology, or general pediatrics).

† NPs are considered to work in behavioral health if they hold an NP certification in mental health.

Table 5. Specialties of Patient Care NPs in New York State by Region

Region	Primary Care	Behavioral Health
Capital District	39.4%	10.3%
Central New York	37.6%	5.9%
Finger Lakes	33.3%	5.7%
Hudson Valley	41.9%	8.8%
Long Island	34.9%	9.2%
Mohawk Valley	52.2%	4.5%
New York City	35.6%	5.0%
North Country	63.6%	3.4%
Southern Tier	49.3%	6.5%
Western New York	44.5%	3.9%
Statewide	38.3%	6.3%

Discussion

It is widely recognized that NPs play key roles in expanding access to health services in the state. This research brief describes basic characteristics of patient care NPs in the state, including supply and distribution, demographic, educational and practice characteristics. NPs are not evenly distributed regionally in the state, with more in the Finger Lakes and Central New York regions compared to other regions of the state. More than half are over age 50 and are not as diverse as the state's population. Almost half of patient care NPs work in health centers and hospital clinics; 38% work in primary care and 6% work in behavioral health.

Conclusion

Mandatory reporting through a re-registration survey provides an efficient and effective approach to collecting detailed data on the state's nurse practitioner workforce. It supports analyses that are needed to identify supply/demand gaps and can inform strategies designed to address these gaps. Timely data and information on New York's NPs, as well as for other health professions, is critical for effective health workforce planning.

This research was conducted at the Center for Health Workforce Studies (CHWS) by Yuhao Liu, MPA, Robert Martiniano, DrPH, MPA, Nafin Harun, MA, and Jean Moore, DrPH, MSN. Support for this analysis was provided by the New York State Department of Health.

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.