A Profile of New York State’s Patient Care Nurse Practitioners
PREFACE

This report profiles active patient care nurse practitioners (NPs) in New York State. The data used in this analysis were drawn from information that NPs are required by law to provide at the time of their triennial certification reregistration. Since 2015, the Center for Health Workforce Studies (CHWS), working in collaboration with the New York State Department of Health (DOH) and New York State Education Department (SED), has assisted with the collection and analysis of this information.

This report was prepared by CHWS staff, including Kristen Stiegler, Robert Martiniano, Nafin Harun, Shen Wang, Gaetano Forte, and Jean Moore, with layout design by Leanne Keough and Matt Allegretti.

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.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of the School of Public Health, University at Albany, SUNY, DOH, or SED.

November 2021
ACKNOWLEDGMENTS

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SUGGESTED CITATION

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Nurse practitioners (NPs) are registered nurses with advanced education and clinical training who provide a wide array of health care services, including primary care and prevention, counseling, assessment, and management of acute and chronic illnesses. NPs play important roles in primary care delivery, particularly in underserved communities.

Since 2015, all NPs in New York State (NYS) have been required by law to provide additional information to the state at the time of their triennial certification reregistration. The requested information primarily focuses on demographic, educational, and practice characteristics and is designed to inform health workforce planning at the state, regional, and local levels.

The COVID-19 pandemic has had a substantial impact on the health care delivery system and the health workforce. In response to surging cases, NYS responded initially through the use of executive orders, to provide scope of practice and regulatory flexibility for health professionals including NPs and physician assistants, and through the redeployment of the health workforce to settings where need was greatest.1,2

This report is based on an analysis of information provided by NPs who renewed their registration between January 1, 2018, and December 31, 2020. A 22-question survey that asks about demographic, educational, and practice characteristics is included as part of NP recertification requirements. CHWS researchers conducted the analysis that served as a basis for this report, which profiles active patient care NPs in NYS. Attention is given to patient care NPs who provide primary care as well as those who work in the state’s Health Professional Shortage Areas (HPSAs).

However, the analysis for this report did not include an assessment of pandemic impacts on NP practice. Key findings are summarized below.

**KEY FINDINGS**

**Patient Care NP Supply and Distribution**

- There were an estimated 14,329 NPs in NYS
- Statewide, there were 74 NPs per 100,000 population, although regional distribution varied widely
  - The Finger Lakes and Central New York regions had the greatest supply of NPs (107 and 104 NPs per 100,000, respectively)
  - The Hudson Valley and North Country regions had the lowest supply of NPs (53 and 55 NPs per 100,000, respectively)

**Demographic Characteristics of Patient Care NPs**

- Hispanic/Latinx (hereafter referred to as Hispanic) NPs remain underrepresented in the state’s NP workforce compared with their presence in the state’s population (5.3% vs 19.0%)
- The percentage of African American/Black, non-Hispanic (hereafter referred to as Black) NPs and American Indian or Alaskan Native (hereafter referred to as American Indian) NPs were comparable to their presence in the state’s population (12.9% vs 14.3% and 0.1% vs 0.2%, respectively)
- NPs in younger age cohorts were more racially and ethnically diverse compared with older NPs
Patient Care NP Education

- The vast majority of NPs had a master’s degree or higher as their highest NP degree
- About 88% of NPs received their NP training in NYS

Current Patient Care NP Practice

- More than 60% of NPs worked in outpatient settings*
- More than 22% of NPs worked in hospital inpatient settings, emergency department settings, or urgent care centers

Patient Care NPs Working in Primary Care

- More than one-third of NPs provided primary care services†

* Outpatient settings include the following: health centers or clinics, including federally qualified health centers (FQHCs); rural health clinics; hospital outpatient care, including primary care and specialty care extension clinics; physician practices; independent NP practices; and state or county public health departments.

† A primary care NP is defined as a patient care NP who reported working in an outpatient setting as defined above, the specialty of that outpatient setting being one or more of the following: general practice, family practice, general internal medicine, obstetrics/gynecology, and/or general pediatrics.

Patient Care NPs in HPSAs‡

- More than 43% of NPs in NYS worked in primary care HPSAs
- Forty-nine percent of NPs who identified as Black worked in primary care HPSAs
- Nearly half of primary care NPs worked in primary care HPSAs
- Of the NPs who worked in HPSAs:
  - 48% worked in health centers or clinics
  - 23% worked in hospital inpatient settings, including emergency departments and urgent care centers
  - 10% worked in physician offices

Practice Requirements for Patient Care NPs

- More than 86% of NPs reported having more than 3,600 hours of qualifying practice experience, making them eligible for a collaborative relationship with a physician
- Of those eligible, 63% reported collaborative relationships with physicians in lieu of written practice agreements

Future Plans of Patient Care NPs

- 95% of NPs reported no near-term plans to retire, to significantly reduce patient care hours, or to change practice locations either within or outside of the state

‡ A primary care HPSA is a geographic area, population, or facility that has been designated as having a shortage of primary care providers and services. For more information, please visit the HRSA website on shortage designations and HPSAs: https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation.
LIMITATIONS

This report is based on data drawn from survey responses submitted by NPs who reregistered their certification between January 1, 2018, and December 31, 2020, and may not provide an accurate count of patient care NPs practicing in the state. Specifically, it does not include NPs who were newly certified between 2018 and 2020. It also may include NPs who stopped providing clinical services after their certification reregistration. Moreover, the data used in this analysis were self-reported and may contain inaccuracies. Finally, the analysis did not include an assessment of COVID-19 impacts on NP practice, despite the fact that scope of practice and licensing requirements, among other variables, were changed in response to COVID-19.

DISCUSSION

More than one-third of patient care NPs provided primary care services. The percentages of NPs who identified as Black or American Indian were similar to their respective proportions of the state’s population, while the percentage of NPs who identified as Hispanic was low compared with their presence in the state’s population.

Our research indicated that approximately half of primary care NPs worked in primary care HPSAs. Moreover, nearly 50% of NPs who identified as Black worked in HPSAs. Further research could provide a better understanding of the NP workforce in underserved communities and could potentially inform programs and policies to increase access to needed services. In addition, future research opportunities could include studies of:

- Impacts of the COVID-19 pandemic on:
  - NP practice decisions
  - NP distribution
  - NPs serving vulnerable populations, especially those working in rural communities or with underserved populations
  - NP telehealth providers, including the number of and types of services provided and a regional analysis
  - NP providers of behavioral health services and the settings where these services are provided, including a regional analysis
  - NPs working in federally qualified health centers (FQHCs)

CONCLUSIONS

This report presents a profile of the state’s patient care NPs using data reported by NPs as they reregistered with the state between January 1, 2018, and December 31, 2020. An increasingly diverse state population requires a more diverse NP workforce that not only ensures adequate capacity but also supports the provision of culturally competent health care. Detailed information about NP supply and distribution furthers our understanding of the state’s NP workforce and the contributions they make to health service delivery and access to care. Continued research on the NP workforce offers a better understanding of NP practice in underserved communities and in-depth insight into services provided. Moreover, understanding the NP workforce gives researchers an opportunity to learn more about impacts on patient outcomes and population health.
Nurse practitioners (NPs) are registered nurses (RNs) with advanced education and clinical experience who provide a wide array of health services. NPs play increasingly important roles in the delivery of primary care services across New York State (NYS), particularly in underserved communities. Since 2015, all NPs in NYS are required by law to provide, via a brief survey, additional information to the state at the time of their triennial certification reregistration. The survey focuses on demographic, educational, and practice characteristics and was developed to support more effective health workforce planning in the state.

The COVID-19 pandemic has had a widespread impact on the health care delivery system and the health workforce. In response to surging cases, NYS responded initially with a variety of approaches to ensure adequate health workforce capacity and with strategies to expand access to care for needed services. Through the use of executive orders to provide scope of practice and regulatory flexibility, NYS temporarily relaxed regulatory limitations by expanding NPs’ scope of practice and waived supervisory or collaborative practice agreement requirements. The state also temporarily suspended required licensing, certification, and mandatory credentialing renewals. These expansions allowed the recruitment of out-of-state health professionals, including individuals from Canada, to assist with acute care services.

This report presents an in-depth analysis of the state’s active patient care NPs, including distribution, practice characteristics, education, demographics, and retirement intentions at the time of reregistration.
multiple submissions, the last survey submitted is kept and all other submissions removed. A 3-year data set that includes the most recent NP survey responses over the 3-year period is compiled. For the purposes of this analysis, a data set was developed that included patient care NPs working or volunteering in NYS in positions that require NP certification.

This report is based on NP survey data collected between January 1, 2018, and December 31, 2020. During that period, 21,994 surveys were completed. Of those respondents, 14,329 were identified as active patient care NPs who worked in NYS (Table 1).

**TABLE 1. Identifying Active Patient Care NPs in NYS**

<table>
<thead>
<tr>
<th>Steps in process</th>
<th>Retained</th>
<th>Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys received</td>
<td>21,994</td>
<td></td>
</tr>
<tr>
<td>Multiple submissions</td>
<td></td>
<td>1,821</td>
</tr>
<tr>
<td>Unique NPs</td>
<td>20,173</td>
<td></td>
</tr>
<tr>
<td>Out of state, inactive, retired</td>
<td></td>
<td>4,094</td>
</tr>
<tr>
<td>Active NPs in NYS</td>
<td>16,079</td>
<td></td>
</tr>
<tr>
<td>Practicing in NYS but not providing patient care</td>
<td></td>
<td>1,750</td>
</tr>
<tr>
<td>Active patient care NPs in NYS</td>
<td>14,329</td>
<td></td>
</tr>
</tbody>
</table>

**Definitions and Notes**

**Patient Care**

Patient care is defined as working or volunteering in positions providing clinical care and requiring NP certification.

**Outpatient Setting**

Outpatient settings include the following:

- Health centers or clinics, including:
  - Federally qualified health centers (FQHCs)
  - Hospital outpatient care, including primary care and specialty care extension clinics
  - State and county public health departments
- Physician practices
- Independent NP practices

**Primary Care NP**

A primary care NP is defined as a patient care NP who reported working in an outpatient setting as defined above, the specialty of that outpatient setting being one or more of the following: general practice, family practice, general internal medicine, obstetrics/gynecology, and/or general pediatrics.

**Regions**

For regional analysis, NYS Department of Labor (NYS DOL) regions are used (Figure 1). The counties encompassed by each NYS DOL region are listed in Table 2.

**FIGURE 1. NYS Department of Labor Regions**
### TABLE 2. NYS Department of Labor Regions by County

<table>
<thead>
<tr>
<th>NYS DOL region</th>
<th>Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central New York</td>
<td>Cayuga, Cortland, Madison, Onondaga, Oswego</td>
</tr>
<tr>
<td>Finger Lakes</td>
<td>Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, Yates</td>
</tr>
<tr>
<td>Hudson Valley</td>
<td>Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester</td>
</tr>
<tr>
<td>Long Island</td>
<td>Nassau, Suffolk</td>
</tr>
<tr>
<td>Mohawk Valley</td>
<td>Fulton, Herkimer, Montgomery, Oneida, Otsego, Schenectady</td>
</tr>
<tr>
<td>New York City</td>
<td>Bronx, Kings (Brooklyn), New York (Manhattan), Queens, Richmond (Staten Island)</td>
</tr>
<tr>
<td>North Country</td>
<td>Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence</td>
</tr>
<tr>
<td>Southern Tier</td>
<td>Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, Tompkins</td>
</tr>
<tr>
<td>Western New York</td>
<td>Allegany, Cattaraugus, Chautauqua, Erie, Niagara</td>
</tr>
</tbody>
</table>

### Health Professional Shortage Areas

Health Professional Shortage Areas (HPSAs) are federal designations that identify communities or counties with shortages of primary care providers (primary care HPSAs), dentists (dental HPSAs), or psychiatrists (mental health HPSAs). Specifically, primary care HPSAs have shortages of general practitioners, family practitioners, internists, obstetricians/gynecologists, and/or general pediatricians who work in outpatient settings as defined above.

### FINDINGS

#### Supply and Distribution of Patient Care NPs

There was wide variability in the distribution of patient care NPs across regions of the state. There were 14,329 NPs who provided patient care in NYS, or about 74 NPs per 100,000 population. Regions with the greatest supply of NPs included the Finger Lakes region (107 NPs per 100,000) and the Central New York region (104 NPs per 100,000) (Figure 2). Regions with the lowest supply of NPs included the North Country (53 NPs per 100,000) and Hudson Valley (55 NPs per 100,000) regions.

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† For more information on HPSAs, see https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation#hpsas.

‡ The statewide rate includes those NPs for whom county or region of principal setting could not be determined because the address had inaccurate or missing information.
A Profile of New York State’s Patient Care Nurse Practitioners
Demographic Characteristics of Patient Care NPs

Age

In most regions, more than half of patient care NPs were 50 years of age or older (Figure 3). The only exception was the New York City region, where only 35% of NPs were 50 years of age or older.

Gender

The vast majority of NPs (92%) were female.

Race/Ethnicity

The state’s NPs were not as racially and ethnically diverse as the general population of NYS. Hispanic NPs were underrepresented in the state’s NP workforce relative to their presence in the state’s population (5.3% vs 19%). The percentage of African American/Black, non-Hispanic (hereafter referred to as Black) NPs was comparable to their presence in the state’s population (12.9% vs 14.3%), as was the percentage of American Indian/Alaskan Native (hereafter referred to as American Indian) NPs (0.1% vs 0.2%). In contrast, NPs who identified as White, non-Hispanic (hereafter referred to as White) and Asian or Pacific Islanders (hereafter referred to as Asian) were overrepresented in the NP workforce (68% and 11%, respectively) relative to their presence in the state’s population (56% and 8%, respectively) (Table 3).

NPs in younger age cohorts were more racially and ethnically diverse than older NPs (Figure 4). More than 38% of NPs under the age of 50 were members of racial and ethnic minority groups compared with only 25% of NPs 50 years of age or older.

Education and Training

More than 78% of NPs graduated from registered nursing education programs in NYS; about 17% graduated from programs in other US states, and about 5% graduated from RN education programs outside of the US. Nearly 3% reported an NP certificate as their highest degree, while nearly 90% of NPs reported holding a master’s degree or post-master’s certificate as their highest NP degree (Table 4). Nearly 8% reported a doctorate as their highest degree. About 88% of all NPs received their NP training in NYS.

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Patient care NPs, N (%)</th>
<th>NYS population,a N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>9,758 (68.1%)</td>
<td>10,883,812 (55.6%)</td>
</tr>
<tr>
<td>Black</td>
<td>1,849 (12.9%)</td>
<td>2,790,504 (14.3%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>761 (5.3%)</td>
<td>3,720,983 (19.0%)</td>
</tr>
<tr>
<td>Asian</td>
<td>1,602 (11.2%)</td>
<td>1,633,539 (8.4%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>15 (0.1%)</td>
<td>46,034 (0.2%)</td>
</tr>
</tbody>
</table>

TABLE 4. Highest NP Degrees/Certificates Held by NYS Patient Care NPs

<table>
<thead>
<tr>
<th>Types of NP degrees and/or certificates</th>
<th>Percentage of all patient care NPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate program</td>
<td>2.5%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>79.7%</td>
</tr>
<tr>
<td>Post-master’s certificate</td>
<td>10.1%</td>
</tr>
<tr>
<td>Doctor of Nursing Practice degree</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

Practice Settings

Nearly 60% of NPs worked in outpatient settings, such as health centers or clinics (including FQHCs); hospital outpatient care, including both primary care and specialty care; physician practices; independent NP practices; and state or county public health departments (Table 5). More than 22% of NPs worked in hospital inpatient settings, emergency department (ED) settings, or urgent care centers.

Nursing homes and long-term care facilities had the highest percentages of NPs who identified as Black, representing nearly one-quarter of those who worked in those settings. Sixteen percent of NPs who worked in nursing home and long-term care facilities identified as Asian.

Hours Worked

More than half of NPs (56%) worked 40 or more hours per week, with 45% working 40 to 49 hours per week and 11% working 50 hours or more per week (Table 6). Older NPs tended to work fewer hours, with 46% of NPs 60 years of age or older working at least 40 hours per week compared with 70% of NPs between the ages of 20 and 29.
TABLE 5. Principal Employment Settings of Patient Care NPs in NYS by Region

<table>
<thead>
<tr>
<th>Principal employment setting</th>
<th>Capital District</th>
<th>Central New York</th>
<th>Finger Lakes</th>
<th>Hudson Valley</th>
<th>Long Island</th>
<th>Mohawk Valley</th>
<th>New York City</th>
<th>North Country</th>
<th>Southern Tier</th>
<th>Western New York</th>
<th>State-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health center or clinic</td>
<td>36.4%</td>
<td>38.0%</td>
<td>41.5%</td>
<td>30.4%</td>
<td>31.3%</td>
<td>50.1%</td>
<td>48.9%</td>
<td>54.1%</td>
<td>50.4%</td>
<td>32.0%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Hospice</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.5%</td>
<td>0.8%</td>
<td>0.6%</td>
<td>0.9%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Hospital inpatient/ED/urgent care center</td>
<td>19.6%</td>
<td>22.1%</td>
<td>22.2%</td>
<td>22.3%</td>
<td>25.5%</td>
<td>13.7%</td>
<td>23.5%</td>
<td>9.0%</td>
<td>13.0%</td>
<td>21.9%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Independent NP practice</td>
<td>7.0%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>5.8%</td>
<td>6.4%</td>
<td>2.9%</td>
<td>2.8%</td>
<td>3.6%</td>
<td>5.3%</td>
<td>3.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Nursing home/long-term care</td>
<td>4.0%</td>
<td>4.1%</td>
<td>8.7%</td>
<td>5.9%</td>
<td>3.6%</td>
<td>6.4%</td>
<td>5.0%</td>
<td>1.4%</td>
<td>5.7%</td>
<td>4.6%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Physician practice</td>
<td>21.1%</td>
<td>19.1%</td>
<td>10.4%</td>
<td>19.5%</td>
<td>20.2%</td>
<td>11.1%</td>
<td>8.4%</td>
<td>19.8%</td>
<td>15.4%</td>
<td>23.5%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Other setting</td>
<td>11.7%</td>
<td>13.2%</td>
<td>13.2%</td>
<td>15.3%</td>
<td>12.4%</td>
<td>14.9%</td>
<td>11.0%</td>
<td>12.2%</td>
<td>9.9%</td>
<td>13.8%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

TABLE 6. NP Patient Care Hours per Week by Age Cohort

<table>
<thead>
<tr>
<th>Patient care hours per week</th>
<th>20-29 Age cohort</th>
<th>30-39 Age cohort</th>
<th>40-49 Age cohort</th>
<th>50-59 Age cohort</th>
<th>60+ Age cohort</th>
<th>All ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9</td>
<td>1.8%</td>
<td>2.9%</td>
<td>3.8%</td>
<td>4.4%</td>
<td>8.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>10-19</td>
<td>3.6%</td>
<td>3.9%</td>
<td>5.4%</td>
<td>5.2%</td>
<td>9.7%</td>
<td>5.8%</td>
</tr>
<tr>
<td>20-29</td>
<td>5.7%</td>
<td>9.7%</td>
<td>10.3%</td>
<td>10.3%</td>
<td>15.2%</td>
<td>11.1%</td>
</tr>
<tr>
<td>30-39</td>
<td>19.2%</td>
<td>24.3%</td>
<td>22.2%</td>
<td>20.9%</td>
<td>20.4%</td>
<td>22.0%</td>
</tr>
<tr>
<td>40-49</td>
<td>63.7%</td>
<td>51.8%</td>
<td>46.2%</td>
<td>43.5%</td>
<td>34.4%</td>
<td>44.9%</td>
</tr>
<tr>
<td>50+</td>
<td>6.0%</td>
<td>7.4%</td>
<td>12.1%</td>
<td>15.7%</td>
<td>11.5%</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

Primary Care NPs

More than one-third (35%) of NPs in NYS provided primary care services, based on both their practice specialty and setting. The remainder worked in hospitals, nursing homes, or other medical specialties in private practices, such as dermatology or endocrinology (60%), or in mental health services (6%). The proportion of NPs who worked in primary care was similar across most racial/ethnic groups (Table 7).
TABLE 7. Race/Ethnicity of Primary Care NPs Compared With NPs in Other Specialties

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Primary care NPs, N (%)</th>
<th>Mental health NPs, N (%)</th>
<th>Other NPs, N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3,425 (35.1%)</td>
<td>619 (6.3%)</td>
<td>5,714 (58.6%)</td>
</tr>
<tr>
<td>Black</td>
<td>694 (37.5%)</td>
<td>(69) (3.7%)</td>
<td>1,086 (58.7%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>286 (37.6%)</td>
<td>28 (3.7%)</td>
<td>447 (58.7%)</td>
</tr>
<tr>
<td>Asian</td>
<td>446 (27.8%)</td>
<td>47 (2.9%)</td>
<td>1,109 (69.2%)</td>
</tr>
<tr>
<td>American Indian</td>
<td>8 (53.3%)</td>
<td>1 (6.7%)</td>
<td>6 (40.0%)</td>
</tr>
<tr>
<td>Other, multiple races</td>
<td>115 (33.4%)</td>
<td>23 (6.7%)</td>
<td>206 (59.9%)</td>
</tr>
<tr>
<td>All patient care NPs</td>
<td>4,974 (34.7%)</td>
<td>787 (5.5%)</td>
<td>8,568 (59.8%)</td>
</tr>
</tbody>
</table>

FIGURE 5. Patient Care NPs in Primary Care HPSAs by Principal Employment Setting

Primary Care Health Professional Shortage Areas

Although only 25% of the state’s population resides in federally designated primary care HPSAs, slightly more than 43% of all patient care NPs in NYS worked in primary care HPSAs. Moreover, nearly half of primary care NPs worked in primary care HPSAs. Of the NPs who worked in HPSAs (Figure 5):

- 48% worked in health centers or clinics
- 23% worked in hospital inpatient settings, including emergency departments and urgent care centers
- 10% worked in physician offices

Forty-nine percent of NPs who identified as Black worked in primary care HPSAs; in contrast, only 41% of NPs who identified as Asian worked in primary care HPSAs.
Practice Requirements for Patient Care NPs

Beginning January 1, 2015, the NYS Nurse Practitioners Modernization Act⁵ allowed NPs with more than 3,600 hours of qualifying practice experience to have collaborative relationships with one or more physicians in lieu of written practice agreements.⁴ Upwards of 86% of NPs reported having more than 3,600 hours of qualifying practice experience. Of those eligible NPs, more than 63% reported having collaborative relationships with physicians in lieu of written practice agreements.

Most NYS regional percentages of eligible NPs with collaborative relationships with physicians were similar to the statewide percentage (ie, around 63%). The North Country region had the highest percentage of NPs reporting collaborative relationships with physicians (66%), followed by the Finger Lakes and New York City regions (both around 65%). The Capital District and Western New York regions had the lowest percentages of NPs reporting collaborative relationships with physicians (both around 57%) (Figure 6).

The settings with the highest percentage of eligible NPs who had collaborative relationships with licensed physicians were nursing homes/long-term care settings and independent NP practices (each about 71%) (Figure 7). In contrast, slightly less than 51% of NPs employed in physician practices had collaborative relationships.

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⁵ Please see NYS Education Law, Article 139, §6902: http://www.op.nysed.gov/prof/nurse/article139.htm.

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FIGURE 6. Eligible Patient Care NPs With Collaborative Relationships With Physicians by NYS Department of Labor Region
Future Practice Plans

At the time of reregistration, more than 95% of NPs reported no plans to make significant changes to their professional activities within the next 12 months. However, about 2% indicated plans to retire within the next 12 months, and 3% reported plans to reduce their hours within the next 12 months. Additionally, 4% reported plans to move their practice to another location within the state, and another 3% planned to move their practice out of the state.

LIMITATIONS

This report is based on data drawn from survey responses submitted by NPs who reregistered their certification between January 1, 2018, and December 31, 2020. The data set does not include information on all NPs certified to practice in NYS. Specifically, it does not include NPs who were newly certified between 2018 and 2020. The data set also may include those NPs who stopped providing clinical services after their certification reregistration. Moreover, the data used in this analysis were self-reported and may contain inaccuracies. Finally, the analysis did not include an assessment of COVID-19 impacts on NP practice, despite the fact that scope of practice and licensing requirements, among other variables, were changed in response to COVID-19.

DISCUSSION

This report presents a profile of NYS NPs based on data drawn from a mandatory reregistration survey. Of the more than 14,300 NPs in NYS, more than half (56%) worked 40 or more hours per week. The distribution of NPs varied widely by region, with more than 100 patient care NPs per 100,000 in the Finger Lakes and Central New York regions, but only 70 patient care NPs per 100,000 in
in the New York City region and 55 per 100,000 in the Hudson Valley region. Sixty-one percent of NPs worked in outpatient settings, with higher percentages of NPs in predominantly upstate rural regions working in health centers, including FQHCs. More than one-third of NPs in the state reported providing primary care services.

NPs play a crucial role in expanding access to health services. As the state’s population grows and becomes more diverse, an NP workforce that closely represents the racial and ethnic composition of the state’s population not only ensures an adequate supply of health workers, but also supports the delivery of culturally competent health care. The findings presented in this report indicate some progress, as younger NPs are more racially and ethnically diverse than older NPs, and the percentages of Black and American Indian NPs were similar to their respective percentages in the state’s population. However, Hispanic NPs remain significantly underrepresented relative to their presence in the statewide general population. In addition, the representation of NPs identifying as Black and/or Hispanic relative to their presence in regional populations varied considerably, highlighting areas of the state where disparities remain. Significantly, nearly 50% of Black NPs worked in primary care HPSAs, bringing much-needed services to vulnerable and underserved populations statewide.

NPs in NYS were predominantly female and had a median age of 48 years, while just under half of all NPs statewide were 50 years of age or older. At the time of reregistration, more than 90% of NPs in the state reported no near-term plans to retire, to significantly reduce patient care hours, or to change practice locations either within or outside of the state.

However, the COVID-19 pandemic has put incredible strain on the entire health care workforce. Despite emergency action taken by the state via executive orders to modify licensure requirements, relax supervisory requirements, and expand practice authority, simultaneous furloughs in some areas in combination with surges and high demand for health care professionals in others may have forced some health professionals to change their current practice plans or location. Consequently, future practice plans for many NPs may be drastically altered due to the pandemic, which may in turn impact access to care for underserved and vulnerable populations. Regions with existing HPSAs could be impacted more significantly by a reduction of available NPs. Nevertheless, while the contributions of NPs to the response to the pandemic are invaluable, the analysis for this report did not study the pandemic’s effect on NP practice.

Our research indicated that approximately half of primary care NPs worked in primary care HPSAs. A better understanding of demographics and practice characteristics of the NP workforce, and who is more likely to work in HPSAs, could help planners and policymakers target resources to increase the number of NPs working in vulnerable or underserved communities. Additional future research opportunities include:

- Impact of the COVID-19 pandemic on:
  - NP practice decisions
  - NP distribution
  - NPs serving vulnerable populations, especially those NPs working in rural communities or with underserved populations
  - NP telehealth providers, including the number of and types of services provided and a regional analysis
  - NP providers of behavioral health services and the settings where these services are provided, including a regional analysis

- NPs working in FQHCs
CONCLUSIONS

This report presents a profile of NPs practicing in NYS based on data drawn from a mandatory survey of NPs reregistering their state certification between January 1, 2018, and December 31, 2020. NPs play a crucial role in expanding access to health services, particularly to underserved and vulnerable communities. Furthermore, an increasingly diverse state population requires a more diverse NP workforce that not only ensures adequate capacity but also supports the provision of culturally competent health care. Detailed information about NP supply and distribution as well as demographic, educational, and practice characteristics furthers our understanding of the state’s NP workforce and the contributions they make to health service delivery in the state. Of course, the COVID-19 pandemic has had a devastating effect on the nation’s health and health care system and will require monitoring of the state’s NP workforce to understand the full impact of the pandemic on NPs. Continued research on the NP workforce promises to offer a better understanding of NP presence and practice in underserved communities and in-depth insight into services provided. Moreover, understanding the NP workforce gives researchers an opportunity to learn more about impacts on patient outcomes and population health.
REFERENCES
REFERENCES


NURSE PRACTITIONER SURVEY

New York Law requires ALL nurse practitioners (NPs) to complete a workforce survey when they renew their NP registrations. The survey questions mostly relate to where NPs practice and what kind of services they provide.

The information collected from these surveys are used by the New York State Department of Health for health workforce planning. The Department of Health will publish any information used only in aggregated, de-identified form, in order to document trends and shortages in the nurse practitioner workforce in New York.

When you have completed the survey, please mail it along with your NP registration renewal form to the New York State Education Department. As part of your registration renewal, you will have to attest that you completed the workforce survey. NPs who fail to complete the survey when they renew their NP registrations could be subject to charges of professional misconduct.

If you have any questions about the survey, please email the New York State Nursing Board office at: nursebd@nysed.gov or call the Nursing Board at (518)474-3817 Ext. 120.

INSTRUCTIONS

• Make dark marks and completely fill the circle.
• Erase cleanly any marks you wish to change.
• Write clearly where necessary.
• Make no stray marks on this form.

Correct: ●
Incorrect: ✗×○

1. Please provide your email address:

2. Date completing survey:
   Month          Year
   ○ January     ○ 2017
   ○ February    ○ 2018
   ○ March       ○ 2019
   ○ April       ○ 2020
   ○ May         ○ 2021
   ○ June        ○ 2022
   ○ July        ○
   ○ August      ○
   ○ September   ○
   ○ October     ○
   ○ November    ○
   ○ December    ○

3. New York State RN License Number
   Profession Code: 22
   License Number: _________

4. New York State Nurse Practitioner License Number
   Profession Code: _________
   License Number: _________

5. National Provider Identifier (If applicable.)
   (Enter the 10-digit number)
   _________

6. Year of Birth
   _________

7. Gender:
   ○ Male
   ○ Female

8. Ethnicity: Are you Hispanic/Latino?
   ○ Yes
   ○ No
9. Race: (Mark all that apply.)
- African American/Black
- American Indian/Alaska Native
- Asian/Pacific Islander
- White
- Other (specify): ________

### EDUCATIONAL INFORMATION

10. What educational program(s) did you complete for your NP preparation? (Mark all that apply.)
- Certificate Program (no Master's Degree)
- Master's Degree
- Post Master's Certificate
- Doctor of Nursing Practice Degree
- Other (specify): ________

### LOCATION OF EDUCATION

11. Location of Education:
- Location of high school from which you graduated?
  - New York
  - Other State in the U.S.
  - Outside the U.S.
- Location of first RN school from which you graduated?
  - New York
  - Other State in the U.S.
  - Outside the U.S.
- Location of first NP education program from which you graduated?
  - New York
  - Other State in the U.S.
  - Outside the U.S.

12. What year did you graduate from your first NP education program? Year: ________

13. For which NP specialties are you certified in New York? (Mark all that apply.)
- 01-Acute Care
- 02-Adult Health
- 03-College Health
- 04-Community Health
- 05-Family Health
- 06-Gerontology
- 07-Holistic Medicine
- 08-Neonatology
- 09-Obstetrics/Gynecology
- 10-Oncology
- 11-Palliative Care
- 12-Pediatrics
- 13-Perinatology
- 14-Psychiatry
- 15-School Health
- 16-Women's Health

Using the numbers above, please indicate your primary practice specialty: ________

### PRACTICE AND SERVICE INFORMATION

14. What best describes your current work status? (Mark all that apply.)
- Working in at least one position that requires NP certification
- Volunteering in a position requiring NP certification
- Working in a position that only requires RN licensure, but not NP certification
- Working, but neither as an RN nor NP
- Not currently working
- Retired
15. For all NP positions held, indicate the average number of hours currently spent per week on each major activity. *(Exclude overtime.)*

<table>
<thead>
<tr>
<th>Activity</th>
<th>None</th>
<th>1-9</th>
<th>10-19</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary care*</td>
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<td>Other patient care</td>
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<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Research</td>
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<td>○</td>
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</tr>
<tr>
<td>Teaching</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Administration</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

*Primary care is defined as first contact and continuing care, including basic or initial diagnosis and treatment, health supervision, management of chronic conditions, preventive health services, and appropriate referral(s).*

***If you do not spend any time providing patient care, **STOP** here.***

16. NP Patient Care Practice Location(s)

*Please indicate the location(s) where you spend the most time providing patient care. List the address(es) of the practice location(s), including zip code. Also, indicate the average number of patient care hours per week you spend at each location.*

a. Principal Practice Location

Practice/Facility/Organization Name

City/Town

Number Street

Zip Code

Avg Patient Care Hours per week:

Which best describes your principal work setting? *(Select only one.)*

- ○ Health center or clinic, including federally qualified health center
- ○ Hospice
- ○ Hospital outpatient primary care
- ○ Hospital outpatient specialty care
- ○ Hospital inpatient/emergency department
- ○ Independent NP practice
- ○ Nursing home/long-term care
- ○ Other (specify)
- ○ Physician practice
- ○ State/county public health department
- ○ Urgent care center

b. Secondary Practice Location

Practice/Facility/Organization Name

City/Town

Number Street

Zip Code

Avg Patient Care Hours per week:

Which best describes your secondary work setting? *(Select only one.)*

- ○ Health center or clinic, including federally qualified health center
- ○ Hospice
- ○ Hospital outpatient primary care
- ○ Hospital outpatient specialty care
- ○ Hospital inpatient/emergency department
- ○ Independent NP practice
- ○ Nursing home/long-term care
- ○ Other (specify)
- ○ Physician practice
- ○ State/county public health department
- ○ Urgent care center
17. If you practice in a private physician office and/or an independent NP practice, please indicate the specialty(ies) of the principal and, as applicable, secondary location(s). (Mark all that apply.)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Principal</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergy and Immunology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermatology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine (General)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endocrinology, Diabetes, and Metabolism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geriatrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Oncology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Internal Medicine Subspecialty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics/Gynecology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otolaryngology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatrics (General)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatric Subspecialty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery (General)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgery Subspecialty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. In the next 12 months, you plan to:
   (Mark all that apply.)
   - Retire from patient care
   - Significantly reduce patient care hours
   - Move to another location in NY and continue practicing
   - Move to another state and continue practicing
   - None of the above

COLLABORATING PHYSICIANS AND RELATIONSHIPS

19. Do you have more than 3,600 hours of experience practicing as a certified nurse practitioner in NY State or another state, or working as a nurse practitioner in Veteran's Administration, the United States Armed Forces, or United States Public Health Service?
   - Yes (Please continue survey.)
   - No (Please STOP here and return the survey.)

20. If you have more than 3,600 hours of nurse practitioner practice experience, which best describes how you practice? (Select only one.)
   - You practice pursuant to written practice protocols and written practice agreement with a collaborating physician.
   - You practice and have collaborative relationships with one or more NY State licensed physicians qualified to collaborate in the specialty involved or with a NY State Department of Health licensed hospital that provides services through licensed physicians qualified to collaborate in the specialty involved and having privileges at such institution. A collaborative relationship means that you communicate, as required by State Education Department regulation, with the qualified physician for the purposes of exchanging information, as needed, in order to provide comprehensive patient care and to make referrals as necessary.

THANK YOU FOR COMPLETING THIS SURVEY. RETURN COMPLETED SURVEY IN THE ENVELOPE PROVIDED.
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Bringing over a decade of experience as a health workforce researcher, Dr. Moore has been the director of CHWS since 2004.