

2014



The Health Care Workforce in New York, 2014

Trends in the Supply and Demand for Health Workers



CHWS
Center for Health Workforce Studies

School of Public Health
University at Albany, State University of New York

**The Health Care Workforce in New York, 2014:
Trends in the Supply and Demand for Health Workers**

September 2015



School of Public Health, University at Albany
State University of New York
1 University Place, Suite 220
Rensselaer, NY 12144-3445
Phone: (518) 402-0250
Web: <http://chws.albany.edu>
Email: chws@health.ny.gov

PREFACE

This report summarizes health care employment trends in New York using data about jobs by health care setting and professions to identify the health professions and occupations in greatest demand currently and to offer projections for future demand. The goals of this report are to assist policy makers and other stakeholders to target health workforce education and job training resources to address the most pressing health care workforce needs; guide health workforce policies, including decisions about the capacity of health professions education programs; and inform current and prospective students about health care employment prospects and opportunities.

This report was prepared by the Center for Health Workforce Studies (CHWS) staff, Cassandra Bruce, Erin Roberts, Robert Martiniano, Stuart Daman, Rakkoo Chung, Bridget Baker, and Jean Moore. Funding for this report was provided by the 1199 Hospital League Health Care Industry Planning and Placement Fund, Inc.

Established in 1996, CHWS is a not-for-profit research organization, 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. Today, CHWS is a national leader in the field of health workforce studies, and the only one uniquely focused on the oral health workforce.

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, the New York State Education Department, the New York Department of Health, or 1199 Hospital League Health Care Industry Planning and Placement Fund, Inc.

September 2015

SUGGESTED CITATION

Bruce C, Roberts EE, Martiniano R, Daman S, Chung R, Baker B, Moore J. *The Health Care Workforce in New York, 2014: Trends in the Supply and Demand for Health Workers*. Rensselaer, NY: Center for Health Workforce Studies, School of Public Health, SUNY Albany; September 2015.

Table of Contents

I. EXECUTIVE SUMMARY	1
A. BACKGROUND	1
B. KEY FINDINGS.....	2
II. BACKGROUND	4
A. OVERVIEW	4
B. OBJECTIVES AND GOALS	5
C. DATA SOURCES AND METHODS	5
D. TERMINOLOGY	9
III. THE HEALTH CARE WORKFORCE IN THE UNITED STATES	12
A. TOTAL EMPLOYMENT	12
B. BY SETTING	13
C. BY OCCUPATION.....	16
IV. NEW YORK HEALTH SECTOR EMPLOYMENT	18
A. TOTAL EMPLOYMENT	18
B. PRIMARY CARE PHYSICIANS	22
C. BY SETTING	23
D. BY REGION	24
1. Hospital Employment.....	26
2. Ambulatory Care	27
3. Nursing and Personal Care Facility Employment	28
4. Home Health Care	29
E. BY OCCUPATION.....	29
1. Current Employment Data.....	29
2. Licensure Data for Selected Health Professions in New York.....	32
F. TRENDS IN NEW YORK RN EDUCATION, 2005-2015	33
G. EMERGING CARE COORDINATION TITLES IN FQHCs AND HOSPITALS	38
1. Background.....	38
2. Methods	38
3. Findings	38
H. DEMAND FOR WORKERS	40
1. Hospitals.....	41
2. Nursing Homes.....	42
3. Home Health Care Agencies.....	43
4. Federally Qualified Health Centers.....	44
I. PROJECTED JOB GROWTH.....	45
V. REGIONAL PROFILES.....	48
A. NEW YORK CITY.....	48
B. CAPITAL DISTRICT	64
C. CENTRAL NEW YORK	76
D. FINGER LAKES	88
E. HUDSON VALLEY.....	100

F. LONG ISLAND.....	112
G. MOHAWK VALLEY.....	123
H. NORTH COUNTRY.....	135
I. SOUTHERN TIER.....	147
J. WESTERN NEW YORK	159

I. EXECUTIVE SUMMARY

A. Background

Federal and state health care reforms are driving rapid changes to the health care delivery system. As a result of the Affordable Care Act's health insurance market places, expanded Medicaid coverage, and preventive care incentives, access to health insurance^{a,b} and preventive services^c is improving for Americans. Consequently, demand for basic health care, such as primary care, is projected to increase.^d Given that many locations in New York lack primary care services, this puts additional strain on the health care system. Additionally, state-level reforms, such as the Delivery System Reform Incentive Payment (DSRIP) Program and the State Health Improvement Plan (SHIP), are looking at new ways to provide care in the most cost efficient and effective manner. These programs aim to: reduce the number of avoidable hospitalizations/emergency department visits, shift care delivery from inpatient to outpatient settings as appropriate, and increase health service integration across a continuum of care.

The result of this reform is a health care system that is more demanding of primary and preventive health care, with the ultimate goal of improving population health. Changes are forcing the health care system to redesign its service delivery structure, which are impacting the use of the health care workforce. Emerging care models typically rely on team-based approaches to deliver patient-centered and coordinated care; accordingly, new categories of health workers are developing. Many emerging titles, however, are not currently included in health workforce data collection efforts and at the same time, many licensed professionals are filling these highly-variable roles; consequently, identifying current labor force participation and future need is complex. These challenges, coupled with the current maldistribution of health care providers and services across the New York State may intensify unmet health care needs produced by current supply shortages in certain geographic areas.

In addition to macro-level analyses, small area assessments of supply and demand are crucial for identifying and addressing area-specific population health and workforce development strategies that may be masked by county- or state-level analyses. This report presents a wide array of available data about the health workforce on the federal- state- and regional-level and includes a focus on education trends for registered nurses and emerging titles in care coordination. The health care sector continues grow in New York, accounting for about 12% of total employment, and it continues to increase faster than employment in all other sectors. Despite this growth, there are still needs for additional health care providers in many areas of the state.

^a<http://info.nystateofhealth.ny.gov/news/press-release-ny-state-health-ends-second-open-enrollment>.

^b<http://obamacarefacts.com/2015/03/16/obamacare-enrollment-numbers-as-of-march-2015/>

^c<http://aspe.hhs.gov/sites/default/files/pdf/83176/The%20Affordable%20Care%20Act%20is%20Improving%20Access%20to%20Preventive%20Services%20for%20Millions%20of%20Americans.pdf>

^d http://www.commonwealthfund.org/~media/files/publications/issue-brief/2015/feb/1804_glied_how_will_aca_affect_use_hlt_care_svcs_ib_v2.pdf?la=en

B. Key Findings

Health sector employment in New York State continues to be an economic driver.

- In 2013 health sector employment accounted for 12% of total employment in New York, higher than the national level of 10.6%.
- Across New York State, health care employment grew by more than 18% between 2000 and 2013, compared with less than 1% for all other employment sectors.
- The difference in employment growth was even more dramatic in upstate New York. Employment growth in the health care sector increased by nearly 17% between 2000 and 2013, while employment outside of the health care sector declined by around 6% during that same period.
- Regionally, health care employment varied across the state. Between 2009 and 2013, some upstate regions experienced growth of almost 7%, while others experienced small declines. New York City experienced the largest employment growth, increasing by more than 8% over the same four years.

Home Health and Ambulatory Care are rapidly expanding settings.

- Although hospitals continue to employ the largest share of health sector workers in New York, jobs in home health care and ambulatory care grew the fastest between 2000 and 2013.
 - Job growth by setting:
 - Hospitals (+25,600, 6.2%)
 - Ambulatory Care (+68,500, 27.9%)
 - Nursing Home and Personal Care Facilities (+7,000, 4.9%)
 - Home Health Care (+76,800, 118.9%)
- In response to an employer demand survey, the majority of hospitals and FQHCs reported plans to expand ambulatory services. Some hospitals also anticipated growth in outpatient procedural services.

Workforce Challenges: Variation in hiring difficulties by setting.

- Hospitals reported the most difficulty recruiting clinical laboratory technologists, clinical lab technicians and nurse managers, and retaining clinical laboratory technologists, care coordinators, and PAs.
- Nursing Homes reported the most difficulty recruiting experienced RNs, nurse managers, and MDS coordinators, and retaining CNAs, experienced and newly licensed RNs, LPNs, and personal care assistants.
- Home Health Care reported the most difficulty recruiting occupational therapists, speech-language pathologists, dietitians/nutritionists, physical therapists, and experienced RNs, and retaining experienced RNs and respiratory therapists.
- FQHCs reported the most difficulty recruiting psychiatric NPs, psychiatrists, and obstetricians/gynecologists and retaining psychiatric NPs, family NPs, and medical assistants.

Health reform initiatives, particularly the DSRIP program, are fueling growing demand for care coordination services.

- To reduce the number of inappropriate emergency department and hospital admissions, providers are increasingly reliant on care coordination.
- Although providers report using similar care coordination titles, there is substantial variation in qualifications and, in some instances, functions associated with these positions.
- Providers cited “promoting treatment adherence” and “improving patient engagement” as two of the most important functions of care coordination staff.

II. BACKGROUND

A. Overview

Federal and state health care reforms are driving rapid changes to the health care delivery system. As a result of the Affordable Care Act's health insurance market places, expanded Medicaid coverage, and preventive care incentives, access to health insurance^{e,f} and preventive services^g is improving for Americans. Consequently, demand for basic health care, such as primary care, is projected to increase.^h Given that many locations in New York lack primary care services, this puts additional strain on the health care system. Additionally, state-level reforms, such as the Delivery System Reform Incentive Payment (DSRIP) Program and the State Health Improvement Plan (SHIP), are looking at new ways to provide care in the most cost efficient and effective manner. These programs aim to: reduce the number of avoidable hospitalizations/emergency department visits, shift care delivery from inpatient to outpatient settings as appropriate, and increase health service integration across a continuum of care.

The result of this reform is a health care system that is more demanding of primary and preventive health care, with the ultimate goal of improving population health. Changes are forcing the health care system to redesign its service delivery structure, which are impacting the use of the health care workforce. Emerging care models typically rely on team-based approaches to deliver patient-centered and coordinated care; accordingly, new categories of health workers are developing. Many emerging titles, however, are not currently included in health workforce data collection efforts and at the same time, many licensed professionals are filling these highly-variable roles; consequently, identifying current labor force participation and future need is complex. These challenges, coupled with the current maldistribution of health care providers and services across the New York State may intensify unmet health care needs produced by current supply shortages in certain geographic areas.

In addition to macro-level analyses, small area assessments of supply and demand are crucial for identifying and addressing area-specific population health and workforce development strategies that may be masked by county- or state-level analyses. This report presents a wide array of available data about the health workforce on the federal- state- and regional-level and includes a focus on education trends for registered nurses and emerging titles in care coordination. The health care sector continues to grow in New York, accounting for about 12% of total employment, and it continues to increase faster than employment in all other sectors. Despite this growth, there are still needs for additional health care providers in many areas of the state.

^e<http://info.nystateofhealth.ny.gov/news/press-release-ny-state-health-ends-second-open-enrollment>.

^f<http://obamacarefacts.com/2015/03/16/obamacare-enrollment-numbers-as-of-march-2015/>

^g<http://aspe.hhs.gov/sites/default/files/pdf/83176/The%20Affordable%20Care%20Act%20is%20Improving%20Access%20to%20Preventive%20Services%20for%20Millions%20of%20Americans.pdf>

^h http://www.commonwealthfund.org/~media/files/publications/issue-brief/2015/feb/1804_glied_how_will_aca_affect_use_hlt_care_svcs_ib_v2.pdf?la=en

B. Objectives and Goals

The objectives of this report are:

- To describe health care employment trends in New York; and
- To identify the health professions and occupations in greatest demand currently and offer projections for future demand.

The goals of this report are:

- To assist policy makers and other stakeholders to target health workforce education and job training resources to address the most pressing health workforce needs;
- To guide health workforce policies, including decisions about the capacity of health professions education programs; and
- To inform current and prospective students about health care employment prospects and opportunities.

C. Data Sources and Methods

All data sources for this report are cited unless they are from primary data collection conducted by the Center for Health Workforce Studies (CHWS) and collaborating partners. The following is a list of data sources used in this report. When appropriate, the methods used for calculating the rates in this report are also discussed.

Information provided in this report is statewide or by New York State Department of Labor (NYSDOL) regions. A list of counties and a map depicting the NYSDOL regions are presented on pages 10 and 11.

Data sources include:

1. Center for Health Workforce Studies

- Surveys of Human Resources Directors in Health Care, 2013-2014

CHWS, in conjunction with statewide and regional provider organizations, conducts annual surveys of human resources directors from FQHCs, home health care agencies, hospitals, and nursing homes across New York. The surveys ask about the professions and occupations that pose the greatest recruitment and retention problems, as well as emerging care coordination titles and employment trends. Recruitment and retention difficulty is assessed on a 1 (least difficult) to 5 (most difficult) scale. The provider organizations that CHWS collaborated with on these surveys included:

- Community Health Center Association of New York State
- Continuing Care Leadership Coalition at the Greater New York Hospital Association
- Healthcare Association of New York State
- Home Care Association of New York State, Inc.
- LeadingAge New York
- New York State Association of Healthcare Providers, Inc.

Home health care agencies serve patients in multiple counties and FQHCs also have sites in multiple counties, which may be located in different NYSDOL regions. Consequently, information

on recruitment and retention for home health care agencies and FQHCs was reported in each region where services were provided or sites were located. In instances where total responses for a region, either by setting or occupation, were less than 5, no information is provided or contiguous regions are combined.

- New York State RN Graduations, 2005-2015

CHWS surveys RN education programs in New York annually to understand trends in the supply of RNs in the state. The 2014 survey included questions about applications, acceptances, and graduations for that year as well as projected graduations through 2015.

- New York State Physician Data, 2014/2015

With the support of the New York State Department of Health and assistance from the New York State Education Department (SED), CHWS administers an ongoing survey of licensed physicians in New York. The survey is designed to collect basic information on demographic and practice characteristics of all licensed physicians in New York. These data are used to describe the supply and distribution of primary care physicians in New York. As a result of diminishing response rates, data for physicians was taken from a combined data set that included the physician re-licensure data and SK&A outpatient data. Information was available on approximately 65% of physicians, although response rates for certain questions were substantially lower, including practice setting, race/ethnicity, work status, and clinical hours.

In this report, primary care physicians refer to the number of physicians who practice in ambulatory care or outpatient settings and include the following specialties: family medicine, general practice, general internal medicine, general pediatrics, obstetrics and gynecology, and geriatrics. Primary care physicians in this report do not include physicians practicing in inpatient hospital settings (eg, hospitalists) or other settings where services are inaccessible to the general public, such as nursing homes, prisons, or on college campuses.

2. US Bureau of Labor Statistics (BLS) and the NYSDOL

Various labor department statistics are used in this report from federal and state sources. In 2010 there were some definitional changes in occupational titles, most notably RNs, personal care aides, and home health aides, which affected their labor department statistics. Prior to 2010 RNs included advanced practice nurses (NPs, certified nurse midwives, and certified registered nurse anesthetists); currently, these are reported separately. Additionally, the previous definition for personal care aides included home health aides. In reviewing changes in counts among years, please be aware of these definitional changes for occupational employment statistics and projections data.

- Covered Employment and Wages Program (ES-202), 2000-2013

These data were used to describe regional changes in health care employment by setting. A number of events potentially affected the information reported, including closures, mergers, and expansions. Consequently, large changes in jobs in specific health sectors (ie, hospitals, nursing

homes, or home health care) may reflect a change in ownership or the service delivery system rather than workforce issues. These numbers are estimates, not whole numbers; therefore, the columns and rows in some tables in this report may not total exactly due to rounding. At times, ES-202 survey responses were not able to be placed into regions. Consequently, summing the regions will not add up to the statewide total.

- Occupational Employment Statistics (OES), 2014

New York published employment data for the state's regions for 2014 based on 2010, 2011, 2012, and 2013 OES survey data, which was adjusted to the first quarter of 2014 by making cost-of-living adjustments. As with the national data, estimates are based on a sample of employers. This data included both jobs and wages, which were reported as an average annual salary. In this report, hourly wages are listed.

- Employment Projections, 2012-2022

Employment projections used in this report reflect a count of the number of jobs in certain occupational categories and by health care setting. Every 2 years, employment projections are developed by BLS for the nation. NYSDOL develops projections for the state and by NYSDOL region, which are both for the period 2012-2022. Annual job openings reflect both newly created positions in the occupation and turnover of workers in existing positions who retire, change jobs, or leave the occupation. Occupations with a small increase in the number of new jobs but a high number of annual openings typically reflect significant annual turnover within the occupation rather than expansion of the occupation. Limitations to these projections include unanticipated external factors such as recessions, change in scopes of work or education for specific occupational titles, changes in state and/or federal reimbursement, and advancements in technology.

3. State Education Department Licensure Data, 2009-2013

The licensure data presented in this report reflect counts of licensed health care professionals in New York. Each year in April, SED updates these data. Data are available from SED on the number of individuals licensed in a health profession. SED licenses more than 25 health professions, and individuals must secure a New York license before practicing in one of these health professions. Licensure data in a health profession represent the upper limit of the number of individuals in New York who can practice in a profession. It is important to recognize the limitations of these data; chiefly, that some individuals who are licensed in a health profession may be working either less than full time or not at all in the profession, or may be working in the profession but in another state. Licensure data can, however, provide valuable information on major trends in the supply of health professionals in the state.

In reviewing licensure data, please be aware that:

- Social workers (SWs) are licensed in New York as either licensed clinical social workers (LCSWs) or licensed master's social workers (LMSWs). Although some data sources provide statistics for LCSWs and LMSWs collectively as social workers, the licensing distinction is reflected for the purposes of understanding recruitment and retention difficulties.

- NPs are licensed as RNs but certified in 1 or more NP specialty. Information presented in the report at the regional level represents a duplicated count across all specialties. The statewide count is unduplicated.
- Counts of health professionals by county are based on the mailing address in the licensure file, which could be either a home or a practice location. Additionally, certain individuals in the file may be licensed to practice in New York but live in another state.ⁱ

4. US Census, 2009-2013

The census is an official count of the entire US population, conducted once every 10 years, and the American Community Survey is conducted each year to provide up-to-date information. The 2009-2013 American Community Survey was used to describe selected population characteristics by NYSDOL regions. The population characteristics included total population, age structure, poverty, race/ethnicity, and education level. The education levels and rates were based on individuals aged 25 years and older.

5. New York State Community Health Indicator Report, 2010-2012 (2009-2011 for cancer)

These data were used to describe the health of the population by NYSDOL regions. The health indicators were obtained from Community Health Indicator Reports (CHIRS) and includes information on deaths, births, and hospitalizations. Both counts and rates are reported for the average of 3 years. The rates for calculating these health indicators are calculated as follows:

- Infant death rate is reported per 1,000 live births.
- Total birth rate is reported per 1,000 females aged 15 to 44 years.
- Teen birth rate is reported per 1,000 females aged 15 to 19 years.
- Low-birthweight rate and percent of late/no prenatal care is reported per 100 live births. Percent of late/no prenatal care was based on those births where information was provided and not on total births.
- All deaths are reported per 100,000 total population.
- Rates per 10,000 for adult asthma hospital admissions are based on population aged 18 and older.
- Rates per 10,000 for pediatric asthma hospital admissions are based on population aged birth to 15 years.
- All other rates per 10,000 for hospitalizations and emergency department (ED) visits are based on the total population.

6. New York State Department of Health SPARCS Data, 2011-2013

The Statewide Planning and Research Cooperative System (SPARCS) collects patient-level information for all hospital inpatient stays, outpatient visits, including visits to hospital extension settings, and ED visits. Data from SPARCS were used to report the number of preventable hospitalizations. The numbers represent the average of 3 years, from 2011 to 2013, and the rates are based on per 10,000 average total population.

ⁱ The total listed in the report includes all New York licensed individuals regardless of whether the address given in the licensure file was a New York address, whereas tables of licensees by region include only those individuals with an address in the region.

D. Terminology

The settings used in this report are based on the North American Industry Classification System (NAICS) for the health care sector. The breakdown of settings within the health care sector is as follows:

- Hospitals (public and private);
- Nursing and personal care facilities (excluding residential, mental retardation, mental health and substance abuse facilities, and other residential care facilities);
- Home health care; and
- Ambulatory care settings (excluding home health care), including:
 - Medical and diagnostic laboratories
 - Offices and clinics of doctors of medicine
 - Offices and clinics of dentists
 - Offices and clinics of other health practitioners
 - Outpatient care centers
 - Other ambulatory health services

This classification scheme provides standardization among the data sets presented, but it has some limitations. By limiting the analyses to the NAICS health services industries, health care workers in hospital-sponsored ambulatory care sites may be included in hospital employment counts. Also, health care professionals in industries outside of the settings listed, such as those in schools, insurance firms, or who are self-employed, are excluded from the health sector counts. CHWS estimates that, nationally, one-fourth of the health care workforce is employed outside of the health care settings that are included in the health care sector as defined by BLS (Table 1, page 12).

Historically, OES groups occupations by category. These occupational categories also have limitations. For example, prior to 2010 registered nursing made no distinction between NPs, nurse midwives, and RNs. The nursing aides, orderlies, and attendants occupational category also includes multiple job titles, levels of training, and certifications and were separated into separate job categories in 2010.

There are some job titles in a health setting that may not necessarily reflect similar OES occupational classifications and this may cause some problems in reporting. For example, confusion may result from the differences in defining a home health aide as any individual providing services in the home or as one who completes home health aide certification requirements. Additionally, throughout this report some abbreviations are used. The following is a list of the most common.

CNA	certified nursing aide
FPL	federal poverty level
FQHC	federally qualified health center
HIT	health information technology
LCSW	licensed clinical social worker
LMSW	licensed master's social worker
LPN	licensed practical nurse
MDS	minimum data set
NP	nurse practitioner
Ob/Gyn	obstetrician/gynecologist
PA	physician assistant
RN	registered nurse

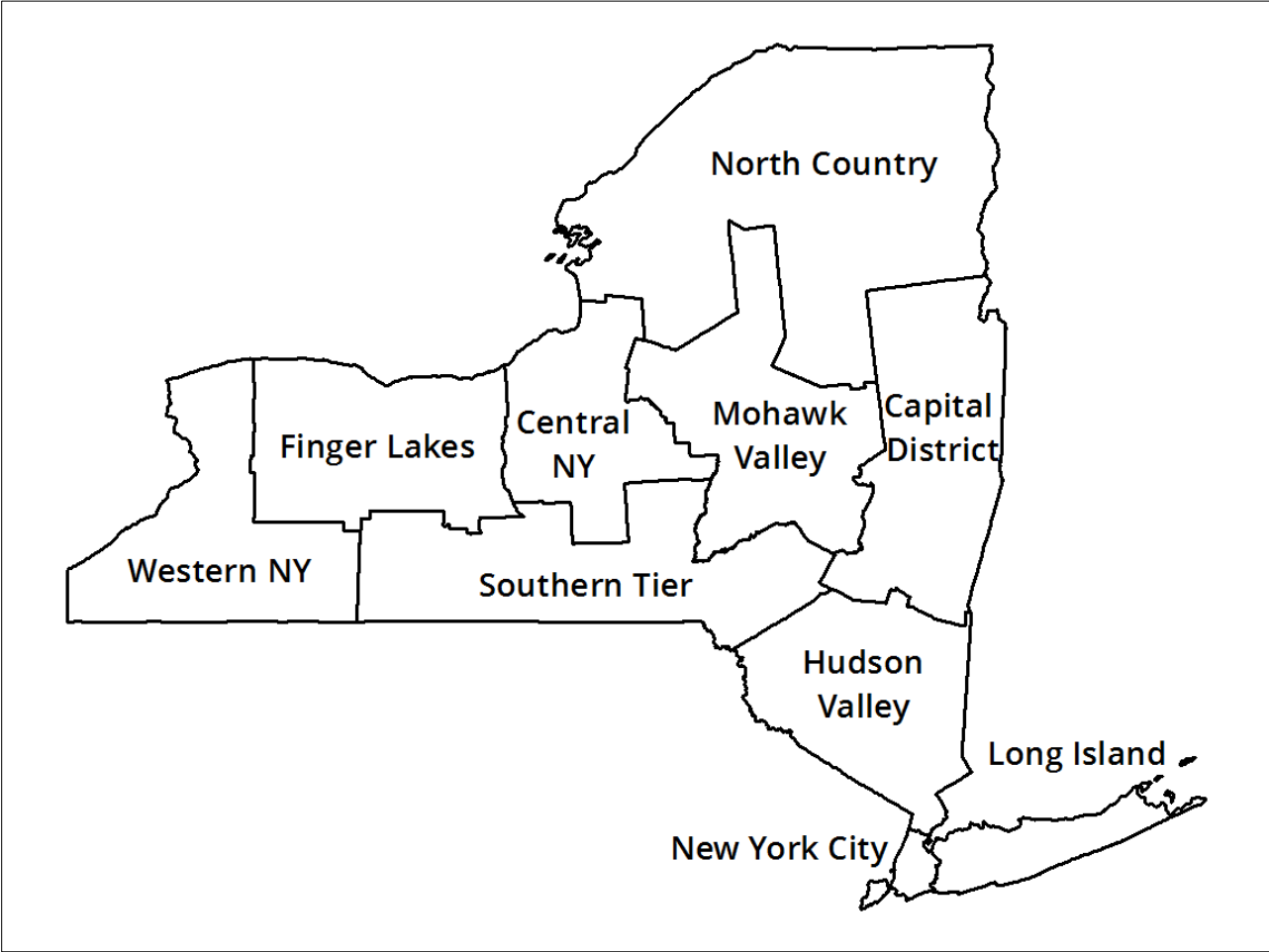
Geographic Areas

The NYSDOL regions (Figure 1) used in this report are:

- Capital District: The counties of Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington.
- Central New York: The counties of Cayuga, Cortland, Madison, Onondaga, and Oswego.
- Finger Lakes: The counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates.
- Hudson Valley: The counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester.
- Long Island: The counties of Nassau and Suffolk.
- Mohawk Valley: The counties of Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie.
- New York City: The counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island).
- North Country: The counties of Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence.
- Southern Tier: The counties of Broome, Chemung, Chenango, Delaware, Schuylar, Steuben, Tioga, and Tompkins.
- Western New York: The counties of Allegany, Cattaraugus, Chautauqua, Erie, and Niagara.

For the purpose of this report, the term “upstate New York” is used to define all New York state regions outside of New York City.

Figure 1. New York State Department of Labor Regions



III. THE HEALTH CARE WORKFORCE IN THE UNITED STATES

A. Total Employment

In 2012 there were more than 19 million jobs either in the health sector or in health occupations employed outside the health sector, accounting for over 13% of the total US workforce. In 2012 more than 15 million of these (10% of US employment) were in the health sector, including both health and nonhealth-related occupations. The remaining 4 million jobs (3% of US employment) were in health occupations in other sectors (Figure 2 and Table 1).

Figure 2. The US Health Workforce, 2012 (in Thousands)

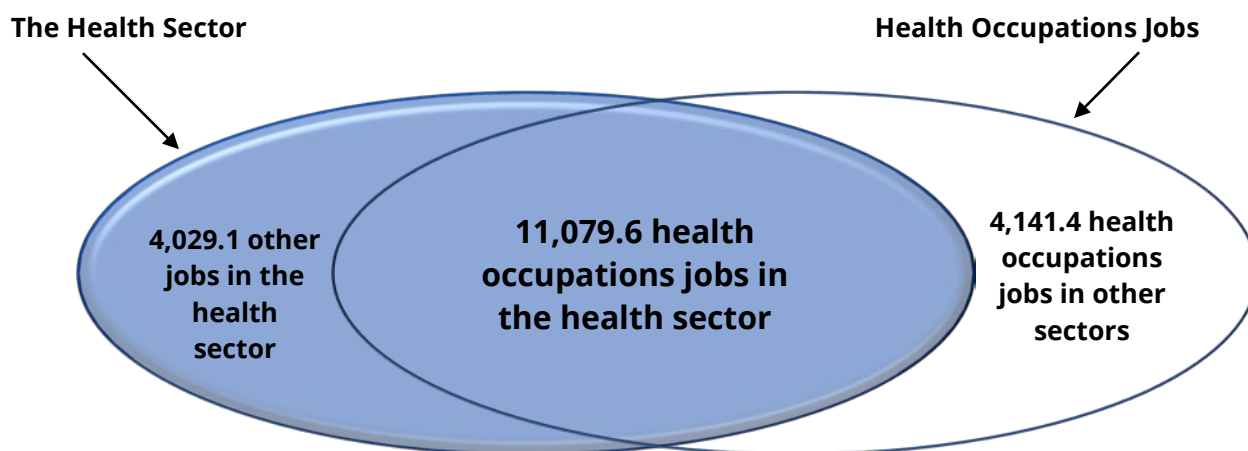


Table 1. The US Health Workforce, 2012 (in Thousands)

Setting	Health Occupations Jobs	Other Jobs	Total
Health care settings	11,079.6	4,029.1	15,108.7
Other work settings	4,141.4	126,105.7	130,247.1
Total	15,221.0	130,134.8	145,355.8

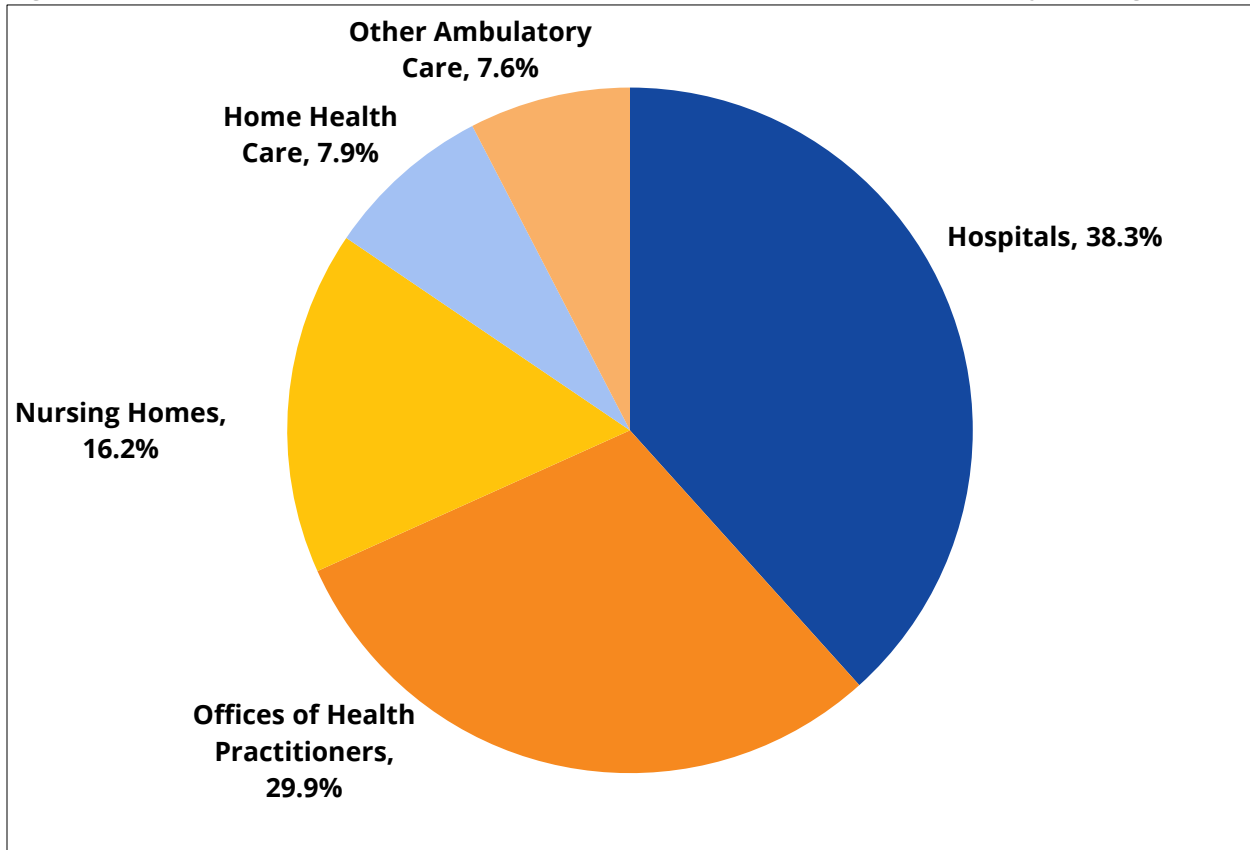
Setting	Number	Percent of the Civilian Workforce
Health occupations jobs in health care settings	11,079.6	7.6%
Other jobs in health care settings	4,029.1	2.8%
Health occupations jobs in other settings	4,141.4	2.9%
Total	19,250.1	13.2%

Sources: US Department of Labor, Bureau of Labor Statistics.
Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public.

B. By Setting

Hospitals continued to employ the most health workers in the United States (38%), followed by offices of health practitioners (30%), nursing homes (16%), and both home health care and other ambulatory care settings, at about 8% each (Figure 3).

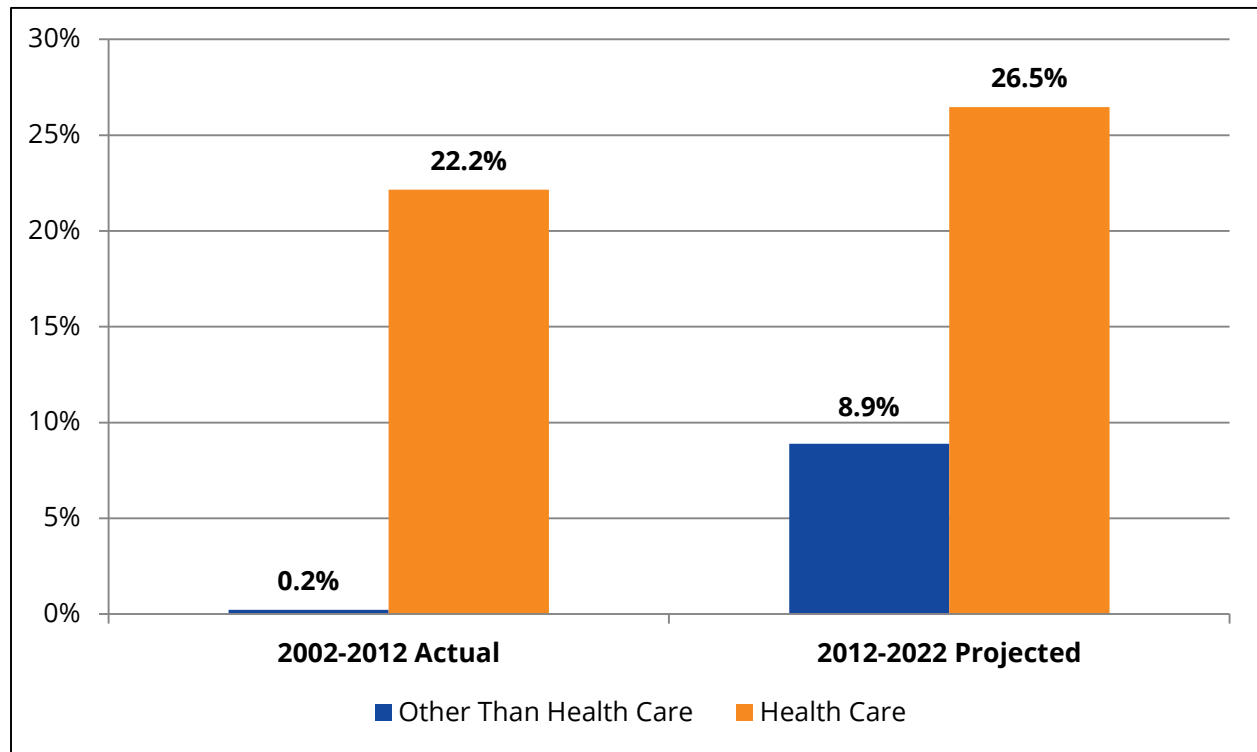
Figure 3. Percent Distribution of the Health Workforce in the United States, by Setting, 2012



Sources: US Department of Labor, Bureau of Labor Statistics.
Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public.

Between 2002 and 2012 employment in the nation’s health sector grew by more than 22%, while employment in other sectors remained stable. It is projected that between 2012 and 2022 health sector employment will grow at a significantly higher rate than employment in all other sectors. Health sector employment is projected to grow from over 15 million jobs in 2012 to more than 19 million jobs in 2022, an increase of more than 26%, compared with only 9% growth for jobs in all other employment sectors (Figure 4).

Figure 4. Job Growth in the Health Care Sector Compared With All Other Employment Sectors in the United States, 2002-2012 and Projected 2012-2022

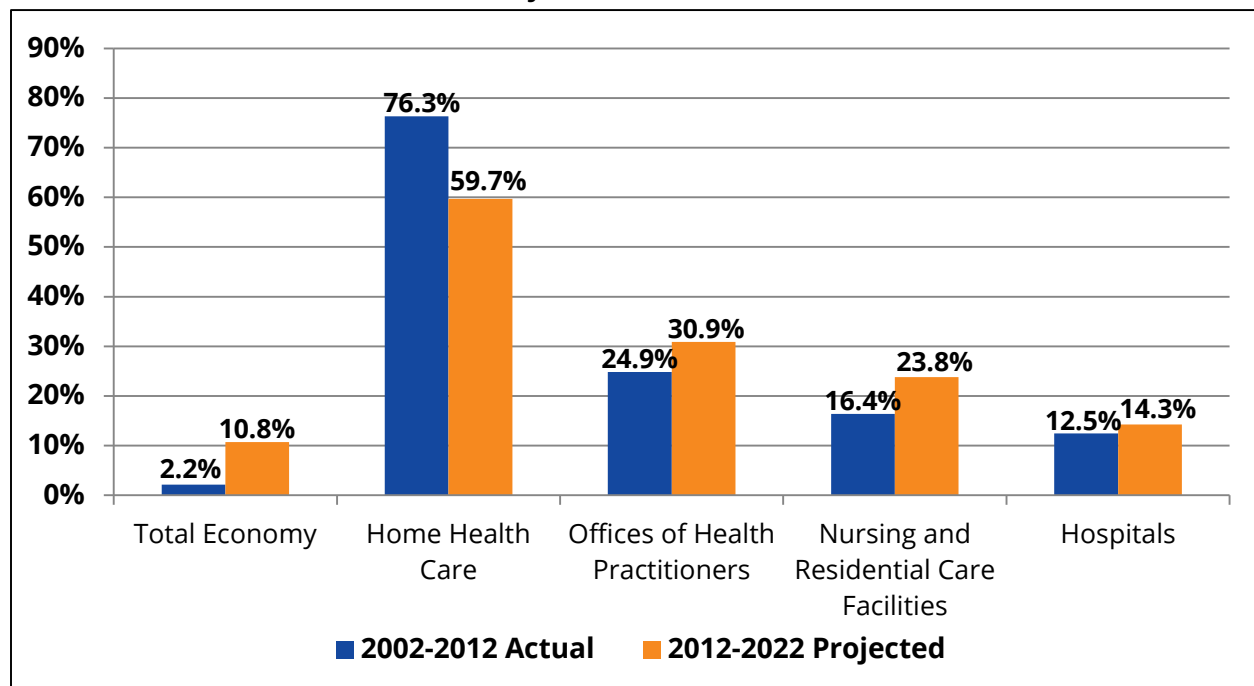


Sources: US Department of Labor, Bureau of Labor Statistics.
 Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public

Nationally, home health care is projected to experience the fastest job growth in the health care sector, with an overall growth of nearly 60% between 2012 and 2022, adding over 700,000 jobs during that period. In addition, offices of health practitioners are projected to add more than 1.2 million jobs during the 10-year period, with an overall growth of 31%.

Between 2012 and 2022 jobs in nursing and residential care facilities are projected to grow by 24%, adding over 760,000 jobs, and hospitals are projected to grow by 14% during the same period, adding more than 825,000 jobs (Figure 5).

Figure 5. Actual and Projected Growth of Selected Occupational Settings in the Health Care Sector in the United States, 2002-2012 and Projected 2012-2022

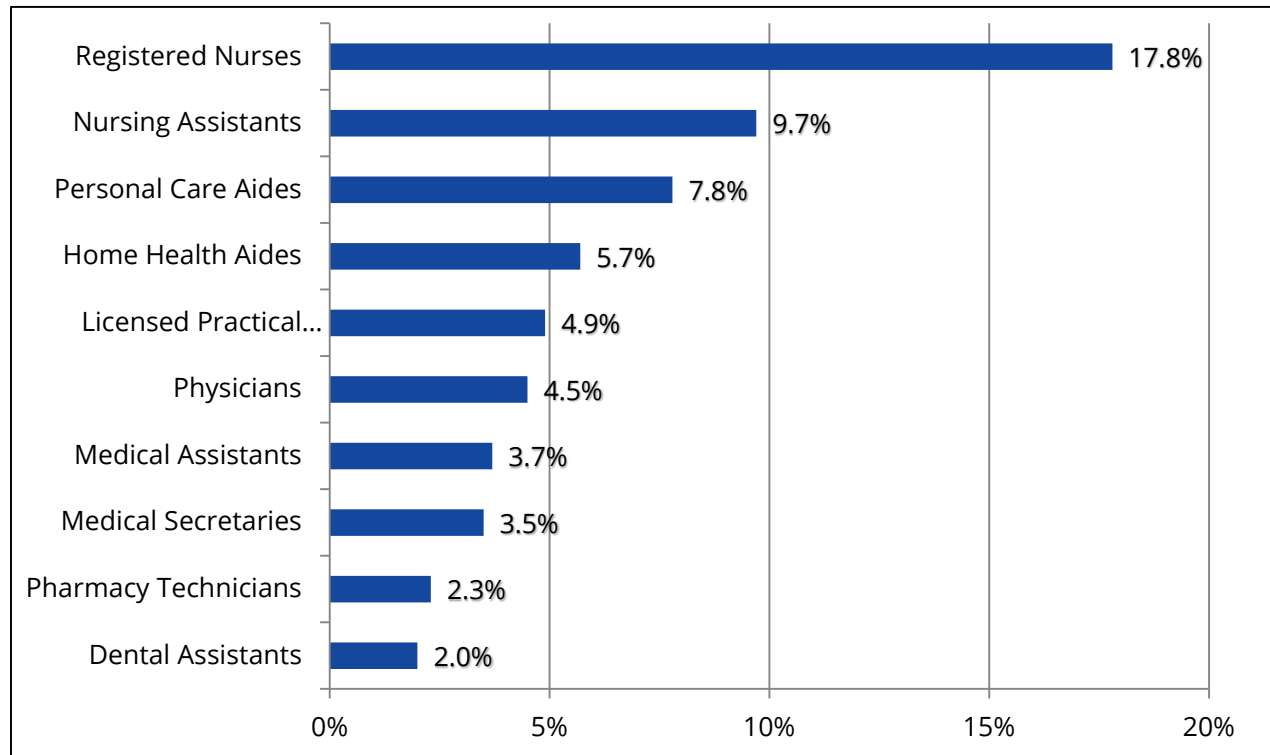


Sources: US Department of Labor, Bureau of Labor Statistics.
 Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public

C. By Occupation

Of the total health care workforce in the United States in 2012, RNs (18%) were the single largest health occupation, followed by nursing assistants (10%), personal care aides (8%), and home health aides (6%) (Figure 6).

Figure 6. Health Care Occupations in the United States, 2012



Sources: US Department of Labor, Bureau of Labor Statistics.

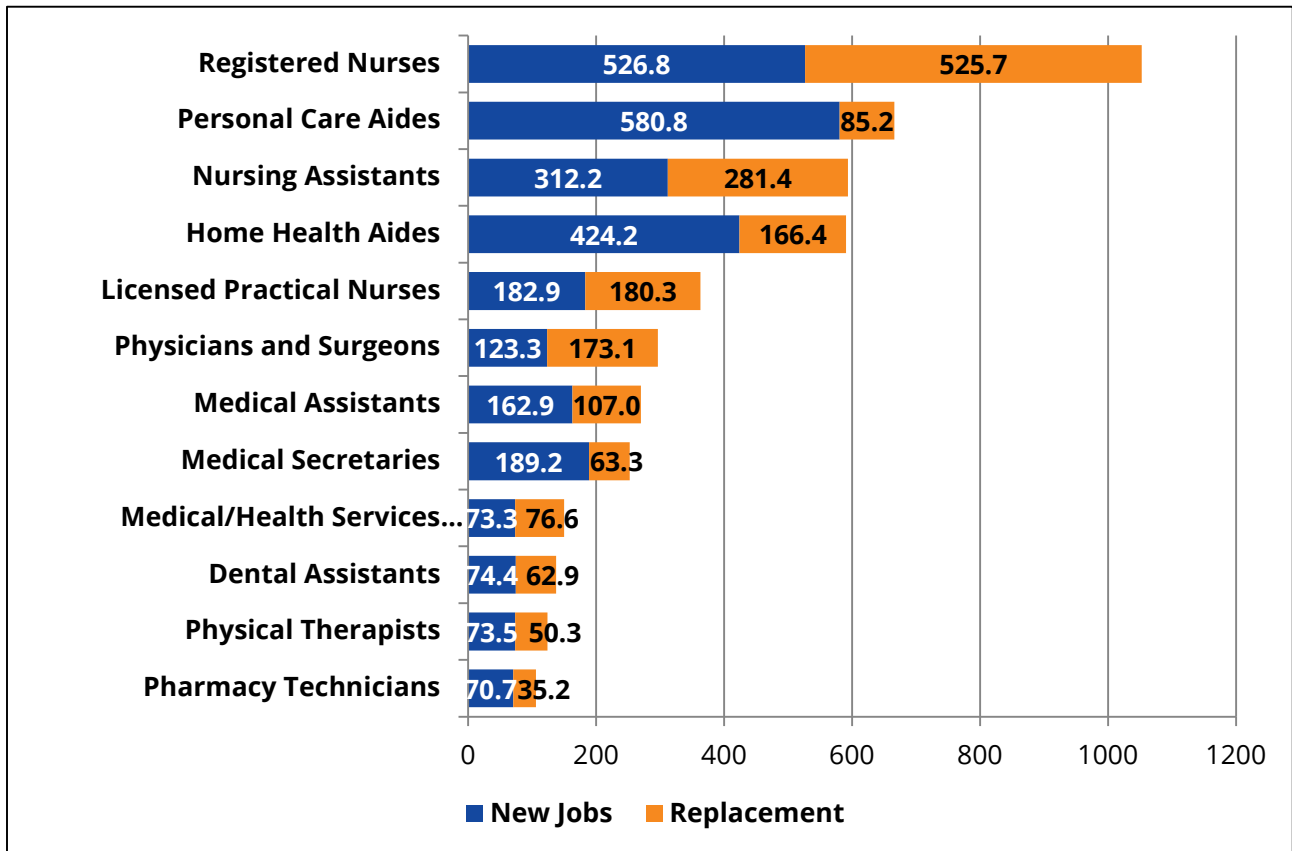
Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public

Sixteen of the top-30 fastest-growing occupations between 2012 and 2022 are in health care. Jobs for both personal care aides and home health aides are projected to increase substantially between 2012 and 2022, both by approximately 49%. The projected top-10 fastest-growing health occupations include:

- Personal care aides (48.8%)
- Home health aides (48.5%)
- Diagnostic medical sonographers (46.0%)
- Occupational therapy assistants (42.6%)
- Physical therapy assistants (41.0%)
- Physical therapy aides (40.1%)
- Physician assistants (38.4%)
- Occupational therapy aides (36.2%)
- Medical secretaries (36.0%)
- Physical therapists (36.0%)

The need for workers, however, includes both new job openings and replacement of existing staff due to turnover. Between 2012 and 2022 more than 1 million new RNs will be needed nationwide, including more than 525,000 to replace RNs leaving the profession. During the same period, over 660,000 personal care aides, nearly 600,000 nursing assistants, about 590,000 home health aides, and over 360,000 LPNs will be needed to fill new and existing jobs (Figure 7).

Figure 7. Selected Health Occupations With the Largest Projected Job Need in the United States, 2012-2022 (in Thousands)



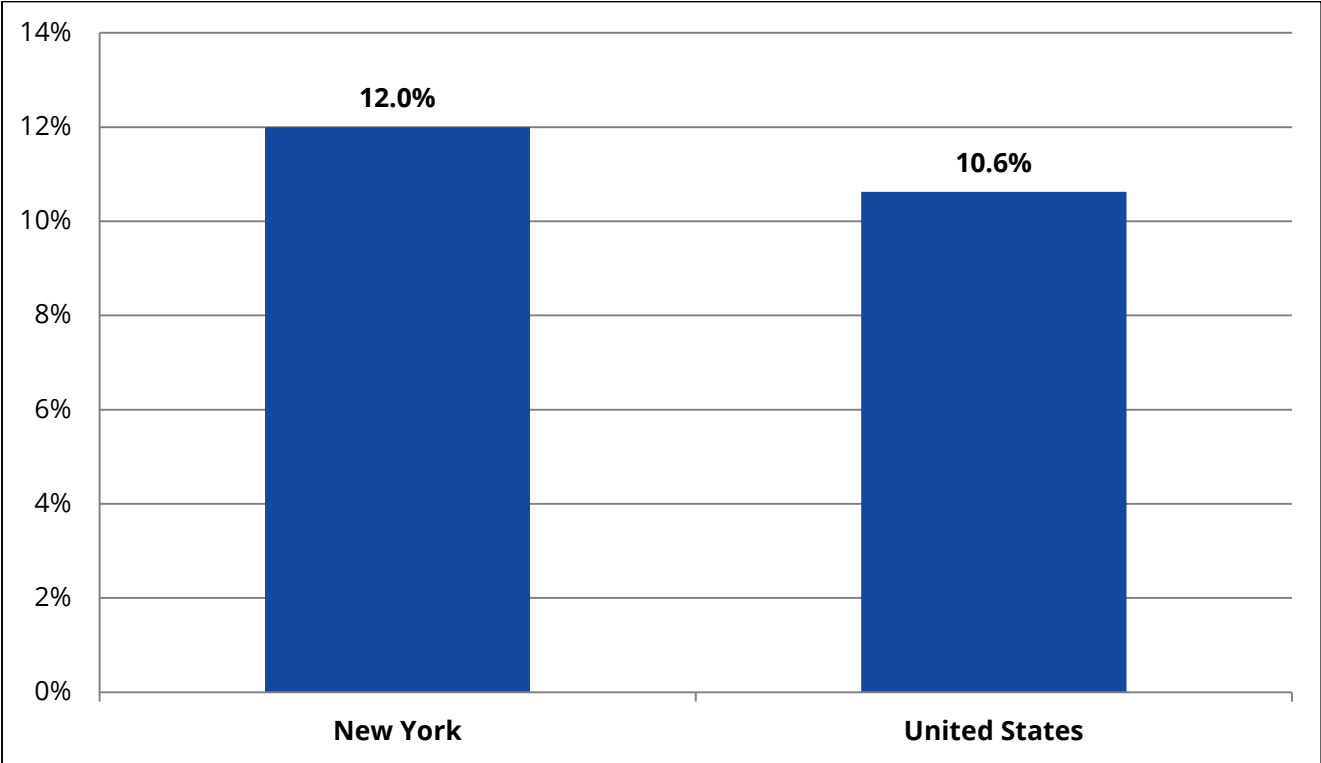
Sources: US Department of Labor, Bureau of Labor Statistics.
 Employment by industry, occupation, and percent distribution, 2012 and projected 2022, 2012-2022 Matrix Public

IV. NEW YORK HEALTH SECTOR EMPLOYMENT

A. Total Employment

In 2013 health sector employment accounted for 12% of total employment in New York, somewhat higher than the national level. However, this rate did not include those health professionals working in other employment sectors outside the health sector, such as nurses working in educational settings or pharmacists working in retail settings, such as retail pharmacies or supermarkets (Figure 8).

Figure 8. Health Sector Employment as a Percentage of Total Employment, 2013

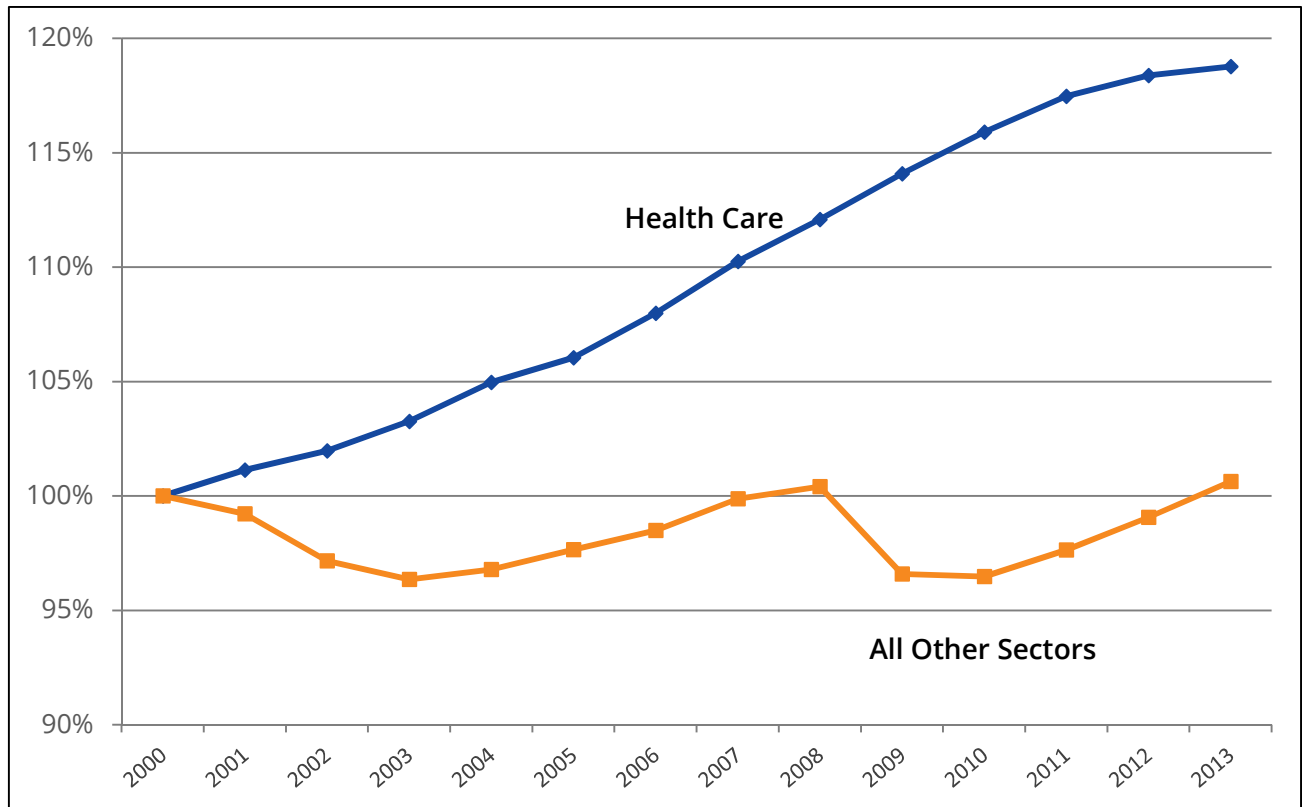


Sources: US Department of Labor, Bureau of Labor Statistics.

Between 2000 and 2013 health care employment in New York grew by more than 18%, adding over 160,000 jobs, while employment in all other sectors grew by about 48,000 (less than 1%). Between 2008 and 2009 employment in the health sector increased by over 17,000 jobs, or nearly 2%, while employment in all other sectors declined by nearly 300,000 jobs.

Additionally, in the 10 years between 2003 and 2013, employment in health care in New York increased by 15%, while employment in all other sectors only grew by about 4% (Figure 9).

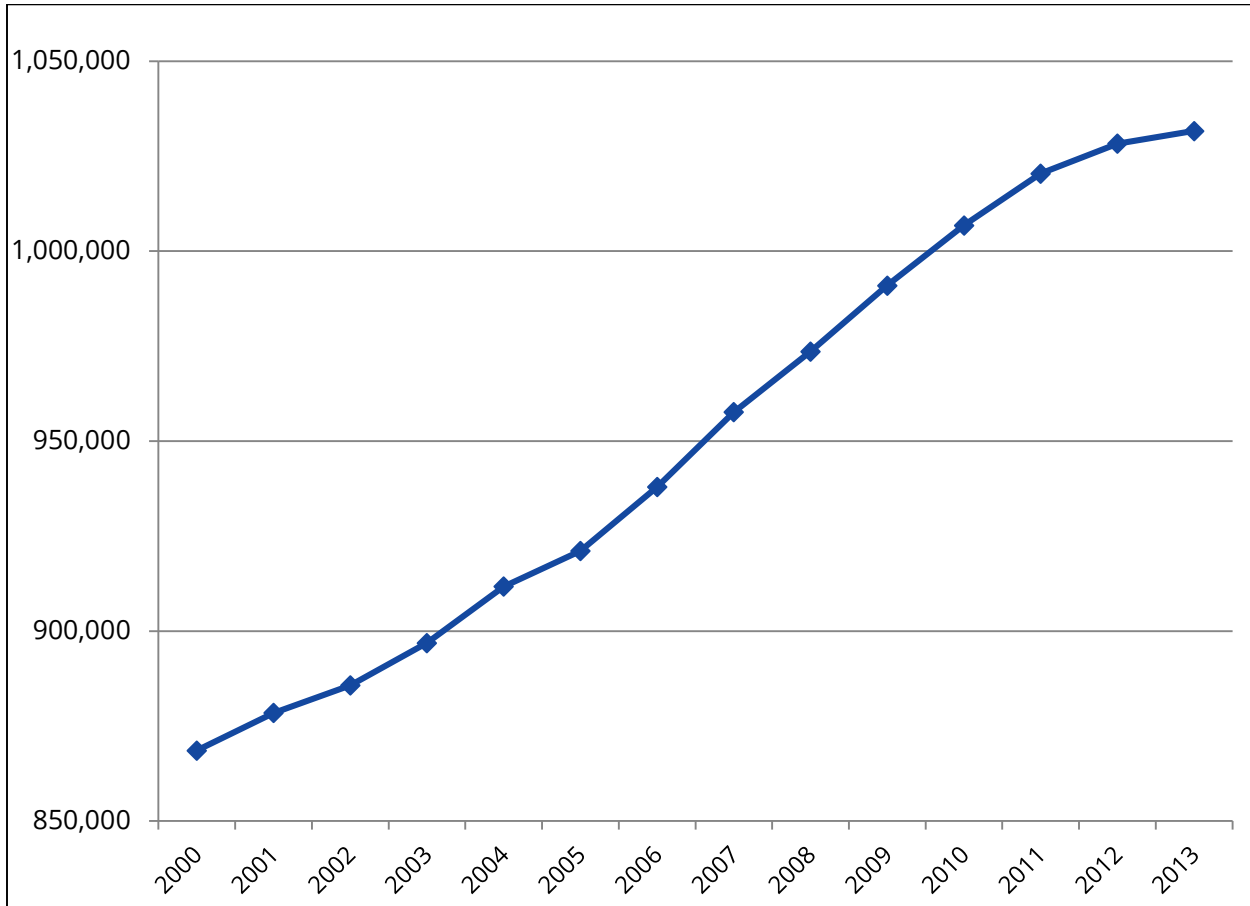
**Figure 9. Employment Growth in New York, 2000-2013
(Standardized to 2000)**



Source: New York State Department of Labor, ES-202

Since 2000, health sector employment in New York has grown rapidly. The average annual growth in the health sector since 2000 has been more than 1%; however, the annual growth between 2012 and 2013 slowed (Figure 10).

Figure 10. Trends in Total Health Sector Employment in New York, 2000-2013

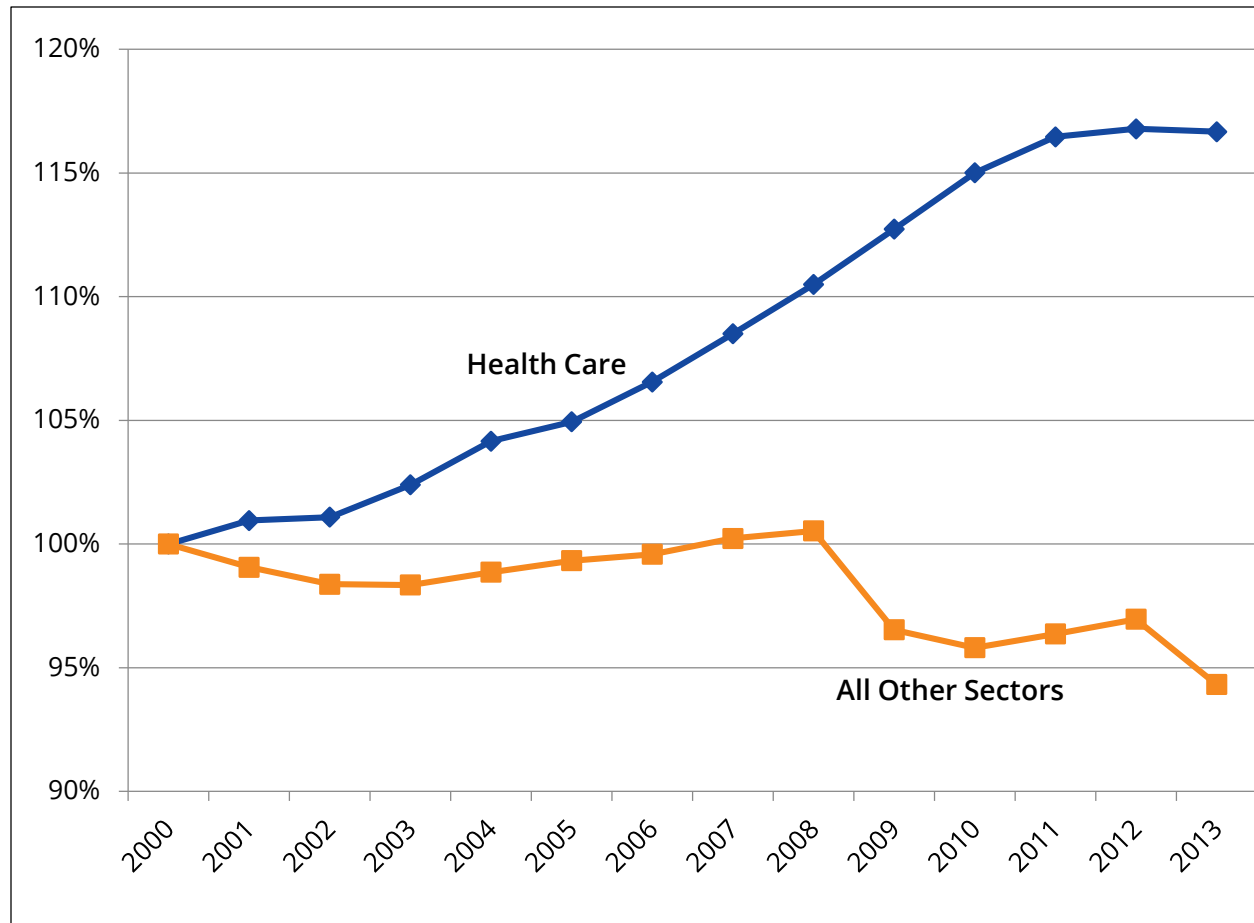


Source: New York State Department of Labor, ES-202

Employment Growth in Regions Outside of New York City^j

The difference in the growth between health care sector and nonhealth care sector jobs was most pronounced in regions outside of New York City. Although employment in the health care sector increased by nearly 17% between 2000 and 2013 in upstate New York, employment outside of the health care sector declined by around 6% during that same period. Between 2000 and 2008 employment outside of health care remained relatively steady, but in 2009 and again in 2013 employment dropped significantly in nonhealth care sectors in upstate New York. After 2010 the annual growth in health care employment began to slow (Figure 11).

Figure 11. Employment Growth in Regions Outside of New York City, 2000-2013 (Standardized to 2000)



Source: New York State Department of Labor, ES-202

^j For New York City employment growth, please see page 51, Figure 19.

B. Primary Care Physicians

There were nearly 15,000 primary care^k physicians practicing in New York in 2014 in community settings, or 74.5 per 100,000 total population. Forty-two percent (42%) of primary care physicians practiced general internal medicine, 23% were in each family and general practice, and 23% were in general pediatrics. There were 41.2 obstetricians/gynecologists (ob/gyns) per 100,000 women aged 15 to 44 and 77.0 general pediatricians per 100,000 for children aged birth to 17 years (Table 2).

Table 2. Primary Care Physicians in New York, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	3,383	17.1
Internal Medicine (General)	6,170	31.2
Geriatrics	114	4.2
Obstetrics/Gynecology	1,689	41.2
Pediatrics (General)	3,351	77.0
Total	14,707	74.5

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Primary care physicians were not evenly distributed among regions in the state. The Long Island region had the largest share with 79.5 physicians per 100,000 total population, followed by New York City (78.9 per 100,000 total population) and Hudson Valley (77.0 per 100,000 total population). The Mohawk Valley region had the smallest share with 53.7 physicians per 100,000 total population (Table 3).

Table 3. Primary Care Physicians per 100,000 Population in New York, by Region, 2014

Specialty	Primary Care Physicians	Per 100,000 Population
Capital District	728	67.0
Central New York	495	62.7
Finger Lakes	914	75.0
Hudson Valley	1,790	77.0
Long Island	2,276	79.5
Mohawk Valley	265	53.7
New York City	6,702	78.9
North Country	245	56.5
Southern Tier	371	56.9
Western New York	921	66.0

^k Includes physicians practicing in outpatient or ambulatory care settings, but excludes those working in inpatient settings such as hospitals, nursing homes, and so on.

C. By Setting

Between 2000 and 2013 employment in New York's health sector increased by nearly 21%. Home health care settings (119%) had the largest increase in employment, more than doubling during this same period. Ambulatory care settings also experienced substantial growth, employing about 28% more persons in 2013 than were employed in 2000. In contrast, nursing homes and hospitals added significantly fewer jobs, with employment growth for these settings at 5% and 6%, respectively (Table 4).

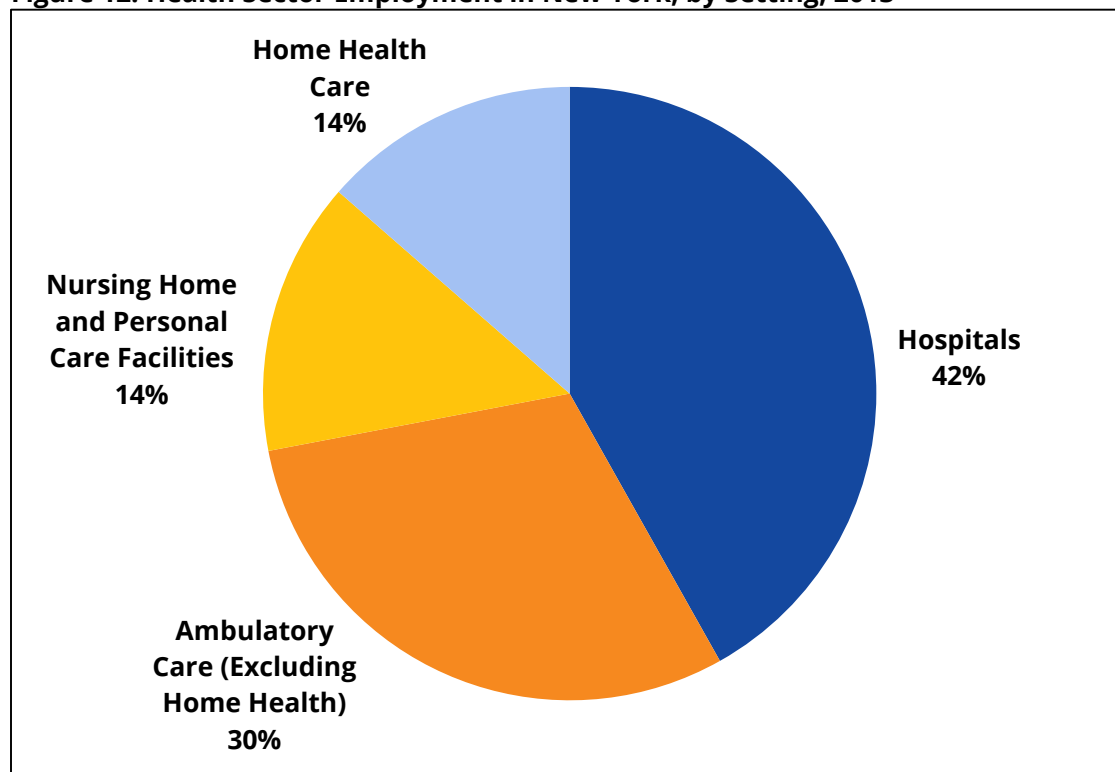
Table 4. Number of Health Care Jobs in New York, by Setting, 2000, 2013

Setting	2000	2013	Number Change	Percent Change
Hospitals	410,300	435,900	25,600	6.2%
Ambulatory care (excluding home health)	245,600	314,100	68,500	27.9%
Nursing home and personal care facilities	143,200	150,200	7,000	4.9%
Home health care	64,600	141,400	76,800	118.9%
Total	863,700	1,041,600	177,900	20.6%

Sources: New York State Department of Labor, ES-202; US Bureau of Labor Statistics, Current Employment Statistics.

Although hospitals had much smaller growth rates, these facilities remained the most prominent employer for New York's health sector in 2013, employing 42% of the health sector. Ambulatory care provided 30% of health sector jobs in New York, while nursing home and personal care facilities and home health care each contributed about 14% of health care positions (Figure 12).

Figure 12. Health Sector Employment in New York, by Setting, 2013



Sources: New York State Department of Labor, ES-202

D. By Region

Health sector employment in New York grew by almost 6% between 2009 and 2013. In 2013 the New York City region had more than 466,000 health sector jobs and the Long Island region had more than 164,000 health sector jobs, reflecting increases of 8% and 7%, respectively, between 2009 and 2013. The Finger Lakes region had the next largest percentage increase in health sector employment, growing by slightly more than 5% from 2009 to 2013. Health sector employment in both the Western New York and Mohawk Valley regions remained stable during the same period (Table 5).

Table 5. Total Health Sector Employment in New York, by Department of Labor Region, 2009-2013

Region	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Capital District	54,136	54,521	55,320	56,097	56,459	2,323	4.3%
Central New York	37,061	37,093	37,367	38,500	38,941	1,880	5.1%
Finger Lakes	60,192	60,999	61,889	62,521	63,357	3,165	5.3%
Hudson Valley	108,778	110,546	111,655	111,528	111,702	2,924	2.7%
Long Island	153,830	161,395	164,628	163,830	164,474	10,644	6.9%
Mohawk Valley	26,942	27,195	27,019	26,861	26,905	-37	-0.1%
New York City	430,901	435,264	441,651	447,956	466,456	35,555	8.3%
North Country	17,244	17,564	17,784	17,899	17,897	653	3.8%
Southern Tier	28,173	28,648	28,925	29,081	29,089	916	3.3%
Western New York	71,034	71,456	71,384	70,649	70,964	-70	-0.1%
Total	990,956	1,006,782	1,020,423	1,028,317	1,046,244	55,288	5.6%

Sources: New York State Department of Labor, ES-202

Between 2009 and 2013 the number of health care jobs per capita across the state increased by less than 1%. The Long Island region had the highest number of health care jobs per capita in 2013 with 5,767.2 jobs per 100,000 total population, followed by New York City with 5,549.2 jobs per 100,000 total population and the Mohawk Valley region with 5,426.9 jobs per 100,000 total population.

The North Country had the lowest number of health care jobs per 100,000 total population in 2013 with 4,110.2 jobs. The Mohawk Valley had the highest percentage of health care jobs to total jobs in 2013 (14%), followed by Long Island and Hudson Valley regions (13% each) (Table 6).

Table 6. Total Employment and Health Sector Employment in New York, by Department of Labor Region, 2009, 2013

Region	2009			
	Total Population	Jobs per 100,000		% Employment in Health Care
		Total Employment	Health Care Employment	
Capital District	1,065,402	46,732.9	5,081.3	10.9%
Central New York	773,606	43,903.6	4,790.7	10.9%
Finger Lakes	1,193,363	44,685.2	5,043.9	11.3%
Hudson Valley	2,289,762	37,606.2	4,750.6	12.6%
Long Island	2,875,904	41,094.2	5,348.9	13.0%
Mohawk Valley	490,080	39,232.2	5,497.7	14.0%
New York City	8,391,881	42,467.4	5,134.7	12.1%
North Country	429,092	35,433.0	4,018.7	11.3%
Southern Tier	646,210	41,159.8	4,359.7	10.6%
Western New York	1,386,153	44,228.5	5,124.5	11.6%
Total	19,541,453	42,651.3	5,071.1	11.9%
Region	2013			
	Total Population	Jobs per 100,000		% Employment in Health Care
		Total Employment	Health Care Employment	
Capital District	1,085,189	46,295.9	5,202.7	11.2%
Central New York	790,387	42,782.0	4,926.8	11.5%
Finger Lakes	1,219,672	44,324.1	5,194.6	11.7%
Hudson Valley	2,319,521	37,525.8	4,815.7	12.8%
Long Island	2,851,884	42,954.1	5,767.2	13.4%
Mohawk Valley	495,776	37,817.9	5,426.9	14.4%
New York City	8,405,837	45,682.1	5,549.2	12.2%
North Country	435,430	34,229.6	4,110.2	12.0%
Southern Tier	653,235	40,133.6	4,453.1	11.1%
Western New York	1,394,196	44,387.4	5,090.0	11.5%
Total	19,651,127	44,183.7	5,324.1	12.1%

Source: New York State Department of Labor, ES-202; US Census Bureau.

1. Hospital Employment

Between 2009 and 2013 overall hospital employment in New York increased by more than 22,000 jobs, or 5%.ⁱ The Long Island region experienced the largest percentage increase in hospital employment (39%) between 2009 and 2013, followed by the Hudson Valley region (33%). The Long Island region also experienced the largest growth in the number of new hospital jobs, with slightly more than 22,000 new jobs, followed by the Hudson Valley region with an increase of more than 13,000 hospital jobs. The Capital District, Finger Lakes, Mohawk Valley, North Country, and Southern Tier regions all saw a loss of hospital jobs between 2009 and 2013 (Table 7).

Table 7. Hospital Employment in New York, by Department of Labor Region, 2009-2013

Region	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Capital District	22,980	23,057	23,541	23,796	21,425	-1,555	-6.8%
Central New York	12,706	13,133	13,202	13,781	16,449	3,743	29.5%
Finger Lakes	28,252	28,258	28,916	29,436	20,752	-7,500	-26.5%
Hudson Valley	40,243	39,765	39,311	38,351	53,556	13,313	33.1%
Long Island	57,061	62,646	64,558	62,754	79,065	22,004	38.6%
Mohawk Valley	12,450	12,501	12,359	12,153	8,143	-4,307	-34.6%
New York City	206,996	200,675	198,908	202,774	209,541	2,545	1.2%
North Country	8,764	8,991	9,190	9,251	5,875	-2,889	-33.0%
Southern Tier	12,906	12,943	13,319	13,659	8,730	-4,176	-32.4%
Western New York	27,864	27,348	27,071	26,800	28,811	947	3.4%
Total	430,237	429,323	430,380	432,758	452,347	22,110	5.1%

Source: New York State Department of Labor, ES-202

ⁱ Recent layoffs, closures, or mergers are not reflected in these numbers, either at the state or regional levels.

2. Ambulatory Care

Employment in ambulatory care settings increased by nearly 7% between 2009 and 2013, adding nearly 20,000 jobs. The Hudson Valley and New York City regions saw the largest percentage increases, growing by more than 8% during the same period. The number of ambulatory care jobs in New York City increased by more than 10,600 between 2009 and 2013, followed by the Long Island and Hudson Valley regions. Ambulatory care employment in the Southern Tier remained relatively stable (Table 8).

Table 8. Ambulatory Care Services Employment (Excluding Home Health Care) in New York, by Department of Labor Region, 2009-2013

Region	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Capital District	16,905	17,222	17,461	17,735	18,264	1,359	8.0%
Central New York	13,632	13,414	13,644	14,125	14,337	705	5.2%
Finger Lakes	15,981	16,457	16,505	16,536	17,225	1,244	7.8%
Hudson Valley	39,449	40,676	41,085	42,068	42,774	3,325	8.4%
Long Island	59,836	61,385	62,110	62,528	63,485	3,649	6.1%
Mohawk Valley	6,476	6,646	6,635	6,757	6,753	277	4.3%
New York City	102,035	105,439	108,007	109,951	112,658	10,623	10.4%
North Country	5,020	5,103	5,137	5,180	5,286	266	5.3%
Southern Tier	7,550	7,703	7,740	7,586	7,591	41	0.5%
Western New York	22,725	23,372	23,640	22,958	23,478	753	3.3%
Total	291,956	299,278	304,422	308,334	311,851	19,895	6.8%

Sources: New York State Department of Labor, ES-202

3. Nursing and Personal Care Facility Employment

Employment in nursing and personal care facilities^m in New York decreased by about 3% between 2009 and 2013, with 2 regions accounting for the majority of the overall decrease in the number of jobs. The New York City region saw a decline of more than 4,100 in nursing and personal care facilities jobs, while nursing and personal care facilities in Long Island reduced jobs by over 1,500. Central New York saw the largest percentage decline (7.7%). The Hudson Valley region had the largest gain in nursing and personal care facility employment (663), followed by the Finger Lakes region (540) (Table 9).

Table 9. Nursing and Personal Care Facility Employment in New York, by Department of Labor Region, 2009-2013

Region	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Capital District	11,191	11,194	11,240	11,413	11,132	-59	-0.5%
Central New York	9,347	9,142	8,929	8,765	8,623	-724	-7.7%
Finger Lakes	12,519	12,811	12,746	12,817	13,059	540	4.3%
Hudson Valley	20,083	20,605	20,742	20,767	20,746	663	3.3%
Long Island	24,238	24,244	24,399	23,918	22,722	-1,516	-6.3%
Mohawk Valley	6,618	6,632	6,561	6,555	6,693	75	1.1%
New York City	55,205	54,439	53,554	51,182	51,102	-4,103	-7.4%
North Country	2,911	2,937	2,920	2,937	3,040	129	4.4%
Southern Tier	6,637	6,901	6,733	6,706	6,665	28	0.4%
Western New York	15,655	15,844	15,644	15,618	15,436	-219	-1.4%
Total	164,421	164,753	163,521	160,811	159,218	-5,203	-3.2%

Sources: New York State Department of Labor, ES-202

^m Includes nursing care facilities and community care facilities for the elderly but excludes residential mental retardation, mental health and substance abuse facilities, and other residential care facilities.

4. Home Health Care

Between 2009 and 2013 employment in home health care in New York grew by more than 36,000 jobs, with the New York City region accounting for the vast majority of the increase. Jobs in home health care in New York City grew more than 45%, adding over 30,000 jobs. Outside of New York City, the Long Island region experienced the next largest increase in home health care employment, growing by more than 2,800 jobs between 2009 and 2013, or 23%, followed by the Hudson Valley region, which added nearly 1,800 jobs, or 20%. Employment in home health care agencies in the Mohawk Valley region experienced a small decline, losing 8 jobs during the same period (Table 10).

Table 10. Home Health Care Employment in New York, by Department of Labor Region, 2009-2013

Region	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Capital District	3,060	3,049	3,078	3,154	3,161	101	3.3%
Central New York	1,377	1,404	1,593	1,829	2,112	735	53.4%
Finger Lakes	3,441	3,473	3,722	3,732	3,527	86	2.5%
Hudson Valley	9,003	9,499	10,517	10,343	10,782	1,779	19.8%
Long Island	12,696	13,120	13,561	14,630	15,580	2,884	22.7%
Mohawk Valley	1,398	1,416	1,464	1,396	1,390	-8	-0.6%
New York City	66,665	74,711	81,182	84,049	96,883	30,218	45.3%
North Country	549	532	538	531	589	40	7.3%
Southern Tier	1,079	1,102	1,133	1,131	1,139	60	5.6%
Western New York	4,790	4,892	5,030	5,272	5,333	543	11.3%
Total	104,342	113,429	122,100	126,413	140,496	36,154	34.6%

Source: New York State Department of Labor, ES-202

E. By Occupation

1. Current Employment Data

Changes in the number of health care jobs in New York varied by occupation. Although this represents positions and not individuals or full-time equivalents (FTEs), it is useful in identifying trends in occupations or job titles. Notable changes between 2009 and 2013 included:

- The number of personal care aides increased by more than 38,200, or by 39%.
- The number of medical and clinical laboratory technician jobs increased by over 2,200, or by 29%.
- The number of occupational therapist jobs increased by over 1,500, or by 21%.
- The number of dental hygienists decreased by over 900, or by 9%.
- The number of social workers decreased by more than 6,100, or by 11% (Table 11).

Table 11. Number of Jobs in Selected Health Occupations in New York, 2009-2013 ⁿ

Occupation	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	165,730	169,710	176,180	166,950	169,820	4,090	2.5%
Personal Care Aides	97,900	101,530	115,920	127,860	136,140	38,240	39.1%
Home Health Aides	129,200	137,830	133,980	123,260	128,480	-720	-0.6%
Nursing Assistants	NA	NA	NA	98,340	99,820	NA	NA
Social Workers	58,650	55,990	51,790	50,760	52,520	-6,130	-10.5%
Licensed Practical Nurses	45,130	45,100	47,950	48,520	49,050	3,920	8.7%
Medical and Health Services Managers	26,680	27,260	27,340	26,630	27,530	850	3.2%
Medical Assistants	19,710	20,950	21,360	21,650	23,170	3,460	17.6%
Pharmacists	16,290	16,660	17,820	18,970	19,060	2,770	17.0%
Dental Assistants	16,160	16,730	17,760	17,420	17,970	1,810	11.2%
Pharmacy Technicians	14,010	14,340	15,730	16,260	16,770	2,760	19.7%
Physical Therapists	13,320	13,740	13,490	13,930	14,170	850	6.4%
Radiologic Technologists	NA	NA	NA	12,210	12,660	NA	NA
Medical Secretaries	9,560	9,530	9,900	10,990	10,790	1,230	12.9%
Speech-Language Pathologists	10,370	8,340	8,870	9,220	10,280	-90	-0.9%
Medical and Clinical Laboratory Technicians	7,610	8,240	7,920	7,260	9,850	2,240	29.4%
Dental Hygienists	10,760	9,710	9,690	9,630	9,850	-910	-8.5%
Medical & Clinical Laboratory Technologists	10,250	10,460	10,820	9,910	9,830	-420	-4.1%
Physician Assistant	8,570	9,220	9,690	9,320	9,780	1,210	14.1%
Nurse Practitioners	NA	NA	NA	8,990	9,610	NA	NA
Medical Records and Health Info Techs	9,140	9,630	9,520	9,200	8,850	-290	-3.2%
Occupational Therapists	7,180	7,100	7,300	7,650	8,710	1,530	21.3%
Physical Therapy Assistants/Aides	6,380	6,480	6,040	6,730	7,050	670	10.5%
Respiratory Therapists	5,380	5,810	5,900	6,080	5,980	600	11.2%
Surgical Technologists	5,170	4,800	5,000	5,060	4,980	-190	-3.7%
Dietitians and Nutritionists	4,400	4,520	4,620	4,510	4,330	-70	-1.6%
Orderlies	NA	NA	NA	3,860	3,850	NA	NA
Cardiovascular Technologists & Technicians	2,940	2,760	2,960	2,880	2,710	-230	-7.8%
Occupational Therapy Assistants/Aides	2,480	2,320	2,370	2,350	2,400	-80	-3.2%
Certified Registered Nurse Anesthetists	NA	NA	NA	1,220	1,580	NA	NA
Nuclear Medicine Technologists	1,340	1,230	1,090	1,110	1,190	-150	-11.2%
Dietetic Technicians	1,120	1,190	1,060	900	790	-330	-29.5%
Nurse Midwives	NA	NA	NA	530	490	NA	NA

Source: US Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics

ⁿ Prior to 2010, RNs included advanced practice nurses (NPs, certified nurse midwives, and certified registered nurse anesthetists). Radiologic technologists were reported separately starting in 2012. Additionally, the previous definition for personal care aides included home health aides.

Average wages per hour in selected health occupations for New York are reported in Table 12. These wages were based on the data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$81.79), followed by pharmacists and medical and health service managers (\$57.48 and \$57.17, respectively). Physical therapist aides (\$13.25), personal care aides (\$11.61), and home health aides (\$10.33) were the lowest wage earners in health care.

Table 12. Average Hourly Wage in Selected Health Occupations in New York, 2014

Occupation	Average Wage per Hour
Nurse Anesthetists	\$81.79
Pharmacists	\$57.48
Medical and Health Services Managers	\$57.17
Nurse Practitioners	\$48.85
Nurse Midwives	\$47.54
Physician Assistants	\$47.50
Speech-Language Pathologists	\$39.16
Physical Therapists	\$38.75
Nuclear Medicine Technologists	\$37.94
Occupational Therapists	\$37.04
Registered Nurses	\$36.71
Dental Hygienists	\$32.81
Radiologic Technologists and Technicians	\$31.99
Respiratory Therapists	\$31.87
Medical and Clinical Laboratory Technologists	\$31.35
Dietitians and Nutritionists	\$29.51
Healthcare Social Workers	\$27.91
Cardiovascular Technologists & Technicians	\$27.31
Mental Health and Substance Abuse Social Workers	\$26.17
Occupational Therapy Assistants	\$24.97
Physical Therapist Assistants	\$24.96
Surgical Technologists	\$23.06
Medical and Clinical Laboratory Technicians	\$22.75
Licensed Practical and Licensed Vocational Nurses	\$21.90
Medical Records and Health Info Techs	\$20.00
Dietetic Technicians	\$19.29
Medical Secretaries	\$17.69
Occupational Therapy Aides	\$17.59
Dental Assistants	\$17.25
Medical Assistants	\$16.17
Nursing Assistants	\$15.57
Pharmacy Technicians	\$15.48
Orderlies	\$14.24
Physical Therapist Aides	\$13.25
Personal Care Aides	\$11.61
Home Health Aides	\$10.33

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

2. Licensure Data for Selected Health Professions in New York

Between 2009 and 2013 the number of licensed RNs in New York increased by more than 15,000, or by 6%. NPs had the largest percentage increases, growing by 27% during the same period. The number of licensed speech-language pathologists and PAs also grew by 20% or more between 2009 and 2013. In contrast, the number of clinical laboratory technicians and clinical laboratory technologists saw a decrease of 14% and 2%, respectively, during the same period (Table 13).

Table 13. Number of Licensed Individuals in Selected Health Occupations in New York, 2009-2013^o

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	265,964	269,947	270,691	273,052	280,973	15,009	5.6%
Licensed Practical Nurses	71,477	69,568	71,239	70,903	71,813	336	0.5%
Social Workers	49,147	48,430	50,391	51,685	53,964	4,817	9.8%
Pharmacists	21,269	21,863	22,431	23,275	24,210	2,941	13.8%
Physical Therapists	19,427	19,987	19,845	20,309	21,086	1,659	8.5%
Nurse Practitioners	14,862	15,395	16,268	17,117	18,815	3,953	26.6%
Speech-Language Pathologists	13,689	14,222	14,981	15,675	16,487	2,798	20.4%
Clinical Laboratory Technologist	15,016	15,118	14,808	14,905	14,665	-351	-2.3%
Physician Assistants	9,685	10,168	10,688	11,275	12,172	2,487	25.7%
Occupational Therapists	10,226	10,320	10,650	11,066	11,568	1,342	13.1%
Dental Hygienists	10,052	10,200	10,449	10,603	10,880	828	8.2%
Respiratory Therapists	5,114	5,279	5,534	5,640	5,892	778	15.2%
Physical Therapy Assistants	4,838	4,957	4,943	5,236	5,617	779	16.1%
Dietitians/Nutritionists	4,832	4,934	4,918	5,138	5,336	504	10.4%
Occupational Therapy Assistants	3,777	3,856	3,981	4,060	4,005	228	6.0%
Clinical Laboratory Technician	2,386	2,300	2,098	2,125	2,046	-340	-14.3%

Source: New York State Education Department, Office of Professions

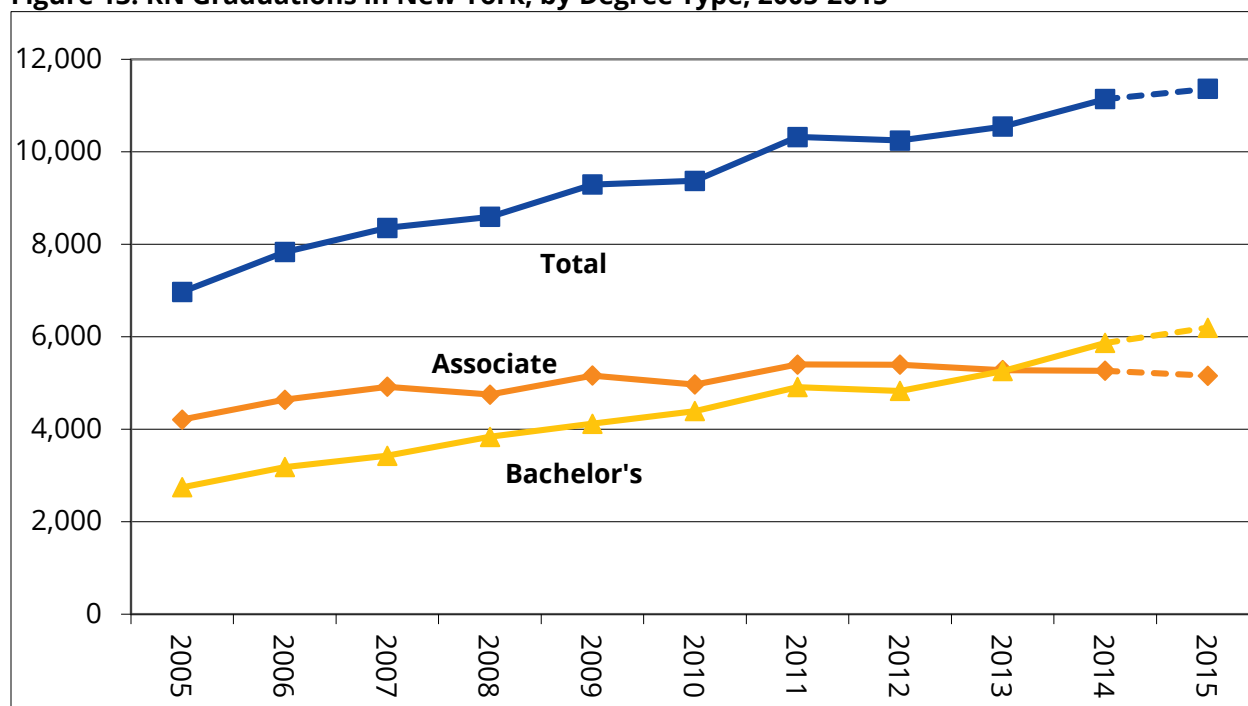
^o This total includes all New York licensed individuals regardless of whether the address given in the licensure file was a New York address, whereas tables of licensees by region include only those individuals with an address in the region.

F. Trends in New York RN Education, 2005-2015

CHWS annually surveys RN education programs in New York to better understand trends in the production of RNs in the state. The 2014 survey included questions about applications, acceptances, and graduations for that year as well as projected graduations through 2015. Of the 122 programs identified for this survey, a total of 112 deans and directors responded, which resulted in a 92% response rate. Data for the nonrespondents were carried over from previous surveys; consequently, the following data reflect estimates of graduations for all RN education programs in the state.

There was a small overall increase in the number of graduates from New York RN education programs between 2013 and 2014, with all of the growth attributed to increases in bachelor's degrees in nursing (BSN). There were 11,141 graduates from RN education programs in New York, an increase of nearly 600 (or almost 6%), compared with the class of 2013. Between 2013 and 2014 there was a decrease of less than 1% in associate degree graduates (ADNs), while the number of BSN graduates grew by more than 300 between 2013 and 2014, an increase of over 11% (Figure 13).

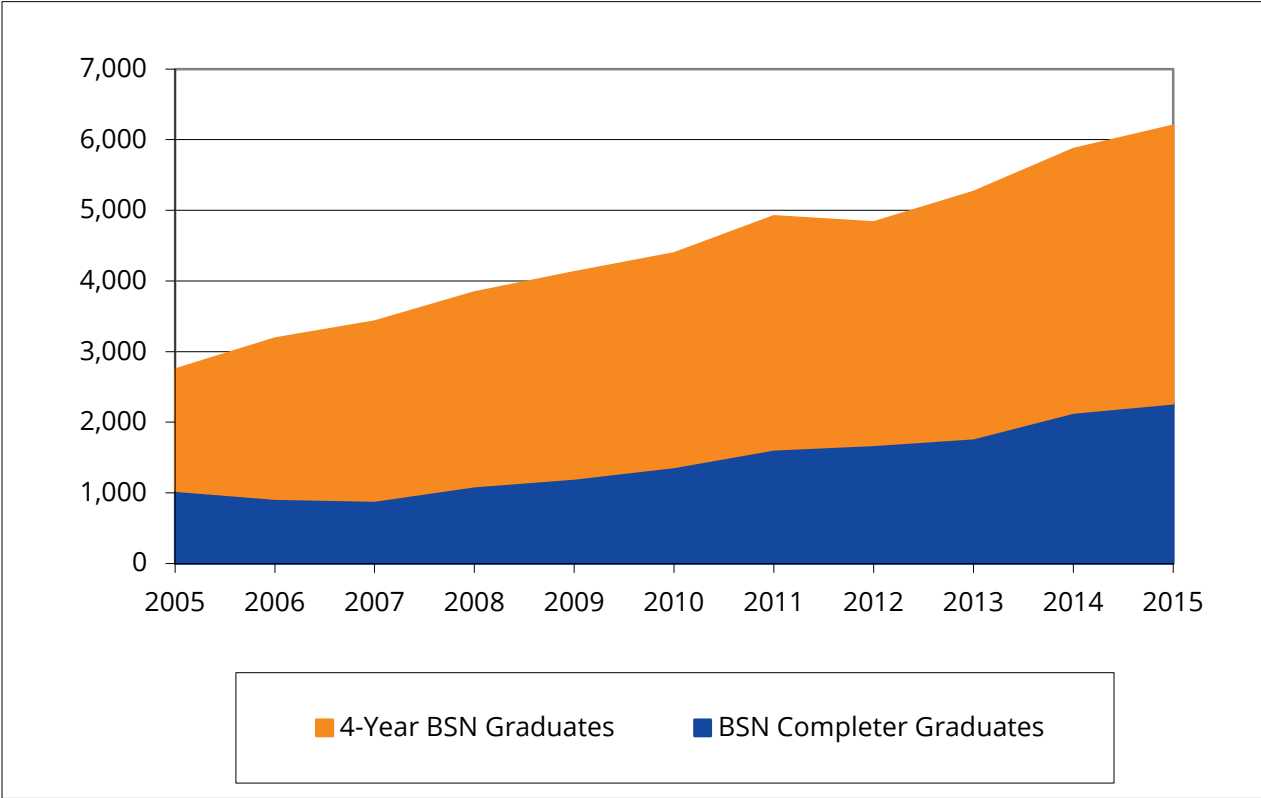
Figure 13. RN Graduations in New York, by Degree Type, 2005-2015



Since 2007 the proportion of graduates from BSN completer^P programs has comprised an increasing share of total RN graduates in New York. In 2014 BSN completers accounted for just over 36% of total BSN graduates and over 19% of overall RN graduates, up from 29% and 13%, respectively, in 2008. Of the 607 new BSN graduates between 2013 and 2014, 359 or 59% were BSN completers (Figure 14).

^P BSN completers are those RNs who already have either an RN associate degree or diploma and continue their educations to complete a BSN.

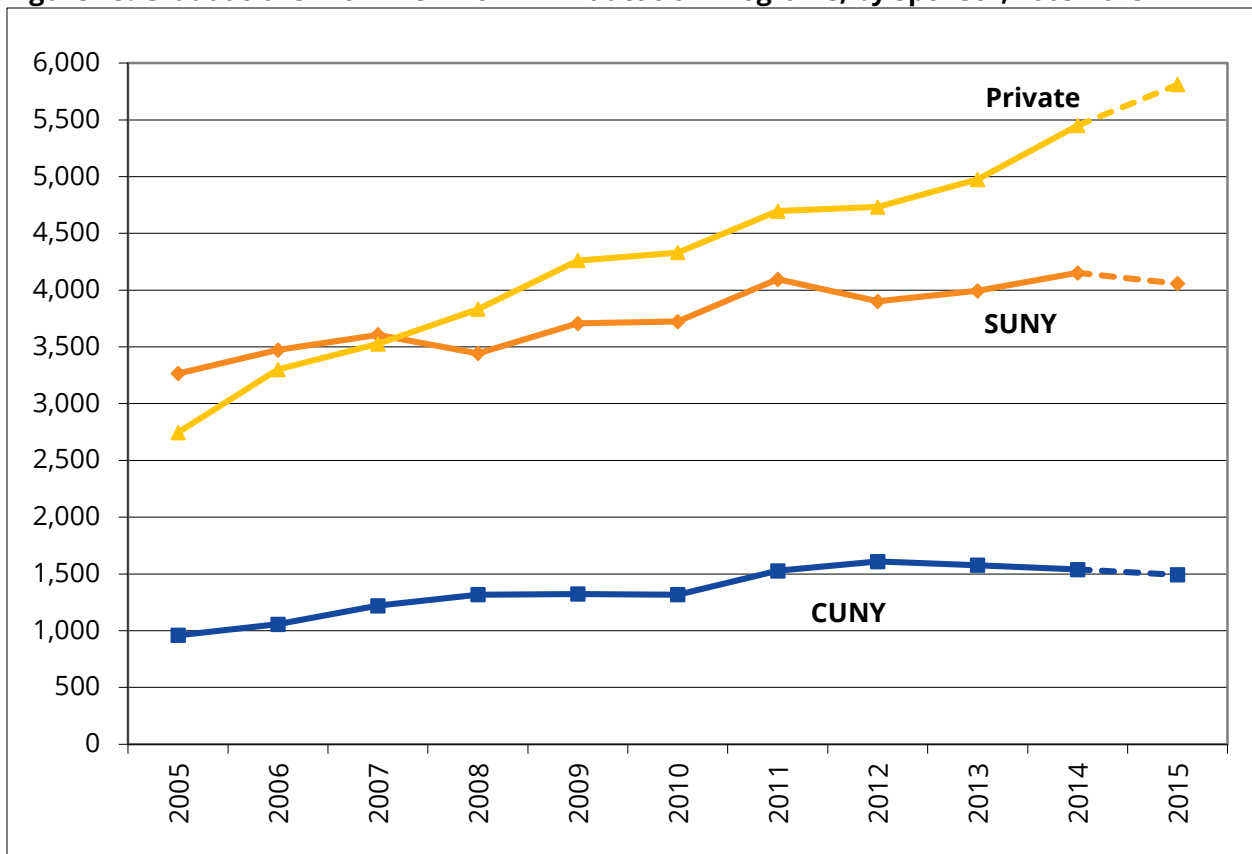
Figure 14. Graduations from BSN 4-Year and BSN Completer Programs, 2005-2015



Between 2005 and 2014 RN graduations from privately sponsored RN programs, including those based in hospitals, nearly doubled, increasing by 99%. During the same period RN graduations from City University of New York- (CUNY) and SUNY-sponsored RN programs increased by 61% and 27%, respectively. In 2014 nearly 49% of all RN graduates in the state attended privately sponsored RN programs, 37% attended SUNY-sponsored RN programs, and 14% attended CUNY-sponsored RN programs.

RN graduations from privately sponsored RN programs are projected to increase by more than 6% between 2014 and 2015, whereas graduations from CUNY- and SUNY-sponsored RN programs are expected to decrease 3% and 2%, respectively. Beginning in 2015 it is estimated that privately sponsored RN education programs will graduate more RNs than publicly sponsored RN education programs (Figure 15).

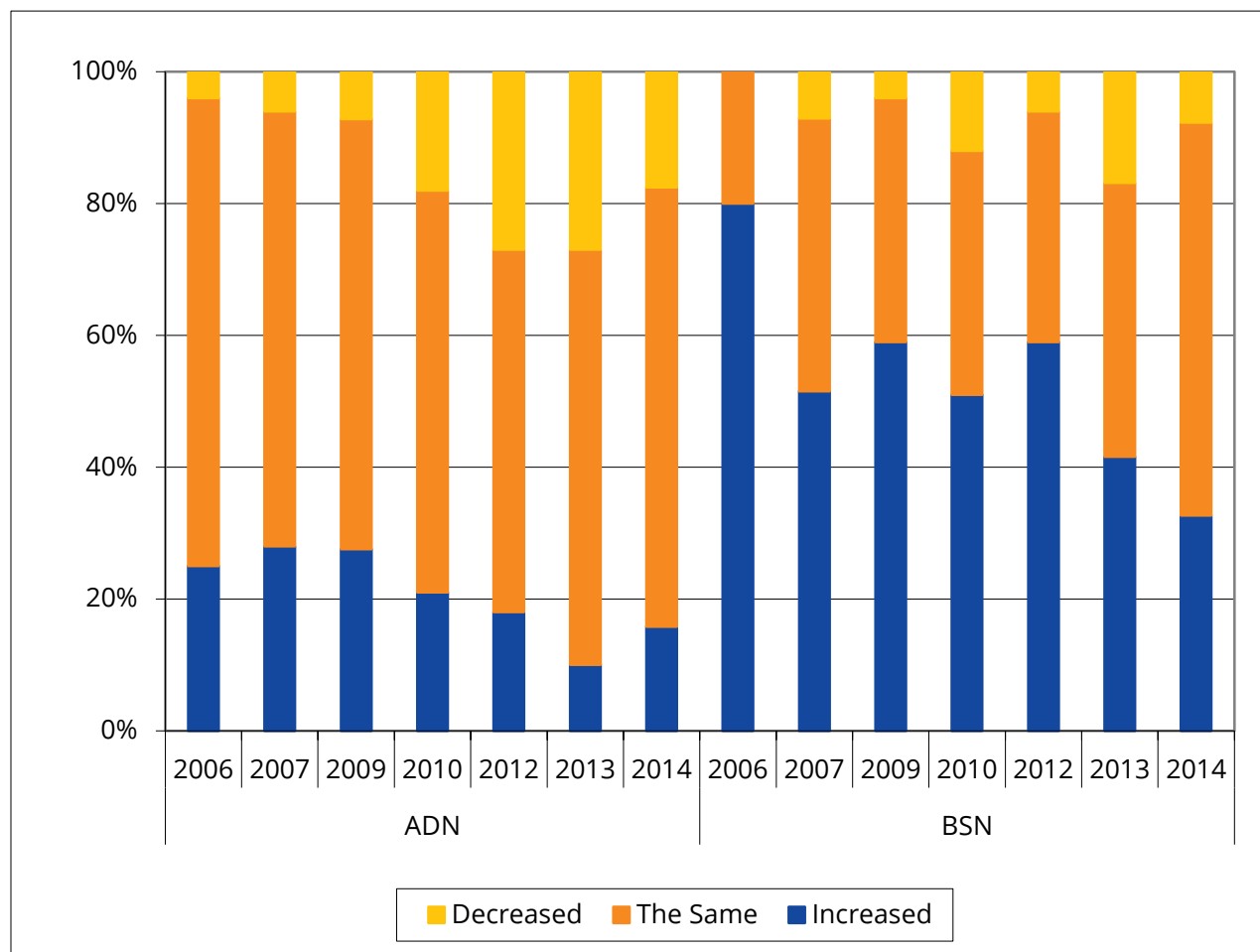
Figure 15. Graduations From New York RN Education Programs, by Sponsor, 2005-2015



Sixty-three percent of deans and directors reported the same number of acceptances to their programs in 2014 as in 2013, including 67% of ADN deans and directors and 58% of BSN deans and directors. The percentage of deans and directors reporting increases in acceptances over the previous year declined slightly in 2014, from 24% in 2013 to 23% in 2014.

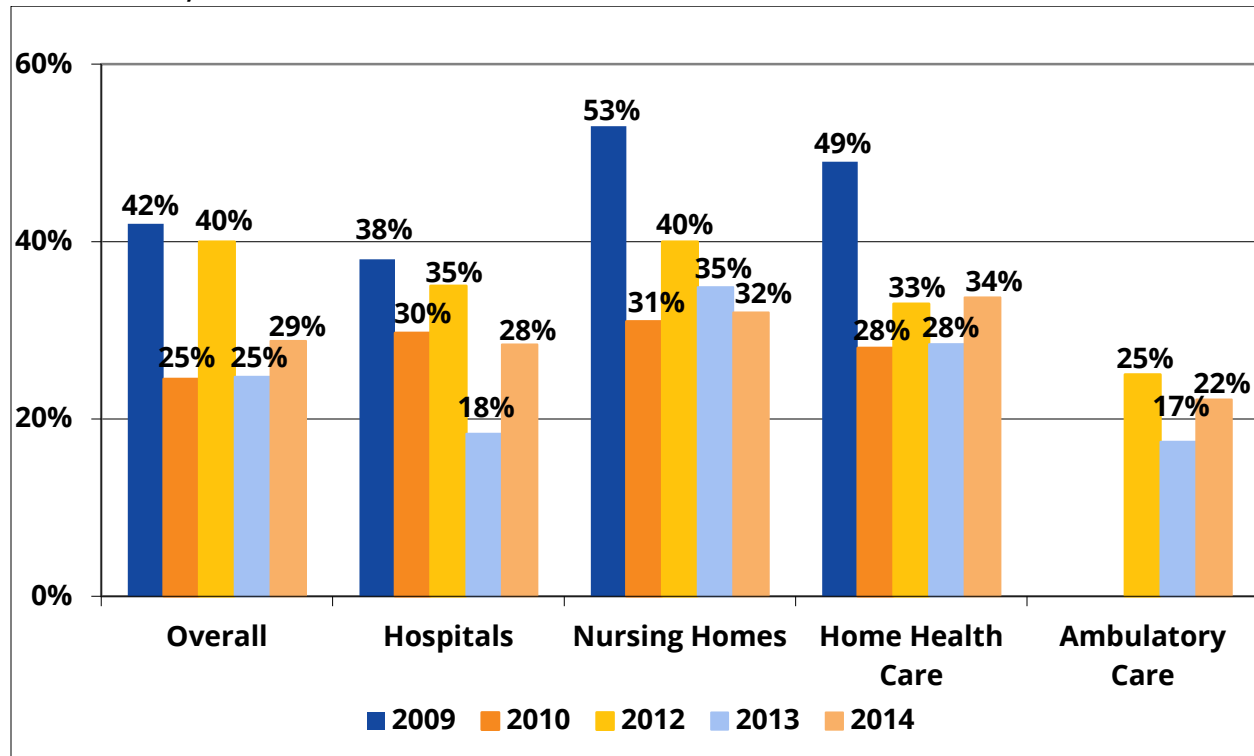
Thirty-two percent of deans and directors of BSN programs (including BSN completer programs) reported more acceptances to their programs in 2014 than in 2013, down from 42% of BSN deans and directors who reported more acceptances to their programs in 2013 than in 2012 (Figure 16). Sixteen percent of ADN deans and directors reported more acceptances to their programs in 2014 than in 2013, up from 10% that reported more acceptances in 2013 than in 2012. The percentage of deans and directors reporting fewer acceptances decreased to 14% in 2014 from 22% in 2013, including 18% of ADN deans and directors and 8% of BSN deans and directors.

Figure 16. Change in the Number of Acceptances From Previous Year in New York, by Program Type, 2006-2014



In 2014 a lower percentage of deans and directors reported “many jobs” in nursing for newly trained RNs than in previous years. In 2006 and 2007 the vast majority of deans and directors reported a strong job market for their graduates, with more than 90% of them reporting “many jobs” for newly trained RNs. Starting in 2009, however, and continuing through 2014, the percentage of RN education program directors who reported “many jobs” for their graduates had declined substantially (Figure 17). In 2014 only 29% of deans and directors reported “many jobs” for newly trained RNs, up slightly from 25% in 2013. The decline was observed across all health care settings.

Figure 17. Percentage of RN Program Directors in New York Reporting “Many Jobs” for Newly Licensed RNs, 2009-2014



BSN deans and directors reported a better job market for their graduates, compared with deans and directors of ADN programs. Thirty-three percent of BSN deans and directors reported “many jobs” overall, compared with only 24% of ADN deans and directors. BSN deans and directors reported “many jobs” in ambulatory care (43%) and home health care (42%).

G. Emerging Care Coordination Titles in FQHCs and Hospitals

1. Background

Efforts to improve chronic disease management are contributing to growing demand for care coordination services. Providers report adding new positions with a singular focus on coordinating care both within a health care organization and across health care settings, in an effort to reduce fragmentation of services. Care coordination staff also focus on patient engagement and often provide education at both individual and community levels. There is a need to better understand the strategies that health care providers use to build capacity for care coordination.

2. Methods

CHWS is currently conducting a multi-year care coordination workforce research based on case studies of a small number of organizations in New York City that represent emerging care delivery models. Each year, participating organizations are interviewed to learn about changes in their approach to the provision of care coordination services. In addition, the Center helped administer and analyze two workforce surveys—one to hospitals and one to health centers across the state. Both surveys included questions about care coordination staffing strategies.

3. Findings

Health reform initiatives, particularly DSRIP, is fueling growing demand for care coordination services.

As workforce planning under DSRIP gets under way, it is clear that Performing Provider Systems (PPSs) recognize the need for better and more comprehensive care coordination services. As PPSs develop strategies to reduce the number of inappropriate emergency department visits and hospital admissions for the Medicaid patients they serve, they report plans to better coordinate care across health care settings, between health and mental health services, with linkages to social services.

Care coordination services are unevenly distributed among patients in need of these services.

Health care providers voiced concern over “uncoordinated” care coordination services provided to the same patients by different organizations (eg, insurers, providers, etc.). Such duplication of services can be costly and in fact reduce the overall effectiveness of the care coordination services provided. At the same time, there are other patients, particularly those with chronic diseases such as diabetes, who would benefit from care coordination services, but are not currently eligible to receive these services.

Although providers report using similar care coordination titles, there is substantial variation in qualifications and, in some instances, functions associated with these positions.

Commonly reported care coordination titles included care coordinator, case manager, patient navigator, community health worker, health coach, and care manager. There was substantial variation across providers on the qualifications for these titles. Some providers required licensure in nursing or social work, and some required a bachelor’s degree, while others reported no specific professional requirements. A bachelor’s degree was often required for the following titles: care coordinator, health educator, care manager, and case manager, especially downstate. According to providers, the bachelor’s degree requirement ensures that staff in these titles are more likely to possess strong oral and written

communications skills as well as critical thinking skills, all of which are needed for effective performance. Providers were more likely to report a high school diploma or a general education diploma as the educational requirement for community health workers. This variation in qualifications can prove challenging in efforts to develop core curriculum for training the care coordination workforce.

Providers cited “promoting treatment adherence” and “improving patient engagement” as two of the most important functions of care coordination staff.

Treatment adherence and improving patient engagement were universally identified as important aspects of patient self-management and education across all care coordination titles (care coordinator, case manager, patient navigator, community health worker, health coach, and care manager). In addition, providers stressed the importance of care coordinators helping patients understand the health care delivery system and available resources and providing supportive counseling and coaching.

H. Demand for Workers

CHWS, in conjunction with statewide and regional provider organizations, conducts annual surveys of human resources directors of FQHCs, home health care agencies, hospitals, and nursing homes throughout New York. The surveys ask about the professions and occupations that pose the greatest recruitment and retention challenges. Respondents rated difficulty of recruitment and retention using a Likert scale—where 1 represented “not at all difficult” or “no turnover” and 5 indicated “extremely difficult” or “extreme turnover.” To conduct these surveys, CHWS collaborated with the following provider organizations:

- Community Health Center Association of New York State
- Continuing Care Leadership Coalition at the Greater New York Hospital Association
- Healthcare Association of New York State
- Home Care Association of New York State, Inc.
- LeadingAge New York
- New York State Association of Healthcare Providers, Inc.

Findings from these surveys are reported statewide and by NYSDOL regions. In instances where total responses for a region, either by setting or occupation, were less than 5, no information was provided or contiguous regions were combined.

1. Hospitals

In 2014, 98 hospitals statewide, or approximately 42%, responded to the survey. New York hospitals reported the most difficulty recruiting clinical laboratory technologists, followed by clinical lab technicians and nurse managers. Clinical laboratory technologists, care coordinators, and PAs were the most difficult occupations to retain (Table 14). Hospitals continue to report recruitment and retention difficulties for primary care physicians, both in inpatient and outpatient settings.⁹

Table 14. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in New York, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.1	2.7	37%	24%	17%
CNA/Patient Care Techs	1.6	2.2	15%	15%	24%
Clinical Lab Technicians	3.6	2.5	51%	38%	19%
Clinical Lab Technologists	3.9	2.9	64%	44%	35%
Licensed Clinical Social Workers	2.6	2.1	22%	20%	14%
Licensed Practical Nurses	1.7	1.7	14%	12%	23%
Medical Assistants	1.6	2.1	3%	10%	28%
Medical Hospital Coders	3.4	2.4	51%	22%	16%
Nurse Practitioners	3.2	2.4	35%	32%	41%
Occupational Therapists	3.1	2.5	38%	22%	20%
Pharmacists	2.9	2.3	27%	20%	29%
Physical Therapists	3.1	2.4	33%	33%	17%
Physician Assistants	3.1	2.6	29%	33%	33%
Radiologic Technicians	1.9	1.7	12%	10%	9%
Radiologic Technologists	2.4	2.0	15%	14%	11%
Registered Nurses					
Newly Licensed RNs	2.0	2.5	20%	26%	36%
Experienced RNs	3.4	2.5	50%	27%	43%
Nurse Managers	3.6	2.4	50%	42%	43%
Speech-Language Pathologists	3.1	2.5	28%	30%	14%

- Many hospitals projected growth in ambulatory services, with increasing demand for NPs (66%), RNs (60%), and PAs (64%).

⁹ *Doctor Shortage: Outpatient and Primary Care Needs Growing. Results of HANYS' 2013 Advocacy Survey, October 2013.* Healthcare Association of New York State; 2014. Available at: http://www.hanys.org/communications/publications/2013/2013_physician_advocacy_survey.pdf. Accessed July 17, 2015.

2. Nursing Homes

In 2014, 145 nursing homes in New York responded to the survey for a response rate of 23%. Nursing homes across the state reported the most difficulty recruiting experienced RNs, nurse managers, and MDS coordinators. Nursing homes also noted that CNAs were the most difficult to retain, followed by both experienced and newly licensed RNs, LPNs, and personal care assistants (Table 15).

Table 15. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in New York, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Certified Nursing Aides	3.0	3.6	68%	43%	15%	37%
Clerical	2.0	1.8	5%	57%	10%	43%
Dietitians/Nutritionists	2.8	2.2	43%	40%	9%	43%
Licensed Practical Nurses	3.1	3.2	63%	40%	12%	36%
Medical Billers	2.8	2.1	64%	27%	5%	36%
Occupational Therapists	3.2	2.5	53%	39%	9%	47%
Occupational Therapy Assistants	3.1	2.5	48%	45%	10%	39%
Personal Care Assistants	2.5	3.2	40%	27%	13%	47%
Physical Therapists	3.1	2.5	46%	49%	11%	40%
Physical Therapy Assistants	3.0	2.4	48%	38%	17%	45%
Registered Nurses						
Newly Licensed RNs	2.5	3.1	55%	43%	14%	47%
Experienced RNs	3.7	3.2	55%	54%	15%	41%
MDS Coordinators	3.5	2.8	57%	45%	10%	39%
Nurse Managers	3.7	3.0	55%	50%	9%	38%
Directors of Nursing	3.4	2.5	62%	40%	13%	47%
Rec. Therapists/Activities Dirs.	2.6	2.3	56%	44%	6%	50%
Respiratory Therapists	3.2	2.6	77%	23%	8%	23%
Social Workers						
Licensed Clinical SWs	2.9	2.3	47%	29%	12%	35%
Licensed Master's SWs	3.0	2.5	52%	32%	13%	32%
Speech-Language Pathologists	3.1	2.7	63%	42%	13%	50%

- Forty-one percent (41%) of nursing homes statewide reported difficulty hiring part-time workers.
- More than half (51%) of nursing homes reported difficulty hiring workers for evening, overnight, and weekend shifts.
- Most nursing homes (82%) were not planning to expand or reduce services next year.
- Only 11% of nursing homes statewide reported difficulty hiring bilingual workers. Desired languages were Cantonese, Mandarin, and Spanish.

3. Home Health Care Agencies

In 2014, 56 home health care agencies^r in New York responded to the survey for a response rate of about 21%. Home health care agencies reported the most difficulties recruiting occupational therapists, followed by speech-language pathologists, dietitians/nutritionists, physical therapists, and experienced RNs—citing worker shortages as the primary reason for recruiting difficulties. Survey respondents reported difficulty retaining experienced RNs and respiratory therapists (Table 16).

Table 16. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in New York, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Dietitians/Nutritionists	3.8	2.8	83%	35%	17%	35%
Home Health Aides	3.0	2.9	63%	29%	13%	54%
Licensed Practical Nurses	2.4	2.3	29%	50%	14%	50%
Occupational Therapists	4.1	3.0	83%	23%	17%	37%
Personal Care Aides/Homemakers	3.2	3.1	55%	36%	0%	55%
Physical Therapists	3.8	3.0	73%	27%	10%	53%
Registered Nurses						
Newly Licensed RNs	2.5	3.0	21%	43%	21%	50%
Experienced RNs	3.8	3.4	53%	58%	21%	50%
Respiratory Therapists	3.5	3.2	67%	33%	17%	67%
Social Workers						
Licensed Clinical SWs	3.5	3.0	78%	33%	17%	44%
Licensed Master's SWs	3.3	2.8	73%	32%	18%	41%
Speech-Language Pathologists	3.9	3.1	73%	12%	12%	42%

- Forty-seven percent (47%) reported difficulty hiring part-time workers.
- Sixty percent (60%) indicated difficulty hiring workers for off shifts (includes staff working on evening, night, or weekend shifts).

^r For purposes of this report, home health care agencies include certified home health agencies, long-term home health care programs, and hospices.

4. Federally Qualified Health Centers

Sixty-eight percent (68%) of all FQHCs responded to the survey in 2014. Respondents reported the most difficulty recruiting psychiatric NPs, psychiatrists, and ob/gyn physicians, and reported the most difficulty retaining psychiatric NPs, family NPs, and medical assistants (Table 17).

Table 17. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in New York, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.5	2.2
	Internal Medicine	3.4	2.0
	Ob/Gyn	3.6	2.1
	Pediatric	3.1	1.9
	Physician Assistants	2.5	1.9
Nurse Practitioners	Pediatric	2.4	2.2
	Adult	2.5	2.2
	Family	2.6	2.4
	Midwives	2.2	1.9
	Psychiatric	3.9	2.5
Nursing	Registered	2.6	2.1
	Licensed Practical	2.1	2.1
	Medical Assistants	1.6	2.3
Behavioral Health	Psychiatrists	3.8	2.1
	Psychologists	2.9	1.8
	Substance Abuse Counselors	2.9	2.2
	Social Workers	2.7	2.0
Oral Health	Dentists	2.9	2.0
	Dental Hygienists	2.0	1.6
	Dental Assistants/Aides/Techs	1.8	1.9
Enabling Services	Care Coordinators/Case Managers	2.3	2.0
	HIV Counselors	1.8	1.9
	Community Health Workers	1.9	1.9
	Patient Health Educators	2.0	2.0
	Nutritionists/Nutrition Educators	2.9	2.0
	Eligibility Assistance	1.7	1.9
	Patient Health Navigators	1.9	2.2
	Outreach Workers	1.7	1.9
Administrative Support	Billing/Data Entry	1.9	1.9
	IT Systems Admin/Maintenance	2.3	1.9

- Eighty-eight percent (88%) of FQHCs indicated plans to expand services, and the majority of them expect to expand nurses, primary care physicians, and enabling service providers. None indicated plans to reduce services.
- Also, 67% of centers reported they had difficulty hiring bilingual staff; Spanish was the language most needed.

I. Projected Job Growth

Between 2012 and 2022 the NYSDOL projects more than 8,300 annual job openings (both new jobs and replacement of existing workers who leave) for home health aides in the state, more than 6,200 annual job openings for personal care aides, and over 5,600 annual job openings for RNs (Table 18).

Table 18. Employment Projections for Selected Health Occupations in New York, including New York City, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Home Health Aides	129,500	188,130	58,630	45.3%	8,320
Personal Care Aides	142,480	194,990	52,510	36.9%	6,270
Registered Nurses	171,900	194,870	22,970	13.4%	5,630
Nursing Assistants	104,700	119,010	14,310	13.7%	3,420
Licensed Practical and Licensed Vocational Nurses	50,010	60,320	10,310	20.6%	2,250
Social Workers	55,630	62,490	6,860	12.3%	1,880
Medical Assistants	22,140	28,080	5,940	26.8%	1,010
Physical Therapists	15,790	20,070	4,280	27.1%	820
Pharmacy Technicians	16,670	20,120	3,450	20.7%	520
Medical and Health Services Managers	27,320	30,650	3,330	12.2%	990
Emergency Medical Technicians and Paramedics	16,580	19,670	3,090	18.6%	760
Dental Assistants	17,570	20,420	2,850	16.2%	650
Physician Assistants	9,560	12,360	2,800	29.3%	450
Pharmacists	19,090	21,620	2,530	13.3%	710
Nurse Practitioners	9,150	11,520	2,370	25.9%	420
Dental Hygienists	9,820	12,140	2,320	23.6%	480
Radiologic Technologists	12,410	14,330	1,920	15.5%	370
Medical and Clinical Laboratory Technicians	7,480	9,180	1,700	22.7%	370
Diagnostic Medical Sonographers	4,100	5,750	1,650	40.2%	220
Medical Records and Health Info Techs	9,340	10,950	1,610	17.2%	410
Occupational Therapists	8,270	9,830	1,560	18.9%	270
Speech-Language Pathologists	10,570	12,050	1,480	14.0%	310
Surgical Technologists	5,290	6,270	980	18.5%	150
Respiratory Therapists	6,150	7,030	880	14.3%	180
Medical and Clinical Laboratory Technologists	10,130	10,970	840	8.3%	350
Dietitians and Nutritionists	4,950	5,770	820	16.6%	140
Clinical, Counseling, and School Psychologists	13,160	13,970	810	6.2%	440
Cardiovascular Technologists & Technicians	2,940	3,650	710	24.1%	110
Orderlies	3,910	4,510	600	15.3%	130
Nurse Anesthetists	1,660	1,950	290	17.5%	60
Psychiatric Aides	8,790	9,070	280	3.2%	200
Nurse Midwives	540	640	100	18.5%	20

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

1. National Workforce Analysis Overview

The National Center for Health Workforce Analysis, of the US Department of Health and Human Services' Health Resources and Services Administration (HRSA), produces specialty-specific reports assessing the nation's health workforce. Many of these reports include state-level analyses, which reveal geographic variation in the supply and demand of health professionals, use current supply and demand trends, and consider the changing population to estimate future surpluses in supply or demand. However, these nation- and statewide reports mask local variations in the distribution of health care professionals. Finally, it is important to note that these reports are limited by the changing health care delivery system, including reimbursement or technology changes, and do not account for policies and programs established by the Affordable Care Act. Findings from these reports are presented below. References to "exhibits" indicate that evidence comes from original HRSA reports, whereas "tables" and "charts" highlight data contained in this CHWS tracking report.

2. Primary Care Workforce

According to the 2013 report *Projecting the Supply and Demand for Primary Care Practitioners Through 2020*,⁵ national demand for primary care services is expected to increase between 2010 and 2020 mainly due to an aging and growing population and the expansion of health insurance coverage. During this time, demand for primary care physicians is expected to exceed the national supply, creating a national shortage. Conversely, HRSA projects primary care NP and PA workforce supplies to increase by 30% and 58%, respectively, exceeding demand requirements. The model also indicates that a reliance on teamwork—through NP and PA integration in primary care delivery models—could partially alleviate the projected primary care physician shortage, reducing the deficit from 20,400 to 6,400 primary care physicians.

Although HRSA's research is limited to national and state findings that mask local geographic variations, historical changes in the supply of health workers for New York State are consistent with the national trends outlined in this HRSA report. The NYS Office of Professions, which tracks the number of licensed professionals in the state, reported that between 2009 and 2013 the number of NPs and PAs in New York State grew by 27% and 26%, respectively (Table 13). Additionally, CHWS surveys of hospital and FQHC administrators reveal anticipated increases in employment of primary care physicians, NPs, and PAs (Tables 14 and 17). Likewise, BLS projects statewide employment of NPs and PAs to grow between 2012 and 2022 by 26% and 29%, respectively (Table 18). Regionally, these figures are expected to fall between 17% (Southern Tier) and 36% (Mohawk Valley) for NP employment growth, and between 16% (North Country) and 41% (Hudson Valley) for PA employment growth (Tables 29, 41, 53, 65, 77, 88, 101, 113, 125, and 147).

3. Oral Health Workforce

Reminiscent of the primary care environment, the oral health care workforce is expected to experience a national shortage of dentists and a surplus of dental hygienists. HRSA's report *National and State-Level*

⁵ For more information, see

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/primarycare/projectingprimarycare.pdf>

Projections of Dentists and Dental Hygienists in the U.S., 2012-2025^t projects dentist shortages to reach 15,600 FTEs nationally and 1,024 FTEs in New York. Conversely, the report estimates a national surplus of dental hygienists of 28,100 FTEs and a surplus of 1,541 FTEs in New York.

As previously cited in this report, statewide findings reinforce the national trend of dental hygienist surpluses. Between 2009 and 2013 the number of licensed dental hygienists in New York State increased by 8.2%, while the number of dental hygienist jobs fell by nearly 9% (Tables 11 and 13). Between 2012 and 2022 the number of dental hygienists are expected to increase by nearly 24% (Table 18). Regionally, these projections range from 10% (Mohawk Valley) employment growth to an increase of nearly 26% (New York City and Long Island) (Tables 29, 41, 53, 65, 77, 88, 101, 113, 125, and 147).

4. Nursing Workforce

Unlike physicians and dentists, the recent HRSA report *The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025*^u projects a growing national surplus of RNs and LPNs by 2025, with supply exceeding demand by 340,000 and 59,000, respectively. These broad figures can be misleading, however, as they “mask a distributional imbalance” at the state level. Although some states, such as Arizona, are expected to experience large RN and LPN shortfalls by 2025 (eg, Arizona with -28,100 RNs and -9,590 LPNs), New York State is expected to experience a surplus, with supply surpassing demand by 23,400 RNs and 1,580 LPNs.

HRSA’s model assumes that nurses will practice in the state “where they have been trained” and explains that optimal nurse migration—that is, a willingness to “migrate to states where the in-state supply did not meet demand”—would result in a relative surplus in every state. Findings from a recent CHWS report affirm these assumptions. The report explains, “RNs educated in New York represent the single largest source of RNs practicing in the state, but there may be a maldistribution or shortage of RNs in certain areas of the state.”^v

Findings in this report suggest that New York State is experiencing faster growth than most, but regional variations are masked by aggregated figures. Although the BLS predicts 2012-2022 employment growth of 13% for RNs and 21% for LPNs, analysis by NYSDOL region suggest windows for employment growth of 8% (North Country) to 14% (New York City) for RNs and 10% (North Country) to 29% (Hudson Valley) and LPNs (Tables 29, 41, 53, 65, 77, 88, 101, 113, 125, and 147).

^t For more information, see <http://bhpr.hrsa.gov/healthworkforce/supplydemand/dentistry/nationalstatelevelprojectionsdentists.pdf>

^u For more information, see

<http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf>

^v For more information, see http://chws.albany.edu/archive/uploads/2015/06/Nursing_Education_Trends_2005-2015.pdf

V. REGIONAL PROFILES

A. New York City

The NYSDOL New York City region includes the 5 counties in New York City: Bronx, New York (Manhattan), Kings (Brooklyn), Queens, and Richmond (Staten Island).

Population

New York City's population had a higher percentage of people under 100% and under 200% of the federal poverty level (FPL) than New York as a whole. New York City's population was also much more racially and ethnically diverse. New York City also had a higher percentage of its population with less than a high school education or equivalent (Table 19).

Table 19. Selected Population Characteristics in the New York City Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	8,268,999	N/A	N/A
Population under 100% FPL	1,653,857	20.0%	14.9%
Population under 200% FPL	3,253,371	39.3%	31.3%
Population aged birth to 17 years	1,989,283	24.1%	24.9%
Population aged 65 and older	1,023,393	12.4%	13.8%
Population female aged 15 to 44	1,915,012	23.2%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	5,074	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	77,706	0.9%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	31,237	0.4%	0.3%
Black/African American, non-Hispanic	1,877,183	22.7%	14.4%
Hispanic/Latino	2,371,116	28.7%	17.9%
Asian/Pacific Islander, non-Hispanic	1,073,172	13.0%	7.6%
American Indian/Native Alaskan, non-Hispanic	15,667	0.2%	0.2%
Two or more/other	197,543	2.4%	2.1%
Less than high school education	1,142,052	20.2%	14.8%
High school or equivalent	2,201,226	39.0%	43.5%
Associate degree	352,244	6.2%	8.4%
Bachelor's degree	1,148,482	20.4%	18.9%
Master's degree or higher	796,895	14.1%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

New York City had a lower number of deaths per capita and a higher birth rate than statewide between 2010 and 2012. However, New York City had much higher rates of asthma (both adult and pediatric), diabetes, preventable hospitalizations, and chronic lower respiratory disease hospitalizations than the state as a whole. Additionally, New York City had a higher percentage of births with no or late prenatal care and a higher rate of both total hospitalizations and ED visits than statewide (Table 20).

Table 20. Selected Health Indicators in the New York City Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate
	Number	Rate ^a	
Total deaths, per 100,000	51,045	618.6	752.2
Deaths due to heart disease, per 100,000	16,995	205.9	225.6
Deaths due to all cancers, per 100,000	12,387	151.3	180.3
Deaths due to diabetes, per 100,000	1,725	20.9	19.7
Total births, per 1,000 females aged 15 to 44	120,156	63.0	60.3
Teen births, per 1,000 females aged 15 to 19	7,015	27.4	22.7
Low-birthweight births, as a percent of total births	10,335	8.6	8.2
Late/no prenatal care, as a percent of total births	8,102	7.0	5.6
Infant deaths, per 1,000 live births	550	4.6	5.1
Total hospitalizations, per 10,000	1,117,357	1,354.0	1,263.4
Preventable hospitalizations, per 10,000	109,142	168.5	156.5
Adult asthma hospitalizations, per 10,000	15,973	24.7	16.6
Pediatric asthma hospitalizations, per 10,000	7,871	44.3	26.9
Diabetes hospitalizations, ^b per 10,000	228,221	276.6	249.7
CLRD hospitalizations, ^c per 10,000	35,249	42.7	37.8
Heart disease hospitalizations, per 10,000	91,674	111.1	114.6
Total ED visits, per 10,000	3,699,886	4,483.5	4,007.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.
^b Primary diagnosis only.
^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

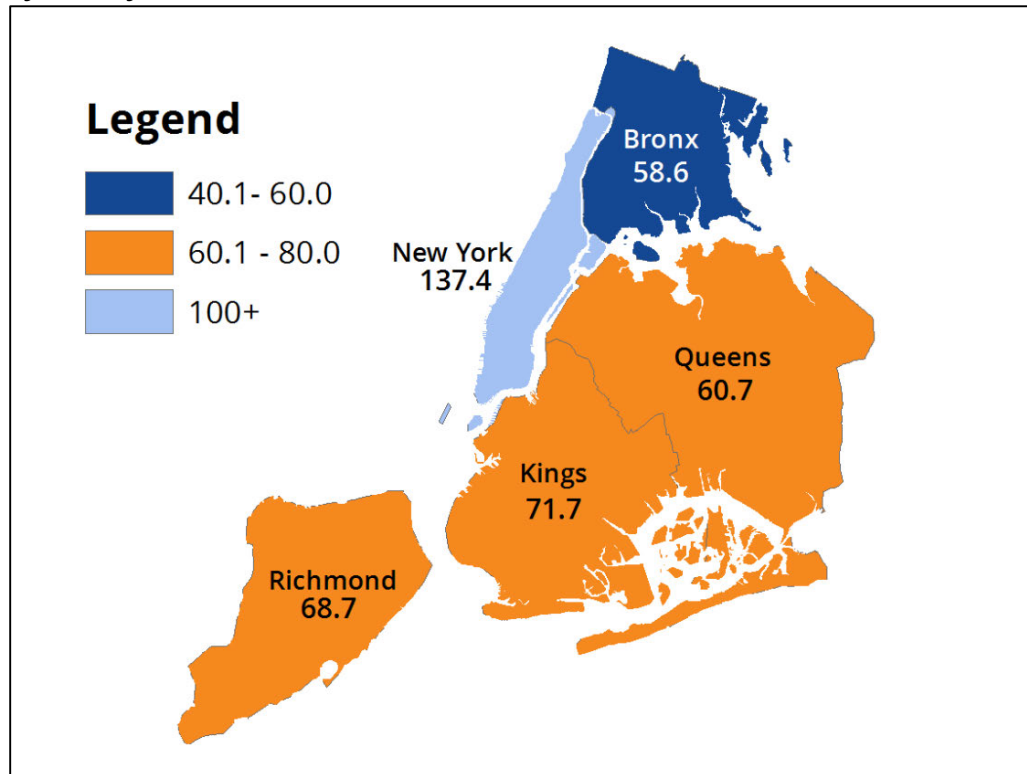
There were about 6,700 primary care physicians practicing in the New York City region in 2014. Slightly less than half of them (49%) practiced general internal medicine, and nearly 23% practiced general pediatrics. There were 78.9 primary care physicians per 100,000 total population in New York City, which was higher than the statewide rate of 74.5 per 100,000 total population. At 83.8 physicians per 100,000 population, general pediatricians were the most prevalent of the primary care specialties—a reflection of the region’s young population. The county of New York had the most primary care physicians per 100,000 total population (137.4), and Queens had the least (60.7) (Table 21 and Figure 18).

Table 21. Primary Care Physicians in the New York City Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	1,072	12.6
Internal Medicine (General)	3,259	38.4
Geriatrics	71	6.8
Obstetrics/Gynecology	768	39.0
Pediatrics (General)	1,532	83.8
Total	6,702	78.9

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 18. Number of Primary Care Physicians per 100,000 Population in the New York City Region, by County, 2014

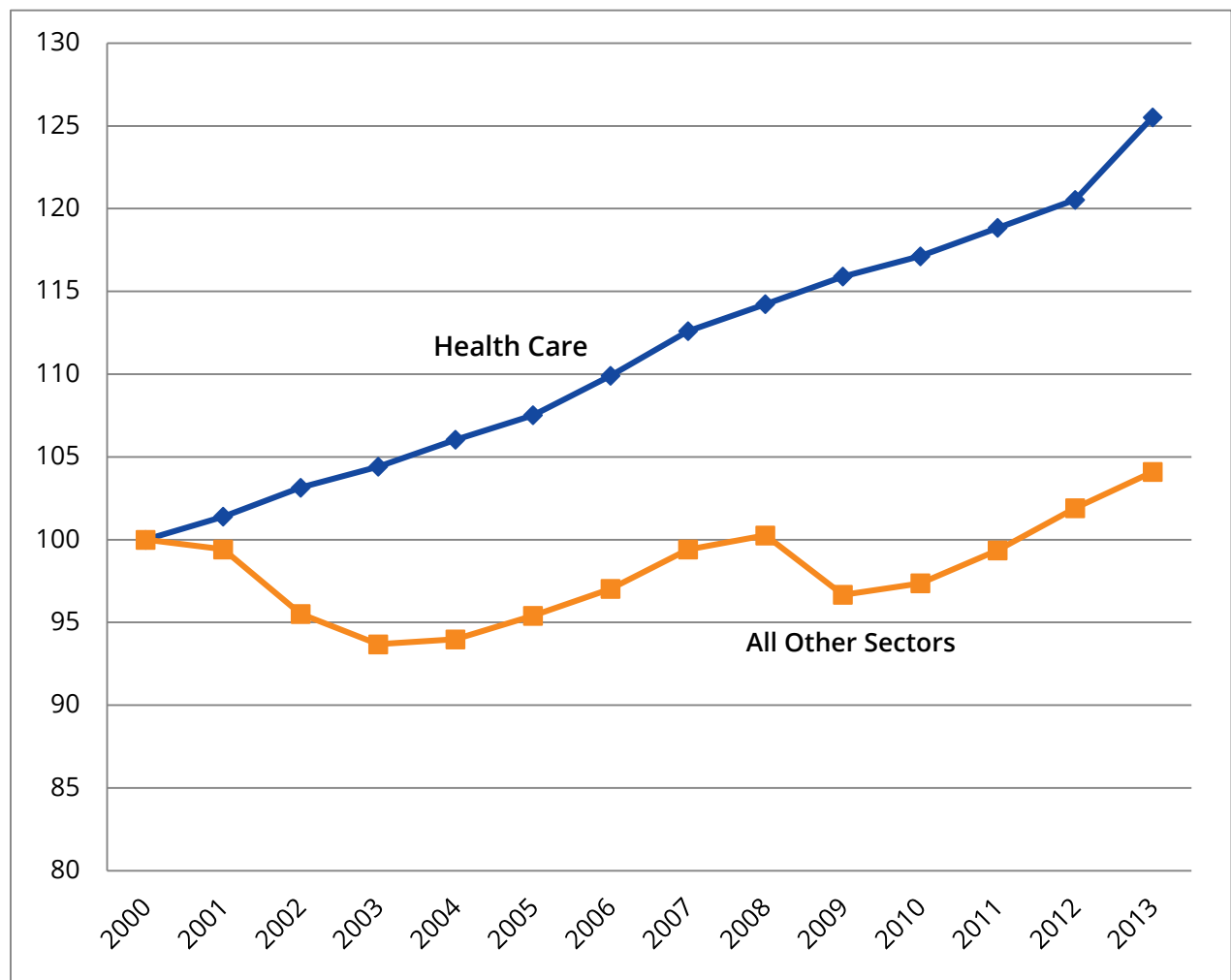


Employment

Total Health Sector Employment

Between 2000 and 2013 employment in the health sector in New York City grew steadily, with the largest increases occurring after 2006. Employment trends in all other sectors fluctuated, experiencing peaks and valleys. From 2008 to 2009 employment in New York City in sectors outside of health care declined but has since recovered. Between 2000 and 2013 employment in the health sector in New York City rose by nearly 26%, while employment in all other sectors grew by about 4% during the same period (Figure 19).

**Figure 19. Employment Growth in the New York City Region, 2000-2013
(Standardized to 2000)**

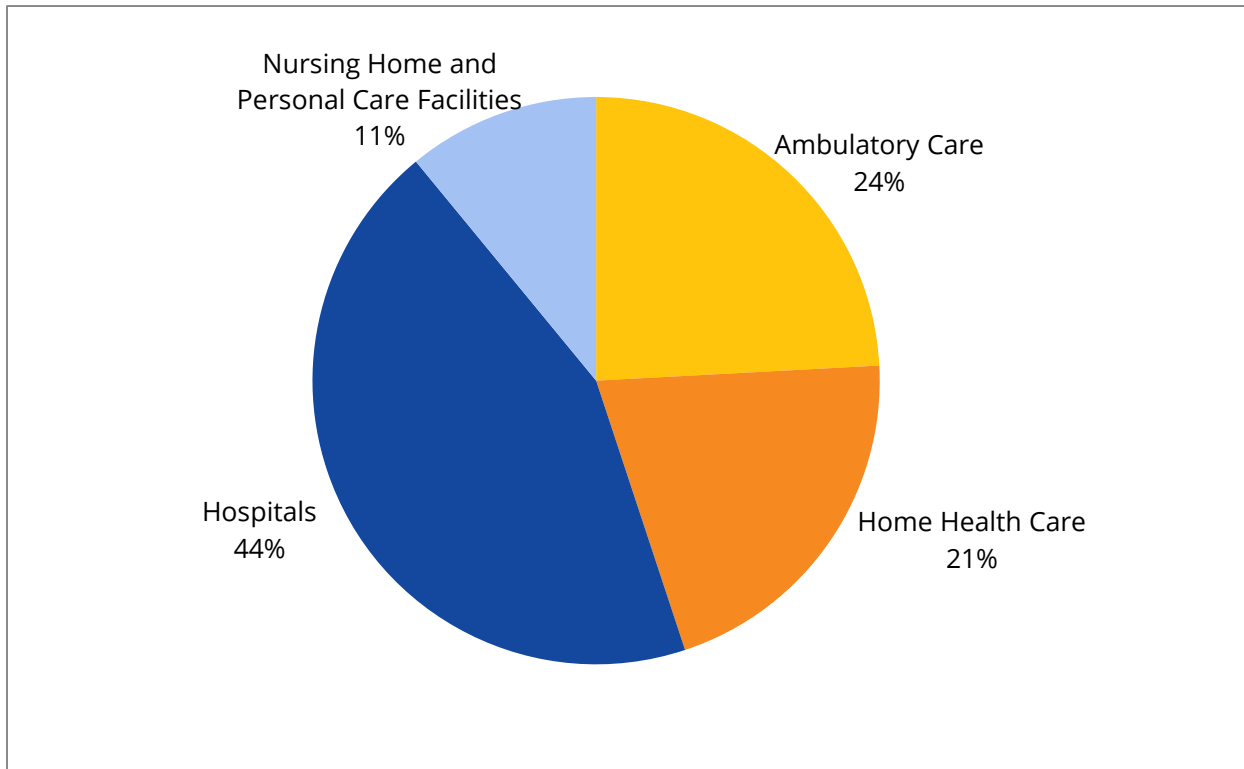


Source: New York State Department of Labor, ES-202

Employment by Setting

Hospitals continued to be the largest employer of New York City health workers in 2013, accounting for 44% of all health care jobs. Ambulatory care settings and home health care agencies followed at 24% and 21%, respectively (Figure 20).

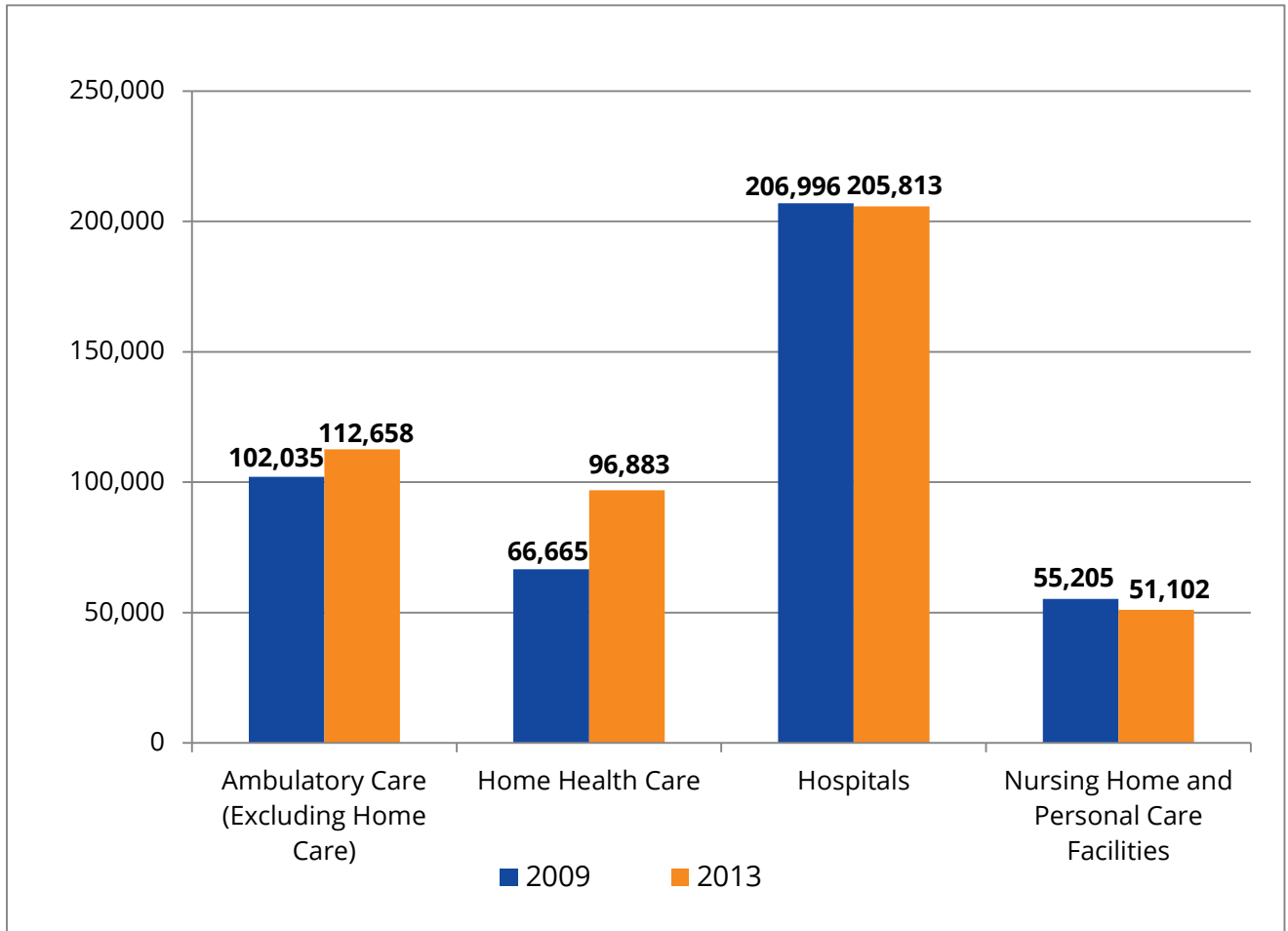
Figure 20. Health Sector Employment in the New York City Region, by Setting, 2013



Source: New York State Department of Labor, ES-202

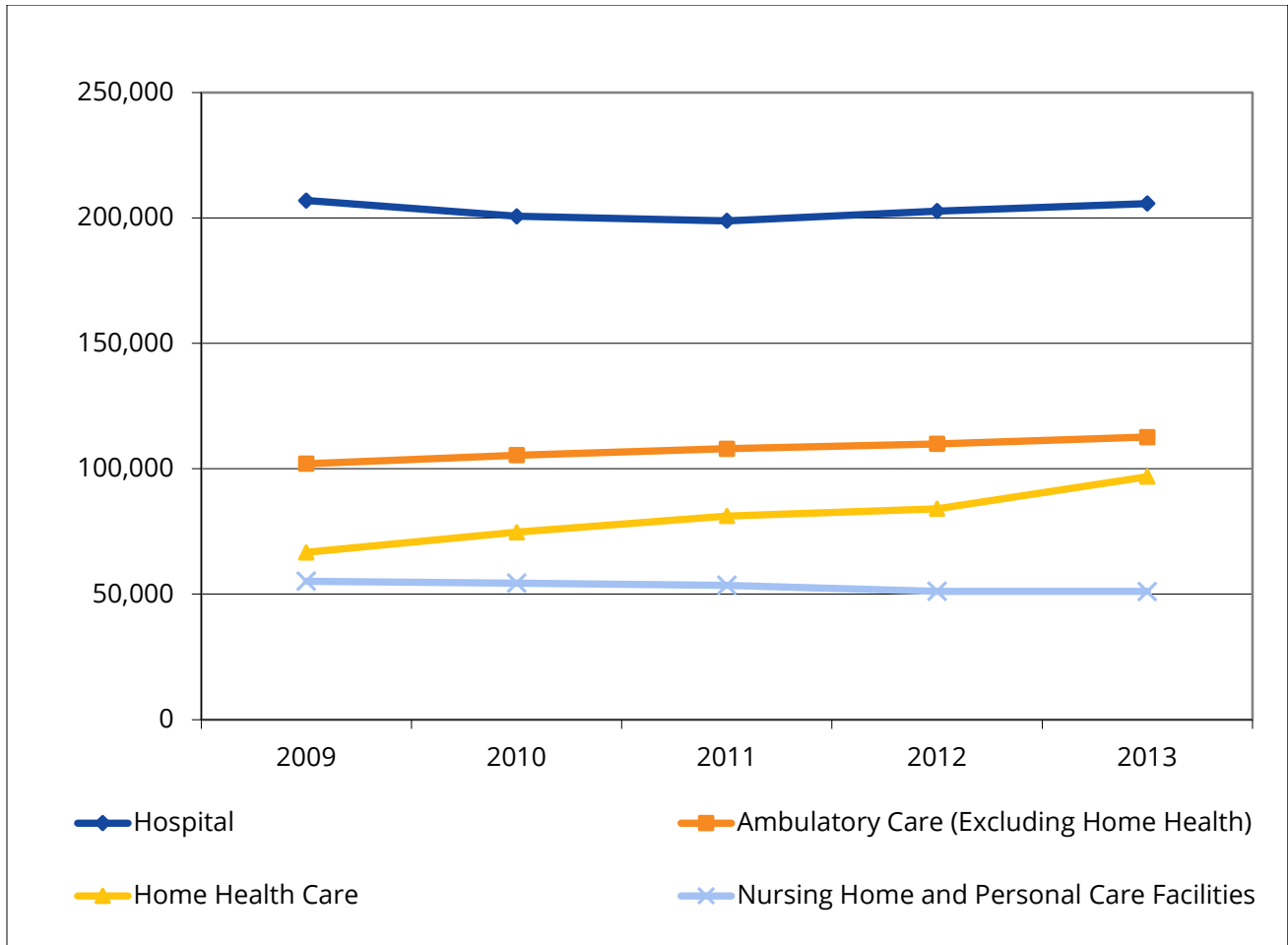
Between 2009 and 2013 health sector employment increased in New York City in ambulatory care and home health care, while hospitals and nursing homes lost jobs in New York City during the same period. Home health care jobs grew by more than 45% between 2009 and 2013. Ambulatory care settings experienced the next largest job growth (10%), whereas the number of jobs in hospitals and nursing homes declined by 1% and 7%, respectively (Figures 21 and 22).

Figure 21. Number of Health Care Jobs in the New York City Region by Setting, 2009-2013



Source: New York State Department of Labor, ES-202

Figure 22. Number of Health Care Jobs in the New York City Region, by Setting, 2009-2013



Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations for the New York City region is reported in Table 22. As of the first quarter of 2014, home health aides had the most jobs (103,450), followed by RNs (94,230) and personal care aides (80,200). Dietetic technicians (320) and nurse midwives (290) had the fewest jobs in the region.

Average wages per hour in selected health occupations for New York City are reported in Table 23. These wages are based on 2010-2013 survey data, which was updated to include the first quarter of 2014, and reflect a minimum wage of \$8.00 per hour. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$72.57), followed by medical and health service managers (\$61.99), pharmacists (\$57.87), and NPs (\$52.75). Personal care aides and home health aides were the lowest wage earners (\$10.94 and \$9.67, respectively).

Table 22. Number of Jobs in Selected Health Occupations in the New York City Region, 2013

Occupation	Employment
Home Health Aides	103,450
Registered Nurses	94,230
Personal Care Aides	80,200
Nursing Assistants	58,220
Social Workers	32,200
Licensed Practical Nurses	20,480
Medical and Health Service Managers	17,380
Medical Assistants	15,860
Pharmacists	11,240
Dental Assistants	10,050
Pharmacy Technicians	9,870
Physical Therapists	8,230
Medical Secretaries	7,690
Radiologic Technologists	6,410
Medical and Clinical Laboratory Technologists	6,330
Occupational Therapists	4,900
Physician Assistants	4,800
Speech-Language Pathologists	4,780
Nurse Practitioners	4,610
Medical Records and Health Information Techs	4,390
Dental Hygienists	4,090
Medical and Clinical Laboratory Technicians	3,890
Physical Therapy Assistants/Aides	3,790
Respiratory Therapists	3,510
Surgical Technologists	3,000
Dietitians and Nutritionists	2,840
Orderlies	2,450
Cardiovascular Technologists & Technicians	1,180
Occupational Therapy Assistants/Aides	950
Nuclear Medicine Technologists	600
Certified Registered Nurse Anesthetists	440
Dietetic Technicians	320
Nurse Midwives	290

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 23. Average Hourly Wage in Selected Health Occupations in the New York City Region, 2014

Occupation	Average Wage per Hour
Nurse Anesthetists	\$72.57
Medical and Health Services Managers	\$61.99
Pharmacists	\$57.87
Nurse Practitioners	\$52.75
Nurse Midwives	\$48.78
Physician Assistants	\$48.23
Speech-Language Pathologists	\$42.93
Registered Nurses	\$41.48
Physical Therapists	\$39.71
Nuclear Medicine Technologists	\$39.21
Occupational Therapists	\$37.93
Respiratory Therapists	\$34.81
Dental Hygienists	\$34.65
Radiologic Technologists and Technicians	\$34.28
Medical and Clinical Laboratory Technologists	\$31.94
Healthcare Social Workers	\$30.17
Dietitians and Nutritionists	\$29.91
Physical Therapist Assistants	\$27.04
Cardiovascular Technologists & Technicians	\$26.86
Occupational Therapy Assistants	\$26.63
Mental Health and Substance Abuse Social Workers	\$26.00
Licensed Practical and Licensed Vocational Nurses	\$24.54
Surgical Technologists	\$24.20
Medical and Clinical Laboratory Technicians	\$23.65
Medical Records and Health Info Techs	\$21.78
Medical Secretaries	\$20.95
Dietetic Technicians	\$20.13
Pharmacy Technicians	\$17.56
Occupational Therapy Aides	\$17.32
Dental Assistants	\$16.99
Nursing Assistants	\$16.88
Medical Assistants	\$16.42
Orderlies	\$15.77
Physical Therapist Aides	\$13.45
Personal Care Aides	\$10.94
Home Health Aides	\$9.67

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

NPs had the largest percentage increase, growing by more than 45% between 2009 and 2013. During the same period the number of social workers increased by more than 3,000, or by 17%, and the number of RNs in New York City grew by over 6,600, or by 12%. The numbers of speech-language pathologists, PAs, dental hygienists, respiratory therapists, and physical therapy assistants all grew by more than 20%. Conversely, clinical laboratory technicians and clinical laboratory technologists experienced a decrease of 21% and 3%, respectively (Table 24).

Table 24. Number of Licensed Individuals in Selected Health Occupations in the New York City Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	57,283	58,980	59,559	61,393	63,947	6,664	11.6%
Social Workers	17,917	18,353	19,175	19,874	20,987	3,070	17.1%
Licensed Practical Nurses	14,488	14,201	14,588	14,792	15,207	719	5.0%
Pharmacists	5,281	5,503	5,709	5,930	6,291	1,010	19.1%
Physical Therapists	4,508	4,714	4,799	4,978	5,176	668	14.8%
Speech-Language Pathologists	3,572	3,744	3,972	4,243	4,564	992	27.8%
Nurse Practitioners	3,068	3,263	3,541	3,874	4,462	1,394	45.4%
Clinical Laboratory Technologists	4,545	4,493	4,406	4,474	4,418	-127	-2.8%
Physician Assistants	2,734	2,885	3,013	3,211	3,466	732	26.8%
Occupational Therapists	2,695	2,771	2,911	3,067	3,207	512	19.0%
Dental Hygienists	1,638	1,704	1,775	1,856	1,965	327	20.0%
Dietitians/Nutritionists	1,444	1,477	1,489	1,564	1,642	198	13.7%
Respiratory Therapists	1,243	1,331	1,402	1,439	1,516	273	22.0%
Physical Therapy Assistants	1,061	1,085	1,104	1,213	1,296	235	22.1%
Occupational Therapy Assistants	898	944	992	1,013	996	98	10.9%
Clinical Laboratory Technicians	678	631	577	581	537	-141	-20.8%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the New York City reported the most difficulty recruiting nurse managers, clinical laboratory technologists, and clinical laboratory technicians with the primary reason cited as salary levels. Clinical laboratory technicians and technologists were also the most difficult to retain, followed by speech-language pathologists, pharmacists, PAs, and nurse managers (Table 25).

Table 25. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the New York City Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	2.4	2.2	30%	39%	4%
CNA/Patient Care Techs	1.1	1.3	0%	12%	8%
Clinical Lab Technicians	3.9	2.8	69%	75%	6%
Clinical Lab Technologists	4.0	2.8	82%	73%	18%
Licensed Clinical Social Workers	2.0	1.8	14%	29%	0%
Licensed Practical Nurses	1.6	1.4	8%	8%	8%
Medical Assistants	1.5	1.7	0%	7%	13%
Medical Hospital Coders	2.7	1.8	43%	24%	10%
Nurse Practitioners	3.1	2.3	21%	58%	0%
Occupational Therapists	2.4	2.1	12%	12%	12%
Pharmacists	2.5	2.4	19%	24%	19%
Physical Therapists	2.3	2.1	10%	38%	14%
Physician Assistants	2.6	2.4	17%	43%	22%
Radiologic Technicians	2.1	1.8	22%	28%	6%
Radiologic Technologists	2.5	2.1	33%	38%	5%
Registered Nurses					
Newly Licensed RNs	1.5	2.0	23%	31%	0%
Experienced RNs	3.5	2.0	62%	35%	4%
Nurse Managers	4.1	2.4	64%	84%	4%
Speech-Language Pathologists	2.8	2.6	12%	65%	12%

- Many hospitals in the New York City region projected growth in ambulatory services, with increasing demand for RNs (83%), NPs (73%), medical assistants (64%), and PAs (63%).

Nursing Homes

Nursing homes in New York City reported that nurse managers were the most difficult to recruit, followed by MDS coordinators, experienced RNs, and speech-language pathologists. MDS coordinators were the most difficult to retain, followed by nurse managers and speech-language pathologists. The primary reasons for these difficulties were related to salary and location (Table 26).

Table 26. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the New York City Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Certified Nursing Aides	2.1	2.6	33%	50%	33%	17%
Clerical	2.4	2.5	0%	75%	0%	25%
Dietitians/Nutritionists	3.1	2.6	38%	25%	0%	38%
Licensed Practical Nurses	2.8	2.9	50%	33%	17%	33.3%
Medical Billers	2.6	1.9	50%	0%	0%	50%
Occupational Therapists	3.0	2.6	50%	0%	0%	50%
Occupational Therapy Assts.	3.1	2.9	33%	33%	0%	33%
Personal Care Assistants	1.7	2.0	0%	0%	0%	0%
Physical Therapists	2.8	2.6	0%	50%	0%	50%
Physical Therapy Assistants	2.6	2.5	0%	0%	0%	100%
Registered Nurses						
Newly Licensed RNs	2.4	2.8	75%	0%	0%	50%
Experienced RNs	3.3	2.9	38%	50%	13%	50%
MDS Coordinators	3.5	3.5	33%	50%	0%	33%
Nurse Managers	3.6	3.4	40%	40%	0%	60%
Directors of Nursing	3.2	2.8	29%	29%	0%	57%
Rec. Therapists/Activities Dirs.	2.6	2.3	33%	100%	0%	33%
Respiratory Therapists	2.5	1.0	0%	0%	0%	0%
Social Workers						
Licensed Clinical SWs	3.2	2.7	50%	33%	0%	17%
Licensed Master's SWs	3.2	3.0	60%	40%	0%	0%
Speech-Language Pathologists	3.3	3.1	50%	50%	0%	0%

- Twenty-three percent (23%) reported difficulty hiring part-time workers.
- Thirty percent (30%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- The majority reported no plans to either expand (99%) or reduce (97%) services next year.

Home Health Care Agencies

Home health care agencies in New York City reported the most difficulty recruiting speech-language pathologists, followed by occupational therapists and respiratory therapists. Experienced RNs were the most difficult to retain, followed by respiratory therapists, dietitians/nutritionists, physical therapists, and speech-language pathologists. The primary reason for difficulty was attributed to a shortage of workers (Table 27).

Table 27. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the New York City Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Dietitians/Nutritionists	3.5	3.5	67%	67%	67%	33%
Home Health Aides	2.8	2.6	20%	20%	20%	40%
Licensed Practical Nurses	2.5	2.7	0%	50%	50%	0%
Occupational Therapists	4.3	3.3	75%	38%	25%	25%
Personal Care Aides/Homemakers	3.1	2.4	25%	25%	0%	50%
Physical Therapists	3.9	3.4	75%	38%	13%	38%
Registered Nurses						
Newly Licensed RNs	2.2	2.8	0%	0%	100%	0%
Experienced RNs	3.6	3.6	50%	67%	67%	50%
Respiratory Therapists	4.0	3.5	100%	67%	67%	33%
Social Workers						
Licensed Clinical SWs	3.1	3.3	75%	100%	50%	50%
Licensed Master's SWs	3.2	3.2	60%	80%	60%	40%
Speech-Language Pathologists	4.4	3.4	88%	13%	25%	25%

- Forty-six percent (46%) indicated difficulty hiring bilingual workers, with Spanish the language most needed.
- Forty percent (40%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).

FQHCs

FQHCs in New York City reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by ob/gyn physicians, and reported the most difficulty retaining patient health navigators, family NPs, and pediatric NPs (Table 28).

Table 28. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the New York City Region, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.5	2.2
	Internal Medicine	3.4	2.1
	Ob/Gyn	3.5	2.1
	Pediatric	3.1	1.8
	Physician Assistants	2.2	1.9
Nurse Practitioners	Pediatric	2.6	2.4
	Adult	2.6	2.3
	Family	2.6	2.4
	Midwives	2.4	2.1
	Psychiatric	3.8	2.3
Nursing	Registered	2.5	2.2
	Licensed Practical	2.2	2.1
	Medical Assistants	1.6	2.3
Behavioral Health	Psychiatrists	3.8	2.0
	Psychologists	2.8	1.5
	Substance Abuse Counselors	2.4	1.9
	Social Workers	2.5	2.0
Oral Health	Dentists	2.6	2.0
	Dental Hygienists	1.9	1.8
	Dental Assistants/Aides/Techs	1.7	1.8
Enabling Services	Care Coordinators/Case Managers	2.3	2.2
	HIV Counselors	1.8	2.1
	Community Health Workers	2.4	2.3
	Patient Health Educators	2.2	2.3
	Nutritionists/Nutrition Educators	2.7	1.9
	Eligibility Assistance	1.9	2.1
	Patient Health Navigators	2.1	2.4
	Outreach Workers	1.7	2.2
Administrative Support	Billing/Data Entry	2.0	1.9
	IT Systems Admin/Maintenance	2.5	2.0

- Eighty-three percent (83%) of FQHCs indicated plans to expand services and expected to hire more nurses, enabling service providers, and primary care physicians.
- Seventy-two percent (72%) of FQHCs reported difficulty hiring bilingual staff; Spanish was most needed (50%), followed by Chinese (19%), French (13%), Creole (13%), and Arabic (6%).
- Fifty percent (50%) reported difficulty hiring workers for weekend shifts.

Employment Projections by Health Occupation

Between 2012 and 2022 the largest numbers of average annual job openings projected in New York City will be for home health aides (5,730), personal care aides (3,610), and RNs (2,260) (Table 29).

Table 29. Employment Projections for Selected Health Occupations in the New York City Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Home Health Aides	81,960	123,670	41,710	50.9%	5,730
Personal Care Aides	77,130	107,720	30,590	39.7%	3,610
Registered Nurses	67,540	77,030	9,490	14.1%	2,260
Nursing Assistants	42,260	47,960	5,700	13.5%	1,370
Social Workers	27,360	31,040	3,680	13.5%	930
Licensed Practical and Licensed Vocational	14,310	17,150	2,840	19.8%	630
Medical Assistants	9,280	11,950	2,670	28.8%	450
Pharmacy Technicians	6,750	8,570	1,820	27.0%	250
Physical Therapists	6,020	7,740	1,720	28.6%	320
Pharmacists	8,680	10,290	1,610	18.5%	370
Medical and Health Services Managers	13,110	14,710	1,600	12.2%	480
Emergency Medical Technicians and	6,900	8,180	1,280	18.6%	320
Dental Assistants	6,410	7,640	1,230	19.2%	250
Physician Assistants	3,630	4,690	1,060	29.2%	180
Nurse Practitioners	2,890	3,630	740	25.6%	140
Radiologic Technologists	4,180	4,910	730	17.5%	130
Occupational Therapists	3,110	3,770	660	21.2%	110
Medical and Clinical Laboratory Technicians	2,800	3,440	640	22.9%	130
Medical Records and Health Info Techs	3,740	4,350	610	16.3%	160
Diagnostic Medical Sonographers	1,310	1,850	540	41.2%	70
Dental Hygienists	2,020	2,540	520	25.7%	100
Speech-Language Pathologists	2,930	3,400	470	16.0%	90
Clinical, Counseling, and School Psychologists	5,450	5,910	460	8.4%	200
Medical and Clinical Laboratory Technologists	4,470	4,870	400	8.9%	160
Surgical Technologists	2,290	2,680	390	17.0%	60
Dietitians and Nutritionists	1,950	2,260	310	15.9%	50
Orderlies	1,840	2,150	310	16.8%	70
Respiratory Therapists	2,200	2,500	300	13.6%	60
Cardiovascular Technologists & Technicians	840	1,030	190	22.6%	30
Psychiatric Aides	3,010	3,200	190	6.3%	80
Nurse Anesthetists	490	580	90	18.4%	20
Nurse Midwives	280	320	40	14.3%	20

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

B. Capital District

The Capital District region includes the counties of Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington.

Population

The population of the Capital District region was less racially and ethnically diverse than New York as a whole and also had a lower percentage of people below 100% and 200% of the FPL. A higher percentage of individuals in the Capital District held high school diplomas or equivalents and associate degrees than statewide, while a lower percentage held bachelor's degrees, and the percentage of individuals with a master's degree or higher was comparable to the statewide rate (Table 30).

Table 30. Selected Population Characteristics in the Capital District Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	1,081,257	N/A	N/A
Population under 100% FPL	118,903	11.0%	14.9%
Population under 200% FPL	267,467	24.7%	31.3%
Population aged birth to 17 years	259,538	24.0%	24.9%
Population aged 65 and older	163,396	15.1%	13.8%
Population female aged 15 to 44	207,277	19.2%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	407	0.0%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	8,316	0.8%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	2,744	0.3%	0.3%
Black/African American, non-Hispanic	70,707	6.5%	14.4%
Hispanic/Latino	44,789	4.1%	17.9%
Asian/Pacific Islander, non-Hispanic	31,765	2.9%	7.6%
American Indian/Native Alaskan, non-Hispanic	1,766	0.2%	0.2%
Two or more/other	24,471	2.3%	2.1%
Less than high school education	67,352	9.1%	14.8%
High school or equivalent	352,461	47.4%	43.5%
Associate degree	84,457	11.4%	8.4%
Bachelor's degree	132,152	17.8%	18.9%
Master's degree or higher	106,841	14.4%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Capital District region had a higher total death rate and deaths due to diabetes and all types of cancer than the state as a whole and upstate New York. The Capital District region had lower rates of asthma (both adult and pediatric) and diabetes hospitalizations compared with both the state as a whole and upstate New York. The rates for preventable hospitalizations and total ED visits were much lower in the Capital District region compared with the state as a whole and upstate New York (Table 31).

Table 31. Selected Health Indicators in the Capital District Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	9,637	892.1	752.2	850.6
Deaths due to heart disease, per 100,000	2,576	238.4	225.6	240.1
Deaths due to all cancers, per 100,000	2,363	219.1	180.3	201.5
Deaths due to diabetes, per 100,000	219	20.3	19.7	18.8
Total births, per 1,000 females aged 15 to 44	11,132	10.4	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	774	20.6	22.7	19.8
Low-birthweight births, as a percent of total births	898	8.1	8.2	7.8
Late/no prenatal care, as a percent of total births	547	5.2	5.6	4.1
Infant deaths, per 1,000 live births	74	6.6	5.1	5.6
Total hospitalizations, per 10,000	120,783	1,118.1	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	11,579	135.3	156.5	147.5
Adult asthma hospitalizations, per 10,000	841	9.8	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	269	12.0	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	23,575	218.2	249.7	230.0
CLRD hospitalizations, ^c per 10,000	3,812	35.3	37.8	34.2
Heart disease hospitalizations, per 10,000	10,462	96.8	114.6	117.2
Total ED visits, per 10,000	382,780	3,543.4	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.

^b Primary diagnosis only.

^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

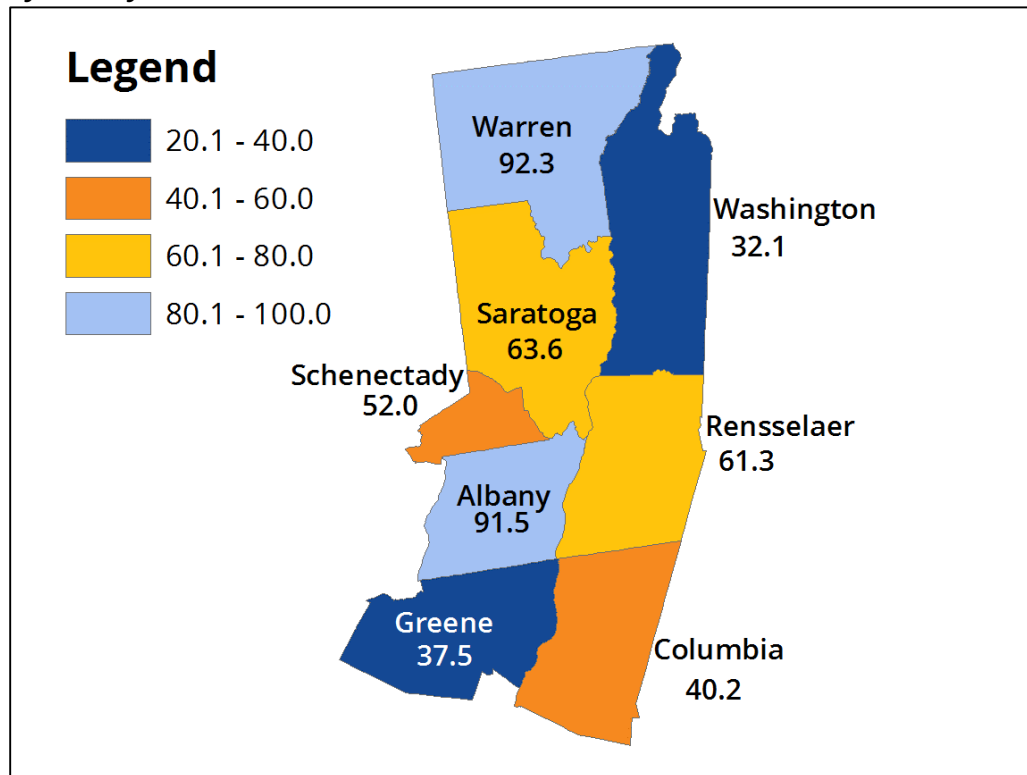
There were nearly 730 primary care physicians practicing in the Capital District region in 2014. Nearly two-fifths (39%) of them were in family or general practice, and 28% were in general internal medicine. There were 67 primary care physicians per 100,000 total population in the Capital District region, which was lower than the statewide rate of 74.5. Warren County had the highest rate of physicians, with 92.3 per 100,000 total population, whereas Washington County had the lowest rate with 32.1 per 100,000 total population (Table 32 and Figure 23).

Table 32. Primary Care Physicians in the Capital District Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	286	26.3
Internal Medicine (General)	202	18.6
Geriatrics	1	0.6
Obstetrics/Gynecology	87	41.7
Pediatrics (General)	152	67.3
Total	728	67.0

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 23. Number of Primary Care Physicians per 100,000 Population in the Capital District Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 employment in the health care sector in the Capital District region grew by more than 1,900 jobs, or by nearly 4%. Ambulatory care (6%), hospitals (4%), and home health (4%) contributed to this overall trend, while nursing home and personal care facilities (-1%) remained stable (Table 33).

Table 33. Number of Health Care Jobs in the Capital District Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	22,980	23,057	23,541	23,796	23,902	845	3.7%
Ambulatory care (excluding home health)	16,905	17,222	17,461	17,735	18,264	1,042	6.1%
Nursing home and personal care facilities	11,191	11,194	11,240	11,413	11,132	-62	-0.6%
Home health care	3,060	3,049	3,078	3,154	3,161	112	3.7%
Total	54,136	54,521	55,320	56,098	56,459	1,938	3.6%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 34. RNs in the Capital District had the largest number of jobs as of the first quarter of 2014 (11,680), followed by nursing assistants (6,200), personal care aides (5,390), and home health aides (4,130). Dietetic technicians (80) and nuclear medicine technologists (50) had the smallest number of jobs in the Capital District region.

Average wages per hour in selected health occupations for the Capital District are reported in Table 35. These wages were based on the data updated to reflect the first quarter of 2014. Pharmacists earned the highest hourly wage in 2014 (\$53.96), followed by medical and health services managers and nurse practitioners (\$50.14 and \$47.16, respectively). Personal care aides (\$12.38), home health aides (\$12.12), and orderlies (\$11.46) were the lowest wage earners.

Table 34. Number of Jobs in Selected Health Occupations in the Capital District Region, 2013

Occupation	Employment
Registered Nurses	11,680
Nursing Assistants	6,200
Personal Care Aides	5,390
Home Health Aides	4,130
Licensed Practical Nurses	3,600
Social Workers	3,500
Medical and Health Service Managers	1,760
Medical Assistants	1,310
Pharmacists	1,040
Pharmacy Technicians	980
Dental Assistants	950
Medical Secretaries	860
Speech-Language Pathologists	800
Radiologic Technologists	770
Physical Therapists	720
Dental Hygienists	720
Physician Assistants	650
Medical Records and Health Information Techs	640
Nurse Practitioners	590
Occupational Therapists	550
Medical and Clinical Laboratory Technologists	550
Medical and Clinical Laboratory Technicians	490
Respiratory Therapists	370
Physical Therapy Assistants/Aides	320
Surgical Technologists	310
Dietitians and Nutritionists	250
Cardiovascular Technologists & Technicians	170
Occupational Therapy Assistants/Aides	170
Orderlies	150
Dietetic Technicians	80
Nuclear Medicine Technologists	50
Nurse Midwives	N/A
Certified Registered Nurse Anesthetists	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 35. Average Hourly Wage in Selected Health Occupations in the Capital District Region, 2014

Occupation	Average Wage per Hour
Pharmacists	\$53.96
Medical and Health Services Managers	\$50.14
Nurse Practitioners	\$47.16
Nurse Midwives	\$47.08
Physician Assistants	\$44.74
Nuclear Medicine Technologists	\$37.27
Physical Therapists	\$33.87
Occupational Therapists	\$33.61
Speech-Language Pathologists	\$32.42
Dental Hygienists	\$30.56
Respiratory Therapists	\$29.72
Dietitians and Nutritionists	\$29.48
Medical and Clinical Laboratory Technologists	\$28.73
Registered Nurses	\$28.53
Radiologic Technologists and Technicians	\$28.35
Mental Health and Substance Abuse Social Workers	\$28.05
Cardiovascular Technologists & Technicians	\$26.45
Healthcare Social Workers	\$24.16
Occupational Therapy Assistants	\$22.55
Physical Therapist Assistants	\$21.33
Occupational Therapy Aides	\$20.32
Medical and Clinical Laboratory Technicians	\$19.65
Dietetic Technicians	\$19.50
Licensed Practical and Licensed Vocational Nurses	\$19.45
Surgical Technologists	\$19.38
Dental Assistants	\$18.13
Medical Records and Health Info Techs	\$16.21
Medical Secretaries	\$16.13
Medical Assistants	\$15.65
Pharmacy Technicians	\$14.06
Nursing Assistants	\$13.36
Physical Therapist Aides	\$12.61
Personal Care Aides	\$12.38
Home Health Aides	\$12.12
Orderlies	\$11.46
Certified Registered Nurse Anesthetists	N/A

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the Capital District experienced the largest increase in the number of licensed RNs—more than 800, or about 6%. This was followed by a significantly smaller increase in LPNs (268), social workers (247), and pharmacists (154). The licensed professions with the largest percentage increases in the Capital District during that period included NPs (21%), PAs (18%), and respiratory therapists (13%). Of note, in 2014 hospitals in the Capital District region reported difficulty recruiting and retaining clinical laboratory technologists and technicians (Table 37), while the number of licensed clinical laboratory technologists and technicians declined between 2009 and 2013 in the Capital District region (Table 36).

Table 36. Number of Licensed Individuals in Selected Health Occupations in the Capital District Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	15,420	15,513	15,506	15,643	16,276	856	5.6%
Licensed Practical Nurses	5,087	5,064	5,245	5,269	5,355	268	5.3%
Social Workers	2,268	2,320	2,415	2,450	2,515	247	10.9%
Pharmacists	1,392	1,431	1,444	1,487	1,546	154	11.1%
Physical Therapists	992	1,011	1,019	1,050	1,087	95	9.6%
Speech-Language Pathologists	892	892	912	913	939	47	5.3%
Dental Hygienists	806	821	849	855	874	68	8.4%
Nurse Practitioners	685	704	716	748	831	146	21.3%
Clinical Laboratory Technologists	949	924	876	854	826	-123	-13.0%
Physician Assistants	575	593	612	643	680	105	18.3%
Occupational Therapists	540	539	547	578	591	51	9.4%
Respiratory Therapists	344	360	370	377	390	46	13.4%
Physical Therapy Assistants	355	355	339	337	333	-22	-6.2%
Dietitians/Nutritionists	297	300	294	303	313	16	5.4%
Occupational Therapy Assistants	295	292	308	309	307	12	4.1%
Clinical Laboratory Technicians	135	130	115	109	98	-37	-27.4%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Capital District region reported the most difficulty recruiting experienced RNs, followed by medical hospital coders, clinical laboratory technologists, and care coordinators. Other occupations identified as difficult to recruit included physical therapists, nurse managers, occupational therapists, clinical lab technicians, and speech-language pathologists. Newly licensed RNs were the most difficult to retain, followed by CNAs, medical hospital coders, and occupational therapists. Hospitals identified shortage of workers and salary as the primary reasons for difficulty (Table 37).

Table 37. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Capital District Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.8	3.0	100%	0%	25%
CNA/Patient Care Techs	1.8	3.8	60%	0%	0%
Clinical Lab Technicians	3.0	2.5	0%	150%	0%
Clinical Lab Technologists	3.8	3.4	40%	40%	20%
Licensed Clinical Social Workers	3.2	2.6	60%	0%	0%
Licensed Practical Nurses	1.8	3.3	75%	0%	0%
Medical Assistants	2.0	2.3	0%	0%	25%
Medical Hospital Coders	4.3	3.5	75%	75%	0%
Nurse Practitioners	2.4	2.2	20%	20%	80%
Occupational Therapists	3.0	3.5	100%	50%	0%
Pharmacists	1.8	2.0	0%	0%	0%
Physical Therapists	3.4	2.8	80%	80%	0%
Physician Assistants	3.2	2.6	20%	40%	80%
Radiologic Technicians	2.5	2.5	0%	0%	0%
Radiologic Technologists	2.8	2.2	60%	0%	0%
Registered Nurses					
Newly Licensed RNs	2.2	4.2	0%	80%	0%
Experienced RNs	4.6	3.0	100%	20%	20%
Nurse Managers	3.4	2.2	80%	20%	20%
Speech-Language Pathologists	3.0	2.5	50%	50%	0%

- Many hospitals in the Capital District region projected growth in ambulatory services, with increasing demand for medical assistants (80%) and care coordinator staff (80%).
- All facilities that reported downsizing said it was due to attrition.

Nursing Homes

Nursing homes in the Capital District region reported that in 2014 respiratory therapists were the most difficult to recruit and retain. Experienced RNs and nurse managers were the next most difficult to recruit. Likewise, nurse managers and experienced RNs were the most difficult to retain in addition to certified nurse aides. The most predominant reason for these difficulties was due to a supply shortage (Table 38).

Table 38. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Capital District Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	3.0	3.3	83%	17%	0%	50%
Clerical	1.3	1.4	0%	0%	0%	0%
Dietitians/Nutritionists	2.7	2.1	67%	67%	0%	33%
Licensed Practical Nurses	3.2	2.0	100%	17%	0%	50%
Medical Billers	2.8	2.0	100%	0%	0%	50%
Occupational Therapists	3.2	3.0	67%	0%	0%	67%
Occupational Therapy Assts.	3.2	2.7	67%	33%	0%	100%
Personal Care Assistants	2.8	2.3	0%	0%	0%	0%
Physical Therapists	2.8	2.4	100%	0%	0%	100%
Physical Therapy Assistants	3.3	2.6	100%	50%	0%	100%
Registered Nurses						
Newly Licensed RNs	2.4	3.2	75%	25%	0%	75%
Experienced RNs	4.0	3.3	88%	50%	13%	50%
MDS Coordinators	3.7	2.8	100%	33%	0%	33%
Nurse Managers	3.9	3.4	88%	38%	0%	38%
Directors of Nursing	3.4	2.8	83%	67%	0%	33%
Rec. Therapists/Activities Dirs.	2.3	2.0	100%	50%	0%	50%
Respiratory Therapists	4.5	3.5	100%	0%	0%	0%
Social Workers						
Licensed Clinical SWs	2.6	2.1	100%	0%	0%	0%
Licensed Master's SWs	2.7	2.3	100%	0%	0%	0%
Speech-Language Pathologists	2.8	2.5	100%	0%	0%	100%

- Fifty-eight percent (58%) reported difficulty hiring part-time workers.
- Sixty-two percent (62%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- No facilities indicated plans to either expand or reduce services next year.

Home Health Care Agencies

Home health care agencies in the Capital District region reported the greatest difficulty recruiting dietitians/nutritionists, LCSWs, and experienced RNs. In addition, these agencies indicated that experienced RNs were the most difficult to retain, followed by occupational therapists and speech-language pathologists. For these occupations, home health care agencies cited shortage of workers as the predominant reason for difficulty (Table 39).

Table 39. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Capital District and Hudson Valley Regions, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	4.8	3.3	100%	60%	20%	40%
Home Health Aides	3.5	3.0	100%	100%	0%	0%
Licensed Practical Nurses	3.0	2.5	0%	100%	0%	0%
Occupational Therapists	4.2	3.6	100%	17%	17%	33%
Personal Care Aides/Homemakers	2.0	2.0	N/A	N/A	N/A	N/A
Physical Therapists	3.5	3.0	80%	60%	20%	40%
Registered Nurses						
Newly Licensed RNs	4.0	N/A	0%	100%	0%	0%
Experienced RNs	4.3	4.0	60%	100%	0%	60%
Respiratory Therapists	3.5	2.8	20%	0%	0%	20%
Social Workers						
Licensed Clinical SWs	4.7	3.3	100%	33%	0%	33%
Licensed Master's SWs	3.6	3.2	100%	33%	0%	33%
Speech-Language Pathologists	4.2	3.5	100%	20%	0%	40%

- Two-thirds (67%) reported difficulty hiring part-time workers.
- Forty-three percent (43%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).

FQHCs

The number of responses from the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by psychologists and family/general practice physicians, and reported the most difficulty retaining psychiatric NPs, psychologists, and family NPs (Table 40).

Table 40. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.0
	Internal Medicine	3.3	2.0
	Ob/Gyn	3.8	2.5
	Pediatric	2.8	2.3
	Physician Assistants	2.7	2.6
Nurse Practitioners	Pediatric	2.3	2.0
	Adult	3.2	2.3
	Family	3.3	2.8
	Midwives	2.0	2.0
	Psychiatric	4.3	3.7
Nursing	Registered	3.5	2.2
	Licensed Practical	2.6	2.6
	Medical Assistants	1.8	2.5
Behavioral Health	Psychiatrists	4.3	2.8
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.3	2.7
	Social Workers	3.3	2.1
Oral Health	Dentists	3.7	2.3
	Dental Hygienists	2.1	1.5
	Dental Assistants/Aides/Techs	2.1	2.3
Enabling Services	Care Coordinators/Case Managers	2.6	2.3
	HIV Counselors	2.0	2.0
	Community Health Workers	2.0	2.0
	Patient Health Educators	2.0	1.7
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.7	1.5
	Patient Health Navigators	1.8	1.8
	Outreach Workers	2.0	1.8
Administrative Support	Billing/Data Entry	1.8	2.0
	IT Systems Admin/Maintenance	2.7	2.2

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- They indicated difficulty hiring workers for evening shifts (67% of FQHCs), workers for weekends (60%), part-time workers (60%), and bilingual workers (57%).

Employment Projections by Health Occupation

According to the NYSDOL, on average, the most annual job openings in the Capital District between 2012 and 2022 will be for RNs (390), home health aides (260), personal care aides (210), and nursing assistants (210) (Table 41).

Table 41. Employment Projections for Selected Health Occupations in the Capital District Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	5,550	7,230	1,680	30.3%	210
Home Health Aides	5,090	6,690	1,600	31.4%	260
Registered Nurses	12,010	13,590	1,580	13.2%	390
Nursing Assistants	6,290	7,230	940	14.9%	210
Licensed Practical and Licensed Vocational Nurses	3,980	4,750	770	19.3%	180
Social Workers	3,880	4,370	490	12.6%	140
Emergency Medical Technicians and Paramedics	1,400	1,860	460	32.9%	90
Pharmacy Technicians	1,090	1,350	260	23.9%	40
Medical Assistants	1,010	1,270	260	25.7%	50
Physician Assistants	620	840	220	35.5%	30
Nurse Practitioners	670	880	210	31.3%	30
Physical Therapists	820	1,020	200	24.4%	40
Dental Hygienists	850	1,040	190	22.4%	40
Medical and Health Services Managers	1,810	1,980	170	9.4%	60
Medical and Clinical Laboratory Technicians	730	900	170	23.3%	40
Speech-Language Pathologists	850	1,010	160	18.8%	30
Pharmacists	990	1,130	140	14.1%	30
Medical Records and Health Info Techs	580	710	130	22.4%	30
Dental Assistants	900	1,030	130	14.4%	30
Radiologic Technologists	800	920	120	15.0%	20
Occupational Therapists	510	610	100	19.6%	20
Diagnostic Medical Sonographers	250	350	100	40.0%	10
Surgical Technologists	340	420	80	23.5%	10
Clinical, Counseling, and School Psychologists	820	890	70	8.5%	30
Dietitians and Nutritionists	300	350	50	16.7%	0
Respiratory Therapists	340	390	50	14.7%	20
Medical and Clinical Laboratory Technologists	630	680	50	7.9%	20
Cardiovascular Technologists & Technicians	200	240	40	20.0%	10
Nurse Anesthetists	190	220	30	15.8%	0
Psychiatric Aides	400	430	30	7.5%	10
Orderlies	150	170	20	13.3%	0

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

C. Central New York

The Central New York region includes the counties of Cayuga, Cortland, Madison, Onondaga, and Oswego.

Population

The distribution of the population in the Central New York region by age roughly paralleled the state's distribution, including the percentage of females of child-bearing age (ages 15 to 44). However, the Central New York region was substantially less racially and ethnically diverse than the state as a whole and had higher percentages of individuals with high school diplomas or equivalents and a higher percentage of individuals with associate degrees than the state as a whole (Table 42).

Table 42. Selected Population Characteristics in the Central New York Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	790,876	N/A	N/A
Population under 100% FPL	110,577	14.0%	14.9%
Population under 200% FPL	236,415	29.9%	31.3%
Population aged birth to 17 years	206,189	26.1%	24.9%
Population aged 65 and older	112,816	14.3%	13.8%
Population female aged 15 to 44	157,261	19.9%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	612	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	7,030	0.9%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	1,691	0.2%	0.3%
Black/African American, non-Hispanic	55,176	7.0%	14.4%
Hispanic/Latino	26,785	3.4%	17.9%
Asian/Pacific Islander, non-Hispanic	17,620	2.2%	7.6%
American Indian/Native Alaskan, non-Hispanic	4,049	0.5%	0.2%
Two or more/other	16,393	2.1%	2.1%
Less than high school education	57,339	11.0%	14.8%
High school or equivalent	257,884	49.3%	43.5%
Associate degree	61,090	11.7%	8.4%
Bachelor's degree	83,296	15.9%	18.9%
Master's degree or higher	63,322	12.1%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Central New York region had a higher overall total death rate and deaths due to all cancers than the state as a whole and upstate New York. Both the overall birth rate and teen birth rate were lower in Central New York than in the state and upstate New York. The Central New York region also had lower rates of asthma (both adult and pediatric), heart disease hospitalizations, ED visits, and total hospitalizations than the state as a whole and upstate New York (Table 43).

**Table 43. Selected Health Indicators in the Central New York Region, 2010-2012
(3-Year Average)**

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	6,908	873.2	752.2	850.6
Deaths due to heart disease, per 100,000	1,589	200.8	225.6	240.1
Deaths due to all cancers, per 100,000	1,658	209.5	180.3	201.5
Deaths due to diabetes, per 100,000	158	19.9	19.7	18.8
Total births, per 1,000 females aged 15 to 44	8,757	55.6	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	801	9.1	22.7	19.8
Low-birthweight births, as a percent of total births	669	7.6	8.2	7.8
Late/no prenatal care, as a percent of total births	301	3.5	5.6	4.1
Infant deaths, per 1,000 live births	55	6.2	5.1	5.6
Total hospitalizations, per 10,000	89,812	1,135.2	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	9,774	158.8	156.5	147.5
Adult asthma hospitalizations, per 10,000	464	7.5	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	149	8.5	26.9	14.7
Diabetes hospitalizations ^b per 10,000	18,274	231.0	249.7	230.0
CLRD hospitalizations, ^c per 10,000	2,645	33.4	37.8	34.2
Heart disease hospitalizations, per 10,000	8,643	109.2	114.6	117.2
Total ED visits, per 10,000	265,818	3,359.7	4,007.6	3,657.6
^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details. ^b Primary diagnosis only. ^c Chronic lower respiratory disease.				

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

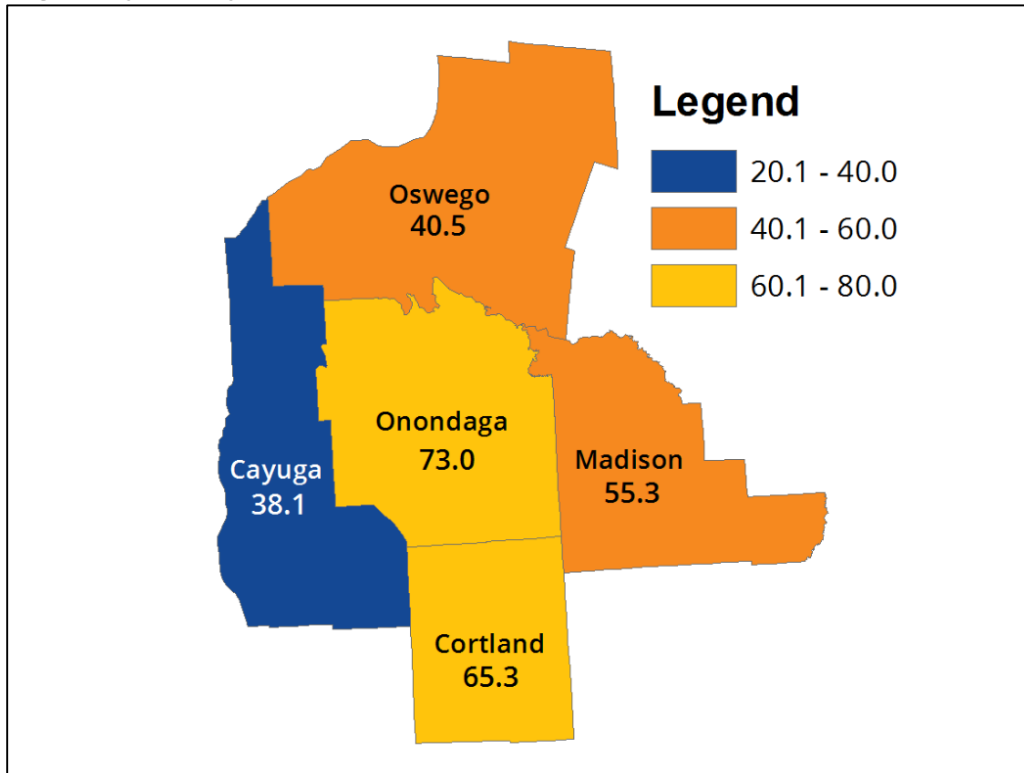
There were nearly 500 primary care physicians practicing in the Central New York region. Forty-four percent (44%) were in family or general practice, 23% were in general internal medicine, and another 20% were in general pediatrics. There were 62.7 primary care physicians per 100,000 total population in the Central New York region, which was below the statewide rate of 74.5 per 100,000. Onondaga County had the most physicians per capita, with 73.0 per 100,000 total population, whereas Cayuga County had the fewest, with 38.1 per 100,000 (Table 44 and Figure 24).

Table 44. Primary Care Physicians in the Central New York Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	216	27.4
Internal Medicine (General)	115	14.6
Geriatrics	3	2.7
Obstetrics/Gynecology	60	38.3
Pediatrics (General)	101	57.6
Total	495	62.7

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 24. Number of Primary Care Physicians per 100,000 Population in the Central New York Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment in the Central New York region grew by nearly 1,900 jobs, or by over 5%. Employment in home health care grew by more than 730 jobs, or by 53%, while jobs in nursing home and personal care facilities declined by over 720 jobs, or by 8%, during the same period. Hospitals added more than 1,100 jobs between 2009 and 2013, growing by over 9%, while ambulatory care increased by more than 700 positions, or by 5% (Table 45).

Table 45. Number of Health Care Jobs in the Central New York Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	12,706	13,133	13,202	13,781	13,869	1,163	9.2%
Ambulatory care (excluding home health)	13,632	13,414	13,644	14,125	14,337	705	5.2%
Nursing home and personal care facilities	9,347	9,142	8,929	8,765	8,623	-724	-7.8%
Home health care	1,377	1,404	1,593	1,829	2,112	735	53.4%
Total	37,061	37,093	37,367	38,500	38,941	1,880	5.1%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations for the Central New York region is reported in Table 46. RNs in the Central New York region had the most jobs in the first quarter of 2014 (7,210), followed by personal care aides (4,860) and nursing assistants (4,110). Occupational therapist assistants, dietetic technicians, and nuclear medicine technologists had the fewest jobs (70, 60, and 50, respectively).

Wages in selected health occupations for Central New York are reported in Table 47. These wages reflect the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$71.59), followed by pharmacists and medical and health service managers (\$60.86 and \$50.31, respectively). The lowest wage earners for the Central New York region were home health aides (\$11.83) and personal care aides (\$11.60).

Table 46. Number of Jobs in Selected Health Occupations in the Central New York Region, 2013

Occupation	Employment
Registered Nurses	7,210
Personal Care Aides	4,860
Nursing Assistants	4,110
Licensed Practical Nurses	2,990
Social Workers	2,030
Home Health Aides	1,950
Medical Assistants	1,050
Medical and Health Service Managers	880
Pharmacists	810
Physical Therapists	740
Pharmacy Technicians	640
Radiologic Technologists	640
Medical and Clinical Laboratory Technologists	610
Dental Assistants	570
Medical Secretaries	570
Physician Assistants	510
Nurse Practitioners	480
Dental Hygienists	410
Medical Records and Health Information Techs	410
Physical Therapy Assistants/Aides	410
Speech-Language Pathologists	400
Occupational Therapists	350
Respiratory Therapists	290
Surgical Technologists	270
Medical and Clinical Laboratory Technicians	190
Dietitians and Nutritionists	170
Occupational Therapy Assistants/Aides	70
Dietetic Technicians	60
Nuclear Medicine Technologists	50
Nurse Midwives	N/A
Cardiovascular Technologists & Technicians	N/A
Orderlies	N/A
Certified Registered Nurse Anesthetists	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 47. Average Hourly Wage in Selected Health Occupations in the Central New York Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$71.59
Pharmacists	\$60.86
Medical and Health Services Managers	\$50.31
Physician Assistants	\$45.37
Nurse Practitioners	\$40.15
Nurse Midwives	\$39.81
Nuclear Medicine Technologists	\$36.72
Physical Therapists	\$33.50
Dental Hygienists	\$32.29
Speech-Language Pathologists	\$32.10
Occupational Therapists	\$31.21
Radiologic Technologists and Technicians	\$30.01
Registered Nurses	\$28.28
Dietitians and Nutritionists	\$27.63
Respiratory Therapists	\$27.09
Medical and Clinical Laboratory Technologists	\$26.14
Mental Health and Substance Abuse Social Workers	\$25.81
Cardiovascular Technologists & Technicians	\$25.09
Occupational Therapy Assistants	\$23.51
Surgical Technologists	\$22.55
Healthcare Social Workers	\$21.85
Physical Therapist Assistants	\$21.59
Medical and Clinical Laboratory Technicians	\$19.69
Dietetic Technicians	\$19.21
Licensed Practical and Licensed Vocational Nurses	\$18.38
Medical Records and Health Info Techs	\$17.91
Dental Assistants	\$16.79
Medical Secretaries	\$15.10
Medical Assistants	\$14.24
Pharmacy Technicians	\$13.59
Nursing Assistants	\$13.57
Physical Therapist Aides	\$13.45
Orderlies	\$12.73
Home Health Aides	\$11.83
Personal Care Aides	\$11.60
Occupational Therapy Aides	N/A

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 more individuals in Central New York became licensed registered nurses than any other selected health occupation—growing by more than 1,000 individuals, or about 10%. During the same period 215 individuals became social workers, an increase of 18%. Additionally, physician assistants saw the highest percentage increase in number (36.3%). The only selected occupation to experience a decrease in number of licensed individuals was clinical laboratory technologists, which lost a little more than 1% (Table 48). As shown in Table 49, hospitals had the most difficulty recruiting these laboratory technologists, primarily due to a shortage of workers.

Table 48. Number of Licensed Individuals in Selected Health Occupations in the Central New York Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	10,538	10,785	10,935	11,197	11,606	1,068	10.1%
Licensed Practical Nurses	5,036	5,046	5,177	5,130	5,136	100	2.0%
Social Workers	1,182	1,217	1,263	1,323	1,397	215	18.2%
Nurse Practitioners	941	959	992	1,018	1,124	183	19.4%
Pharmacists	685	708	714	746	794	109	15.9%
Physical Therapists	699	724	721	735	784	85	12.2%
Dental Hygienists	544	548	563	563	558	14	2.6%
Clinical Laboratory Technologists	563	564	558	561	555	-8	-1.4%
Speech-Language Pathologists	467	471	489	512	522	55	11.8%
Physician Assistants	339	370	405	436	462	123	36.3%
Respiratory Therapists	348	342	353	355	373	25	7.2%
Occupational Therapists	294	307	298	315	347	53	18.0%
Physical Therapy Assistants	227	235	241	255	264	37	16.3%
Dietitians/Nutritionists	185	187	183	192	204	19	10.3%
Clinical Laboratory Technicians	123	123	110	128	126	3	2.4%
Occupational Therapy Assistants	93	97	95	103	99	6	6.5%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Central New York region reported the most difficulty recruiting PAs, followed by clinical laboratory technologists, occupational therapists, and speech-language pathologists. Likewise, hospitals had the most difficulty retaining physician assistants, followed by care coordinators, nurse practitioners, and experienced RNs. Hospitals reported that difficulties for these occupations were predominantly the result of worker shortages and salary levels (Table 49).

Table 49. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Central New York Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.3	3.0	0%	0%	0%
CNA/Patient Care Techs	2.5	2.5	0%	0%	0%
Clinical Lab Technicians	3.0	2.0	33%	33%	33%
Clinical Lab Technologists	3.8	2.5	50%	25%	0%
Licensed Clinical Social Workers	3.0	2.0	0%	0%	0%
Licensed Practical Nurses	2.5	2.3	0%	0%	0%
Medical Assistants	1.7	2.7	33%	0%	0%
Medical Hospital Coders	3.0	1.8	25%	0%	0%
Nurse Practitioners	3.3	3.0	75%	50%	25%
Occupational Therapists	3.8	2.0	0%	0%	0%
Pharmacists	2.8	2.3	0%	0%	0%
Physical Therapists	3.3	2.0	0%	0%	0%
Physician Assistants	4.0	3.3	75%	50%	25%
Radiologic Technicians	1.7	1.3	0%	0%	0%
Radiologic Technologists	2.8	2.0	0%	50%	0%
Registered Nurses					
Newly Licensed RNs	2.0	2.8	0%	0%	0%
Experienced RNs	3.3	3.0	50%	0%	50%
Nurse Managers	3.5	2.5	25%	0%	25%
Speech-Language Pathologists	3.7	2.7	33%	33%	0%

- Many hospitals in the Central New York region projected growth in ambulatory services, with increasing demand for NPs (67%) and PAs (67%).

Nursing Homes

In the Central New York region, nursing homes reported that CNAs and experienced RNs were the most difficult to recruit. Similarly, LPNs, nurse managers, and all master's level social workers were difficult to employ. Nursing homes reported that CNAs were the most difficult to retain, followed by experienced RNs, LPNs, newly licensed RNs, recreational therapists/activity directors, and respiratory therapists. Respondents indicated that difficulties in recruiting and retaining these workers were primarily for reasons other than worker shortages, competition among organizations, and salary levels (Table 50).

Table 50. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Central New York Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	3.8	3.8	64%	36%	18%	55%
Clerical	1.6	1.3	0%	33%	0%	67%
Dietitians/Nutritionists	2.0	1.2	0%	0%	0%	100%
Licensed Practical Nurses	3.6	3.2	60%	30%	10%	50%
Medical Billers	2.2	1.7	0%	50%	0%	50%
Occupational Therapists	2.8	1.8	50%	0%	0%	50%
Occupational Therapy Assts.	3.1	1.6	0%	0%	0%	100%
Personal Care Assistants	2.4	2.5	0%	0%	0%	100%
Physical Therapists	2.5	1.8	50%	0%	0%	50%
Physical Therapy Assistants	3.2	1.6	67%	0%	0%	67%
Registered Nurses						
Newly Licensed RNs	3.1	3.0	67%	17%	0%	100%
Experienced RNs	3.8	3.3	40%	40%	0%	80%
MDS Coordinators	2.8	1.3	67%	33%	0%	100%
Nurse Managers	3.4	2.9	67%	33%	0%	67%
Directors of Nursing	3.0	2.8	75%	25%	0%	75%
Rec. Therapists/Activities Dirs.	3.0	3.0	0%	0%	0%	100%
Respiratory Therapists	3.0	3.0	0%	0%	0%	100%
Social Workers						
Licensed Clinical SWs	3.3	2.7	25%	25%	0%	100%
Licensed Master's SWs	3.3	2.6	25%	25%	0%	100%
Speech-Language Pathologists	3.0	2.3	0%	0%	0%	100%

- Almost 43% reported difficulty hiring part-time workers.
- Nearly three-quarters of nursing homes also reported difficulty hiring workers for off shifts (evenings, nights, and weekends).

Home Health Care Agencies

Home health care agencies reported the most difficulty recruiting experienced RNs and retaining personal care aides. Similarly, these facilities had trouble recruiting and retaining newly licensed RNs, occupational therapists, physical therapists, and respiratory therapists. These difficulties were predominantly the result of worker shortages and competition for employees (Table 51).

Table 51. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Central New York Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	3.0	1.5	100%	0%	0%	0%
Home Health Aides	2.0	3.3	50%	0%	0%	50%
Licensed Practical Nurses	2.3	2.5	0%	0%	0%	100%
Occupational Therapists	3.7	3.0	100%	0%	0%	50%
Personal Care Aides/Homemakers	2.0	4.5	100%	0%	0%	0%
Physical Therapists	3.7	3.0	100%	0%	0%	50%
Registered Nurses						
Newly Licensed RNs	3.7	3.7	33%	67%	33%	67%
Experienced RNs	4.2	4.0	75%	75%	25%	50%
Respiratory Therapists	3.3	3.0	25%	0%	0%	25%
Social Workers						
Licensed Clinical SWs	2.7	2.5	N/A	N/A	N/A	N/A
Licensed Master's SWs	2.6	2.3	100%	0%	0%	100%
Speech-Language Pathologists	3.3	2.3	100%	0%	0%	0%

- Forty percent (40%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- Forty percent (40%) indicated difficulty hiring part-time workers.

FQHCs

The number of responses from the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by psychologists and family/general practice physicians, and reported the most difficulty retaining psychiatric NPs, psychologists, and family NPs (Table 52).

Table 52. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.0
	Internal Medicine	3.3	2.0
	Ob/Gyn	3.8	2.5
	Pediatric	2.8	2.3
	Physician Assistants	2.7	2.6
Nurse Practitioners	Pediatric	2.3	2.0
	Adult	3.2	2.3
	Family	3.3	2.8
	Midwives	2.0	2.0
	Psychiatric	4.3	3.7
Nursing	Registered	3.5	2.2
	Licensed Practical	2.6	2.6
	Medical Assistants	1.8	2.5
Behavioral Health	Psychiatrists	4.3	2.8
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.3	2.7
	Social Workers	3.3	2.1
Oral Health	Dentists	3.7	2.3
	Dental Hygienists	2.1	1.5
	Dental Assistants/Aides/Techs	2.1	2.3
Enabling Services	Care Coordinators/Case Managers	2.6	2.3
	HIV Counselors	2.0	2.0
	Community Health Workers	2.0	2.0
	Patient Health Educators	2.0	1.7
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.7	1.5
	Patient Health Navigators	1.8	1.8
	Outreach Workers	2.0	1.8
Administrative Support	Billing/Data Entry	1.8	2.0
	IT Systems Admin/Maintenance	2.7	2.2

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- They indicated difficulty hiring workers for evening shifts (67% of FQHCs), workers for weekends (60%), part-time workers (60%), and bilingual workers (57%).

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 Central New York will, on average, have the most annual job openings for RNs (220), personal care aides (150), and LPNs (140). Over this same period, the region is expected to experience the largest percentage increase in employment of home health aides (31.3%) and physician assistants (31.3%), followed by dental hygienists (22.9%) and emergency medical technicians and paramedics (22.7%) (Table 53).

Table 53. Employment Projections for Selected Health Occupations in the Central New York Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	4,880	5,940	1,060	21.7%	150
Registered Nurses	7,780	8,450	670	8.6%	220
Home Health Aides	2,140	2,810	670	31.3%	110
Licensed Practical and Licensed Vocational Nurses	3,460	4,020	560	16.2%	140
Nursing Assistants	4,330	4,640	310	7.2%	110
Medical Assistants	950	1,160	210	22.1%	40
Social Workers	2,240	2,430	190	8.5%	80
Physician Assistants	480	630	150	31.3%	20
Emergency Medical Technicians and Paramedics	660	810	150	22.7%	40
Physical Therapists	790	920	130	16.5%	30
Dental Hygienists	480	590	110	22.9%	20
Dental Assistants	710	820	110	15.5%	30
Nurse Practitioners	470	570	100	21.3%	20
Pharmacy Technicians	780	870	90	11.5%	20
Medical and Health Services Managers	800	880	80	10.0%	30
Medical and Clinical Laboratory Technologists	620	700	80	12.9%	30
Radiologic Technologists	600	670	70	11.7%	20
Medical Records and Health Info Techs	490	560	70	14.3%	20
Speech-Language Pathologists	420	460	40	9.5%	10
Medical and Clinical Laboratory Technicians	200	240	40	20.0%	10
Clinical, Counseling, and School Psychologists	520	550	30	5.8%	10
Occupational Therapists	360	390	30	8.3%	10
Respiratory Therapists	340	370	30	8.8%	10
Diagnostic Medical Sonographers	150	180	30	20.0%	0
Surgical Technologists	290	320	30	10.3%	0
Pharmacists	750	770	20	2.7%	20
Dietitians and Nutritionists	200	210	10	5.0%	0
Nurse Anesthetists	50	60	10	20.0%	0

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

D. Finger Lakes

The Finger Lakes region includes the counties of Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates.

Population

The population of the Finger Lakes region had a lower percentage of individuals below 100% and 200% of the FPL, was slightly older than the population of the state as a whole, and was less racially and ethnically diverse. The region also had a higher percentage of individuals with high school or equivalent degrees and associate degrees but a lower percentage of individuals with bachelor's degrees or higher compared with the statewide percentages (Table 54).

Table 54. Selected Population Characteristics in the Finger Lakes Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	1,218,280	N/A	N/A
Population under 100% FPL	161,324	13.2%	14.9%
Population under 200% FPL	357,341	29.3%	31.3%
Population aged birth to 17 years	308,258	25.3%	24.9%
Population aged 65 and older	179,378	14.7%	13.8%
Population female aged 15 to 44	235,970	19.4%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	673	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	10,642	0.9%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	2,996	0.2%	0.3%
Black/African American, non-Hispanic	122,776	10.1%	14.4%
Hispanic/Latino	71,692	5.9%	17.9%
Asian/Pacific Islander, non-Hispanic	29,222	2.4%	7.6%
American Indian/Native Alaskan, non-Hispanic	3,090	0.3%	0.2%
Two or more/other	22,181	1.8%	2.1%
Less than high school education	88,087	10.7%	14.8%
High school or equivalent	383,332	46.7%	43.5%
Associate degree	97,084	11.8%	8.4%
Bachelor's degree	143,228	17.5%	18.9%
Master's degree or higher	108,370	13.2%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Finger Lakes region had a higher total death rate, including deaths due to all cancers, than the state as a whole or upstate New York. The rate of infant deaths was slightly higher in the Finger Lakes region than statewide or in upstate New York, and the teen birth rate in the Finger Lakes region was higher than both statewide and upstate New York.

The rates of preventable hospitalizations, ED visits, and total hospitalizations were lower in the Finger Lakes region than either the state as a whole or upstate. The Finger Lakes region also had lower rates of pediatric asthma, adult asthma, diabetes, chronic lower respiratory disease, and heart disease hospitalizations than the state as a whole and upstate (Table 55).

Table 55. Selected Health Indicators in the Finger Lakes Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	10,721	880.1	752.2	850.6
Deaths due to heart disease, per 100,000	2,564	210.5	225.6	240.1
Deaths due to all cancers, per 100,000	2,511	206.3	180.3	201.5
Deaths due to diabetes, per 100,000	210	17.3	19.7	18.8
Total births, per 1,000 females aged 15 to 44	13,313	56.7	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	1,089	24.1	22.7	19.8
Low-birthweight births, as a percent of total births	1,035	7.8	8.2	7.8
Late/no prenatal care, as a percent of total births	424	3.5	5.6	4.1
Infant deaths, per 1,000 live births	89	6.7	5.1	5.6
Total hospitalizations, per 10,000	135,182	1,109.7	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	13,617	143.1	156.5	147.5
Adult asthma hospitalizations, per 10,000	866	9.1	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	262	9.8	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	27,650	227.0	249.7	230.0
CLRD hospitalizations, ^c per 10,000	3,461	28.4	37.8	34.2
Heart disease hospitalizations, per 10,000	13,816	113.4	114.6	117.2
Total ED visits, per 10,000	433,926	3,562.1	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.
^b Primary diagnosis only.
^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

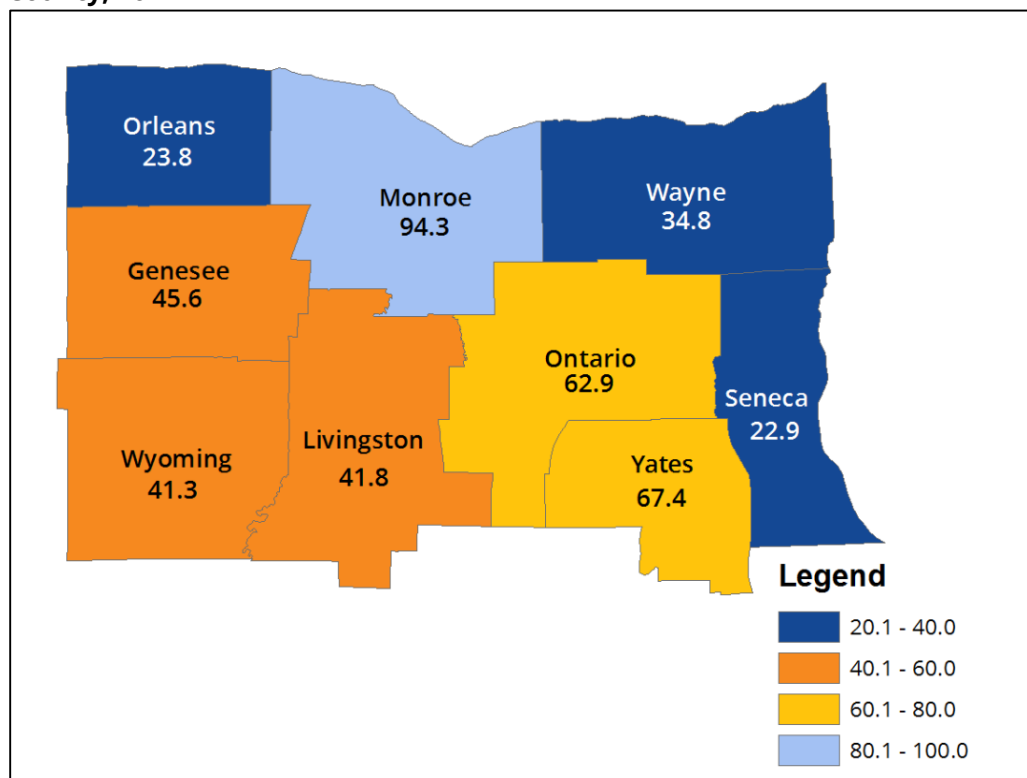
There were about 900 primary care physicians practicing in the Finger Lakes region in 2014. Forty percent (40%) were in general internal medicine, 26% were in family or general practice, and another 23% were in general pediatrics. There were 75.0 primary care physicians per 100,000 total population in the Finger Lakes region, which was slightly higher than the statewide rate of 74.5 per 100,000. Monroe County had the highest rate with 94.3 per 100,000 total population, and Seneca County had the lowest rate with 22.9 per 100,000 total population. Orleans also had a low rate of primary care physicians, with 23.8 per 100,000 total population (Table 56 and Figure 25).

Table 56. Primary Care Physicians in the Finger Lakes Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	235	19.3
Internal Medicine (General)	362	29.7
Geriatrics	5	2.8
Obstetrics/Gynecology	103	43.6
Pediatrics (General)	209	77.8
Total	914	75.0

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 25. Number of Primary Care Physicians per 100,000 Population in the Finger Lakes Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment throughout the Finger Lakes region grew by nearly 3,200 jobs, or by over 5%. Employment in hospitals increased by nearly 1,300 jobs, by almost 5%, and employment in ambulatory care settings grew by over 1,200 jobs, or by nearly 8%, during the same period. Home health care had the lowest percentage increase in jobs (3%) between 2009 and 2013, while adding the least number of jobs (86) (Table 57).

Table 57. Number of Health Care Jobs in the Finger Lakes Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	28,252	28,258	28,916	29,436	29,546	1,294	4.6%
Ambulatory care (excluding home health)	15,981	16,457	16,505	16,538	17,225	1,244	7.8%
Nursing home and personal care facilities	12,519	12,811	12,746	12,817	13,059	540	4.3%
Home health care	3,441	3,473	3,722	3,732	3,527	86	2.5%
Total	60,192	60,999	61,889	62,523	63,357	3,165	5.3%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 58. RNs accounted for the most jobs in the Finger Lakes region in the first quarter of 2014 (11,420), followed by nursing assistants (6,960) and personal care aides (5,870). Occupational therapy assistants/aides, nuclear medicine technologists, and dietetic technicians had the fewest jobs (150, 80, and 70, respectively).

Wages in selected health occupations for the Finger Lakes region are reported in Table 59. These wages were based on data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$99.63), followed by pharmacists and PAs (\$57.48 and \$45.64, respectively). Home health aides (\$11.65), orderlies (\$11.57), and physical therapist aides (\$11.47) were the lowest wage earners in the selected health occupations reported for the Finger Lakes region.

Table 58. Number of Jobs in Selected Health Occupations in the Finger Lakes Region, 2013

Occupation	Employment
Registered Nurses	11,420
Nursing Assistants	6,960
Personal Care Aides	5,870
Home Health Aides	4,520
Licensed Practical Nurses	4,210
Social Workers	2,930
Medical and Health Service Managers	1,410
Physical Therapists	1,130
Medical Secretaries	1,130
Dental Hygienists	1,110
Pharmacy Technicians	1,060
Dental Assistants	1,040
Pharmacists	970
Nurse Practitioners	960
Medical Assistants	840
Radiologic Technologists	830
Physician Assistants	820
Medical and Clinical Laboratory Technicians	820
Medical and Clinical Laboratory Technologists	810
Speech-Language Pathologists	760
Occupational Therapists	660
Medical Records and Health Information Techs	500
Respiratory Therapists	430
Physical Therapy Assistants/Aides	400
Dietitians and Nutritionists	290
Surgical Technologists	280
Cardiovascular Technologists & Technicians	170
Occupational Therapy Assistants/Aides	150
Nuclear Medicine Technologists	80
Dietetic Technicians	70
Nurse Midwives	N/A
Orderlies	N/A
Certified Registered Nurse Anesthetists	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 59. Average Hourly Wage in Selected Health Occupations in the Finger Lakes Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$99.63
Pharmacists	\$57.48
Physician Assistants	\$45.64
Medical and Health Services Managers	\$45.63
Nurse Midwives	\$42.57
Nurse Practitioners	\$41.43
Physical Therapists	\$35.73
Nuclear Medicine Technologists	\$34.43
Occupational Therapists	\$34.09
Speech-Language Pathologists	\$29.88
Registered Nurses	\$29.24
Dental Hygienists	\$29.06
Medical and Clinical Laboratory Technologists	\$27.48
Respiratory Therapists	\$25.59
Cardiovascular Technologists & Technicians	\$25.33
Radiologic Technologists and Technicians	\$25.01
Mental Health and Substance Abuse Social Workers	\$25.00
Dietitians and Nutritionists	\$24.63
Healthcare Social Workers	\$23.44
Occupational Therapy Assistants	\$22.17
Physical Therapist Assistants	\$21.89
Occupational Therapy Aides	\$19.50
Licensed Practical and Licensed Vocational Nurses	\$18.47
Surgical Technologists	\$18.35
Medical Records and Health Info Techs	\$18.18
Medical and Clinical Laboratory Technicians	\$16.95
Dental Assistants	\$16.55
Dietetic Technicians	\$16.31
Medical Secretaries	\$14.29
Medical Assistants	\$14.10
Pharmacy Technicians	\$12.99
Nursing Assistants	\$12.89
Personal Care Aides	\$12.25
Home Health Aides	\$11.65
Orderlies	\$11.57
Physical Therapist Aides	\$11.47

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the number of licensed RNs in the Finger Lakes region increased by more than 1,700, or 11%, which was followed by the addition of over 300 (16%) social workers, and more than 250 (4%) LPNs. PAs had the largest percentage increase by nearly 25%, followed by respiratory therapists (23%), social workers (16%), and physical therapy assistants (16%). Whereas the majority of selected licensed professionals increased, 3 occupations experienced losses—clinical laboratory technicians (-1%), clinical laboratory technologists (-4%), and occupational therapy assistants (-5%) (Table 60).

Table 60. Number of Licensed Individuals in Selected Health Occupations in the Finger Lakes Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	15,178	15,502	15,704	16,195	16,883	1705	11.2%
Licensed Practical Nurses	6,129	6,191	6,395	6,342	6,395	266	4.3%
Social Workers	2,043	2,110	2,199	2,291	2,374	331	16.2%
Nurse Practitioners	1,351	1,365	1,413	1,451	1,538	187	13.8%
Pharmacists	1,025	1,036	1,071	1,121	1,172	147	14.3%
Speech-Language Pathologists	946	978	1,022	1,037	1,070	124	13.1%
Dental Hygienists	1,023	1,032	1,049	1,041	1,059	36	3.5%
Physical Therapists	949	967	990	1,006	1,056	107	11.3%
Clinical Laboratory Technologists	975	960	939	950	935	-40	-4.1%
Physician Assistants	588	625	642	686	733	145	24.7%
Occupational Therapists	592	601	614	635	663	71	12.0%
Respiratory Therapists	270	285	305	318	331	61	22.6%
Physical Therapy Assistants	267	279	287	299	310	43	16.1%
Dietitians/Nutritionists	257	256	247	265	269	12	4.7%
Occupational Therapy Assistants	223	226	222	222	213	-10	-4.5%
Clinical Laboratory Technicians	71	71	65	64	70	-1	-1.4%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Finger Lakes region reported the most difficulty recruiting clinical lab technologists, followed by nurse managers and speech-language pathologists. Hospitals in this region also reported the greatest retention difficulty for clinical lab technologists, newly licensed RNs, and speech-language pathologists (Table 61).

Table 61. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Finger Lakes Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.2	2.8	60%	20%	60%
CNA/Patient Care Techs	2.0	2.8	67%	17%	33%
Clinical Lab Technicians	3.0	3.0	100%	100%	33%
Clinical Lab Technologists	4.2	3.6	100%	80%	80%
Licensed Clinical Social Workers	2.5	1.8	33%	33%	50%
Licensed Practical Nurses	1.6	1.6	40%	20%	20%
Medical Assistants	2.0	2.0	0%	0%	0%
Medical Hospital Coders	2.7	1.7	67%	33%	17%
Nurse Practitioners	3.1	2.7	57%	57%	71%
Occupational Therapists	3.6	2.8	60%	40%	40%
Pharmacists	3.3	2.5	33%	33%	50%
Physical Therapists	3.2	2.6	40%	40%	40%
Physician Assistants	2.7	2.7	33%	67%	67%
Radiologic Technicians	2.0	1.4	40%	20%	40%
Radiologic Technologists	2.7	2.2	33%	17%	50%
Registered Nurses					
Newly Licensed RNs	2.2	3.2	17%	67%	83%
Experienced RNs	3.6	2.6	57%	71%	57%
Nurse Managers	3.9	2.6	57%	14%	43%
Speech-Language Pathologists	3.8	3.0	60%	20%	40%

- Hospitals in the Finger Lakes region reported increased demand for RNs (43%), NPs (50%), and PAs (50%).

Nursing Homes

Nursing homes in the Finger Lakes region reported recruiting difficulties for nurse managers, experienced RNs, and MDS coordinators. Facilities reported the most difficulty retaining CNAs, experienced RNs, licensed practical nurses, and MDS coordinators (Table 62).

Table 62. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Finger Lakes Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	3.3	3.9	75%	63%	19%	31%
Clerical	2.1	2.3	0%	75%	0%	50%
Dietitians/Nutritionists	3.1	2.8	40%	80%	0%	40%
Licensed Practical Nurses	3.3	3.6	50%	58%	25%	33%
Medical Billers	3.5	2.8	75%	50%	0%	25%
Occupational Therapists	3.2	2.6	50%	50%	0%	50%
Occupational Therapy Assts.	3.3	2.7	50%	50%	0%	50%
Personal Care Assistants	3.1	3.6	40%	40%	0%	40%
Physical Therapists	3.4	3.0	60%	60%	0%	40%
Physical Therapy Assistants	3.3	2.9	60%	40%	0%	40%
Registered Nurses						
Newly Licensed RNs	3.1	3.5	50%	80%	10%	30%
Experienced RNs	4.1	3.8	64%	71%	7%	29%
MDS Coordinators	4.1	3.6	67%	58%	0%	33%
Nurse Managers	4.2	3.4	42%	75%	0%	33%
Directors of Nursing	3.7	2.9	63%	63%	0%	38%
Rec. Therapists/Activities Dirs.	2.9	2.9	60%	80%	0%	40%
Respiratory Therapists	3.7	3.1	75%	75%	0%	25%
Social Workers						
Licensed Clinical SWs	3.1	2.6	40%	60%	20%	40%
Licensed Master's SWs	3.1	2.6	40%	60%	20%	40%
Speech-Language Pathologists	3.5	3.2	50%	100%	0%	50%

- Forty percent (40%) reported difficulty hiring part-time workers.
- Sixty-three percent (63%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- Seventy-two percent (72%) reported no plans to either expand or reduce services next year.

Home Health Care Agencies

The number of responses for home health care agencies in the Finger Lakes region was too low to analyze separately, so it was combined with the Western New York region for analysis. Home health care agencies in the combined 2 regions indicated the most difficulty recruiting dietitians/nutritionists, physical therapists, LMSWs, and speech-language pathologists. Personal care aides/homemakers and newly licensed RNs were the most difficult to retain (Table 63).

Table 63. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Finger Lakes and Western New York Regions, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	4.3	3.0	100%	33%	0%	67%
Home Health Aides	3.3	3.1	40%	60%	20%	80%
Licensed Practical Nurses	3.3	2.7	50%	50%	25%	100%
Occupational Therapists	3.7	3.0	50%	50%	25%	50%
Personal Care Aides/Homemakers	3.6	4.0	50%	75%	0%	75%
Physical Therapists	4.3	3.2	67%	17%	0%	100%
Registered Nurses						
Newly Licensed RNs	3.0	3.7	0%	33%	33%	67%
Experienced RNs	3.9	3.3	17%	50%	33%	67%
Respiratory Therapists	3.0	3.3	0%	0%	0%	33%
Social Workers						
Licensed Clinical SWs	3.8	3.3	33%	33%	33%	100%
Licensed Master's SWs	4.0	2.8	33%	33%	33%	100%
Speech-Language Pathologists	4.0	3.3	33%	0%	0%	67%

- Seventy-one reported difficulty hiring part-time workers.
- All agencies indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- No agencies reported plans to reduce services next year.

FQHCs

The number of responses from the Finger Lakes and Western New York regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatrists, psychiatric NPs, and family physicians, and reported the most difficulty retaining psychiatric NPs, dentists, general internists, and dental assistants/aides/technicians (Table 64).

Table 64. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Finger Lakes and Western New York Regions, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.3
	Internal Medicine	3.6	2.5
	Ob/Gyn	3.3	2.0
	Pediatric	2.8	1.8
	Physician Assistants	3.0	2.4
Nurse Practitioners	Pediatric	1.7	2.0
	Adult	3.0	2.0
	Family	2.8	2.2
	Midwives	1.0	1.0
	Psychiatric	4.0	4.0
Nursing	Registered	2.3	1.5
	Licensed Practical	2.0	2.0
	Medical Assistants	2.0	2.0
Behavioral Health	Psychiatrists	4.5	2.0
	Psychologists	2.5	1.0
	Substance Abuse Counselors	3.0	N/A
	Social Workers	2.5	1.6
Oral Health	Dentists	3.5	2.8
	Dental Hygienists	2.0	1.3
	Dental Assistants/Aides/Techs	2.8	2.5
Enabling Services	Care Coordinators/Case Managers	2.1	1.7
	HIV Counselors	2.5	2.0
	Community Health Workers	1.8	1.5
	Patient Health Educators	1.5	1.3
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.3	1.7
	Patient Health Navigators	2.0	1.5
	Outreach Workers	1.7	1.3
Administrative Support	Billing/Data Entry	2.0	1.7
	IT Systems Admin/Maintenance	2.2	2.0

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Finger Lakes region will be for RNs (350), home health aides (260), and nursing assistants (210) (Table 65).

Table 65. Employment Projections for Selected Health Occupations in the Finger Lakes Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Home Health Aides	5,910	7,380	1,470	24.9%	260
Personal Care Aides	5,740	7,150	1,410	24.6%	180
Registered Nurses	12,080	13,270	1,190	9.9%	350
Nursing Assistants	6,930	7,760	830	12.0%	210
Licensed Practical and Licensed Vocational Nurses	4,400	5,070	670	15.2%	180
Emergency Medical Technicians and Paramedics	1,340	1,650	310	23.1%	70
Social Workers	3,030	3,280	250	8.3%	90
Physical Therapists	1,030	1,220	190	18.4%	50
Medical and Clinical Laboratory Technicians	910	1,100	190	20.9%	40
Physician Assistants	710	890	180	25.4%	30
Nurse Practitioners	920	1,090	170	18.5%	40
Medical and Health Services Managers	1,520	1,680	160	10.5%	60
Dental Hygienists	1,050	1,210	160	15.2%	50
Medical Assistants	710	860	150	21.1%	30
Pharmacy Technicians	1,110	1,240	130	11.7%	20
Diagnostic Medical Sonographers	280	380	100	35.7%	10
Dental Assistants	1,110	1,210	100	9.0%	30
Radiologic Technologists	720	810	90	12.5%	20
Occupational Therapists	620	700	80	12.9%	20
Medical Records and Health Info Techs	530	610	80	15.1%	20
Pharmacists	1,010	1,080	70	6.9%	30
Medical and Clinical Laboratory Technologists	790	860	70	8.9%	30
Speech-Language Pathologists	680	740	60	8.8%	20
Surgical Technologists	330	390	60	18.2%	10
Cardiovascular Technologists & Technicians	230	280	50	21.7%	10
Dietitians and Nutritionists	300	340	40	13.3%	0
Respiratory Therapists	350	380	30	8.6%	10
Clinical, Counseling, and School Psychologists	800	820	20	2.5%	20
Nurse Anesthetists	50	60	10	20.0%	0

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

E. Hudson Valley

The Hudson Valley region includes the counties of Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester.

Population

The Hudson Valley region had a lower percentage of individuals below 100% and 200% of the FPL and was less diverse than the state overall. Additionally, compared with the state, the region had fewer middle-aged residents—with a larger percentage of its population younger than age 18 or older than 64 years. The Hudson Valley region also had a higher percentage of its population with a bachelor's degree or higher (Table 66).

Table 66. Selected Population Characteristics in the Hudson Valley Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	2,301,577	N/A	N/A
Population under 100% FPL	241,371	10.5%	14.9%
Population under 200% FPL	535,094	23.2%	31.3%
Population aged birth to 17 years	621,717	27.0%	24.9%
Population aged 65 and older	324,301	14.1%	13.8%
Population female aged 15 to 44	432,188	18.8%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	1,151	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	18,989	0.8%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	9,277	0.4%	0.3%
Black/African American, non-Hispanic	242,389	10.5%	14.4%
Hispanic/Latino	404,306	17.6%	17.9%
Asian/Pacific Islander, non-Hispanic	98,389	4.3%	7.6%
American Indian/Native Alaskan, non-Hispanic	2,544	0.1%	0.2%
Two or more/other	47,522	2.1%	2.1%
Less than high school education	183,138	11.9%	14.8%
High school or equivalent	649,189	42.3%	43.5%
Associate degree	117,970	7.7%	8.4%
Bachelor's degree	311,942	20.3%	18.9%
Master's degree or higher	272,840	17.8%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Hudson Valley region had a lower rate of total deaths than the state as a whole and upstate New York. Deaths and hospitalizations due to heart disease and diabetes were also lower. The Hudson Valley region also had lower rates of asthma hospitalizations (both adult and pediatric) than the state as a whole, but the adult asthma hospitalization rate was higher than upstate New York. Total hospitalizations, preventable hospitalizations, and ED visits were also lower in Hudson Valley, compared with statewide and upstate rates (Table 67).

Table 67. Selected Health Indicators in the Hudson Valley Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	16,535	718.5	752.2	850.6
Deaths due to heart disease, per 100,000	4,750	206.4	225.6	240.1
Deaths due to all cancers, per 100,000	4,128	180.0	180.3	201.5
Deaths due to diabetes, per 100,000	333	14.5	19.7	18.8
Total births, per 1,000 females aged 15 to 44	26,725	61.9	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	1,282	15.7	22.7	19.8
Low-birthweight births, as a percent of total births	2,010	7.5	8.2	7.8
Late/no prenatal care, as a percent of total births	1,019	4.2	5.6	4.1
Infant deaths, per 1,000 live births	137	5.1	5.1	5.6
Total hospitalizations, per 10,000	269,516	1,171.2	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	22,334	127.9	156.5	147.5
Adult asthma hospitalizations, per 10,000	2,073	11.9	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	832	15.0	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	48,958	212.8	249.7	230.0
CLRD hospitalizations, ^c per 10,000	7,023	30.5	37.8	34.2
Heart disease hospitalizations, per 10,000	23,717	103.1	114.6	117.2
Total ED visits, per 10,000	776,801	3,375.7	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.

^b Primary diagnosis only.

^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

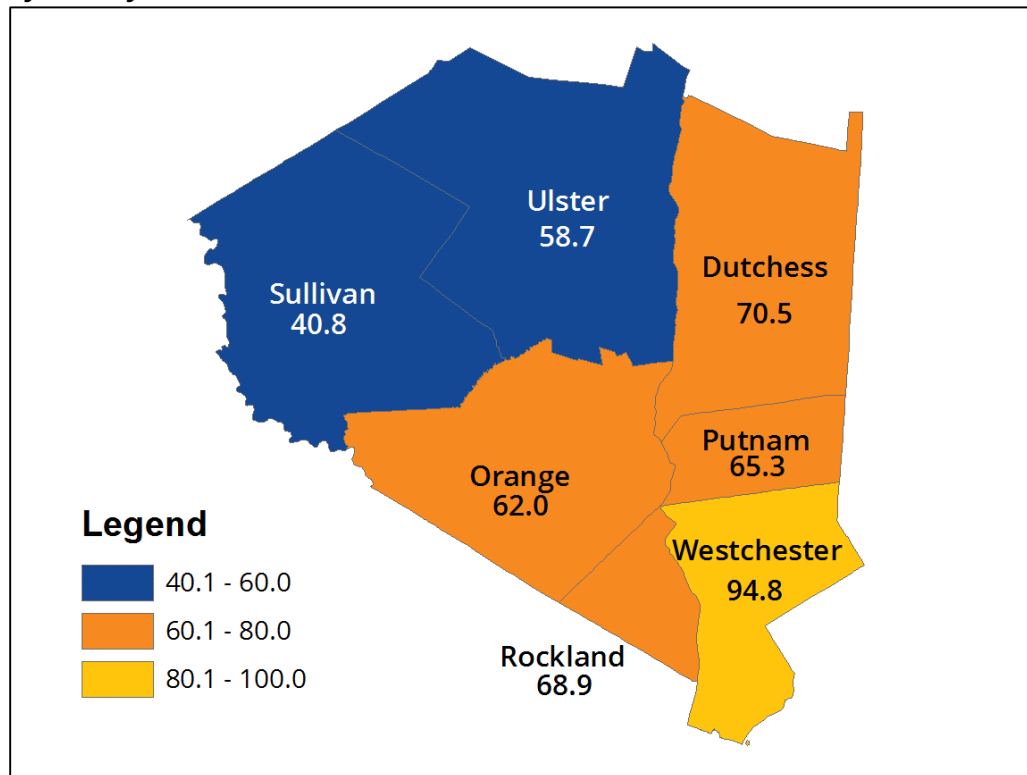
There were nearly 1,800 primary care physicians practicing in the Hudson Valley region in 2014. Forty-two percent (42%) were in general internal medicine, 26% were in general pediatrics, and another 21% were in general or family practice. There were 77.0 primary care physicians per 100,000 population in the Hudson Valley region, which was above the statewide rate of 74.5 per 100,000. Westchester County had the highest rate of primary care physicians with 94.8 per 100,000 population, whereas Sullivan County had the lowest rate with 40.8 per 100,000 (Table 68 and Figure 26).

Table 68. Primary Care Physicians in the Hudson Valley Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	369	15.9
Internal Medicine (General)	748	32.2
Geriatrics	12	3.7
Obstetrics/Gynecology	195	44.7
Pediatrics (General)	466	83.1
Total	1,790	77.0

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 26. Number of Primary Care Physicians per 100,000 Population in the Hudson Valley Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment in the Hudson Valley region increased by nearly 3%, adding almost 3,000 jobs. All settings in the health sector experienced job growth between 2009 and 2013, except hospitals, which experienced a decrease of more than 2,800 jobs (-7%). Home health care had the largest percentage increase in jobs (20%), followed by ambulatory care (8%) (Table 69).

Table 69. Number of Health Care Jobs in the Hudson Valley Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	40,243	39,765	39,311	38,351	37,400	-2,843	-7.1%
Ambulatory care (excluding home health)	39,449	40,676	41,085	42,068	42,774	3,325	8.4%
Nursing home and personal care facilities	20,083	20,605	20,742	20,767	20,746	663	3.3%
Home health care	9,003	9,499	10,517	10,343	10,782	1,779	19.8%
Total	108,778	110,546	111,655	111,529	111,702	2,924	2.7%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 70. RNs in the Hudson Valley region accounted for the most jobs in the first quarter of 2014 (18,450), followed by personal care aides (13,410) and nursing assistants (11,800). Cardiovascular Technologists & Technicians and nuclear medicine technologists had the fewest jobs (260 and 140, respectively).

Wages in selected health occupations for the Hudson Valley region are reported in Table 71. These wages were based on data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$78.40), followed by medical and health service managers (\$58.48) and pharmacists (\$58.15). Home health aides (\$11.71) earned the least amount for the selected health occupations in the Hudson Valley region.

Table 70. Number of Jobs in Selected Health Occupations in the Hudson Valley Region, 2013

Occupation	Employment
Registered Nurses	18,450
Personal Care Aides	13,410
Nursing Assistants	11,800
Home Health Aides	8,830
Licensed Practical Nurses	6,360
Social Workers	5,640
Medical and Health Service Managers	2,800
Dental Assistants	2,620
Medical Assistants	2,200
Pharmacy Technicians	2,190
Pharmacists	2,140
Speech-Language Pathologists	1,800
Physical Therapists	1,660
Medical Secretaries	1,650
Dental Hygienists	1,340
Radiologic Technologists	1,210
Occupational Therapists	1,210
Medical Records and Health Information Techs	990
Nurse Practitioners	930
Medical and Clinical Laboratory Technicians	880
Physical Therapy Assistants/Aides	850
Physician Assistants	690
Dietitians and Nutritionists	670
Medical and Clinical Laboratory Technologists	660
Respiratory Therapists	590
Occupational Therapy Assistants/Aides	570
Surgical Technologists	410
Orderlies	310
Cardiovascular Technologists & Technicians	260
Nuclear Medicine Technologists	140
Nurse Midwives	N/A
Certified Registered Nurse Anesthetists	N/A
Dietetic Technicians	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 71. Average Hourly Wage in Selected Health Occupations in the Hudson Valley Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$78.40
Medical and Health Services Managers	\$58.48
Pharmacists	\$58.15
Nurse Midwives	\$53.07
Physician Assistants	\$49.45
Nurse Practitioners	\$48.98
Speech-Language Pathologists	\$43.18
Physical Therapists	\$42.76
Occupational Therapists	\$41.96
Nuclear Medicine Technologists	\$41.12
Registered Nurses	\$37.46
Dental Hygienists	\$37.08
Radiologic Technologists and Technicians	\$34.71
Medical and Clinical Laboratory Technologists	\$32.94
Respiratory Therapists	\$32.77
Dietitians and Nutritionists	\$32.05
Cardiovascular Technologists & Technicians	\$29.72
Healthcare Social Workers	\$29.54
Mental Health and Substance Abuse Social Workers	\$28.95
Occupational Therapy Assistants	\$28.04
Physical Therapist Assistants	\$26.47
Medical and Clinical Laboratory Technicians	\$24.74
Licensed Practical and Licensed Vocational Nurses	\$23.61
Surgical Technologists	\$23.10
Dietetic Technicians	\$20.87
Medical Records and Health Info Techs	\$19.67
Medical Secretaries	\$18.86
Dental Assistants	\$17.69
Medical Assistants	\$17.01
Occupational Therapy Aides	\$16.07
Nursing Assistants	\$15.96
Pharmacy Technicians	\$15.20
Orderlies	\$15.18
Physical Therapist Aides	\$12.99
Personal Care Aides	\$12.89
Home Health Aides	\$11.71

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the number of licensed RNs in the Hudson Valley region increased by more than 1,700, or by 6%. The number of NPs (27%) grew the fastest, followed by speech-language pathologists (22%) and physician assistants (21%). In contrast, Hudson Valley experienced losses in the number of clinical laboratory technologists (-3%) and clinical laboratory technicians (-6%) (Table 72).

Table 72. Number of Licensed Individuals in Selected Health Occupations in the Hudson Valley Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	31,300	31,875	31,788	32,299	33,026	1726	5.50%
Licensed Practical Nurses	7,674	7,621	7,763	7,763	7,951	277	3.60%
Social Workers	7,072	7,160	7,383	7,448	7,643	571	8.10%
Physical Therapists	2,234	2,293	2,340	2,407	2,488	254	11.40%
Nurse Practitioners	1,759	1,838	1,945	2,064	2,235	476	27.10%
Speech-Language Pathologists	1,817	1,910	2,013	2,106	2,208	391	21.50%
Pharmacists	1,998	2,030	2,021	2,094	2,154	156	7.80%
Occupational Therapists	1,324	1,353	1,408	1,421	1,462	138	10.40%
Clinical Laboratory Technologists	1,434	1,433	1,419	1,433	1,387	-47	-3.30%
Dental Hygienists	1,101	1,127	1,136	1,150	1,166	65	5.90%
Physician Assistants	787	810	844	884	953	166	21.10%
Occupational Therapy Assistants	680	710	751	782	782	102	15.00%
Dietitians/Nutritionists	689	717	705	733	758	69	10.00%
Respiratory Therapists	610	624	645	647	679	69	11.30%
Physical Therapy Assistants	483	503	494	510	528	45	9.30%
Clinical Laboratory Technicians	248	248	227	227	233	-15	-6.10%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Hudson Valley region reported the most difficulty recruiting clinical laboratory technologists, followed by medical hospital coders, experienced RNs, and nurse managers. Clinical laboratory technologists were also the most difficult to retain, followed by medical hospital coders, physical therapists, and clinical laboratory technicians (Table 73).

Table 73. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Hudson Valley Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.3	2.7	58%	50%	33%
CNA/Patient Care Techs	1.8	2.4	7%	7%	14%
Clinical Lab Technicians	3.0	3.0	45%	36%	45%
Clinical Lab Technologists	4.4	3.6	67%	58%	67%
Licensed Clinical Social Workers	2.1	2.1	0%	9%	9%
Licensed Practical Nurses	1.6	1.5	13%	0%	0%
Medical Assistants	1.3	1.8	0%	13%	0%
Medical Hospital Coders	4.2	3.3	83%	50%	33%
Nurse Practitioners	2.3	2.5	36%	9%	9%
Occupational Therapists	3.4	3.1	62%	46%	23%
Pharmacists	3.4	2.2	43%	43%	29%
Physical Therapists	3.5	3.3	46%	46%	15%
Physician Assistants	2.6	2.6	30%	20%	20%
Radiologic Technicians	1.3	1.3	0%	0%	8%
Radiologic Technologists	1.5	1.4	0%	0%	8%
Registered Nurses					
Newly Licensed RNs	2.2	2.6	23%	23%	31%
Experienced RNs	3.6	2.7	71%	21%	29%
Nurse Managers	3.6	2.9	50%	29%	43%
Speech-Language Pathologists	2.9	2.9	38%	31%	8%

- Hospitals in the Hudson Valley region reported growth in the number of NPs (43%), PAs (36%), and RNs (36%).
- Facilities that downsized in the past year reported it was due to layoffs.

Nursing Homes

Nursing homes in the Hudson Valley region reported the greatest difficulty recruiting nurse managers, MDS coordinators, and directors of nursing. Personal care assistants, CNAs, newly licensed RNs, and medical billers were the most difficult to retain (Table 74).

Table 74. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Hudson Valley Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	2.6	3.3	71%	29%	0%	57%
Clerical	2.4	1.9	50%	0%	0%	100%
Dietitians/Nutritionists	2.7	2.1	67%	0%	0%	67%
Licensed Practical Nurses	2.5	2.4	25%	75%	0%	25%
Medical Billers	2.9	2.8	50%	0%	0%	100%
Occupational Therapists	3.4	2.1	50%	50%	0%	25%
Occupational Therapy Assts.	3.3	2.0	50%	25%	0%	50%
Personal Care Assistants	2.7	3.7	50%	0%	0%	100%
Physical Therapists	3.4	2.1	50%	50%	0%	50%
Physical Therapy Assistants	3.2	2.0	33%	33%	0%	67%
Registered Nurses						
Newly Licensed RNs	2.1	2.9	0%	0%	0%	100%
Experienced RNs	3.3	2.6	80%	20%	0%	40%
MDS Coordinators	3.7	1.7	67%	33%	0%	33%
Nurse Managers	3.9	2.2	60%	20%	0%	60%
Directors of Nursing	3.7	1.4	50%	0%	0%	100%
Rec. Therapists/Activities Dirs.	2.6	1.7	50%	0%	0%	100%
Respiratory Therapists	3.3	2.4	100%	0%	0%	100%
Social Workers						
Licensed Clinical SWs	2.9	1.8	50%	50%	0%	50%
Licensed Master's SWs	3.3	2.2	50%	50%	0%	50%
Speech-Language Pathologists	2.9	2.1	67%	33%	0%	67%

- Fifty-six percent (56%) reported difficulty hiring RNs for off shifts (evenings, nights, and weekends).
- The vast majority of nursing homes in the Hudson Valley region had no plans to expand (94%) or reduce (99%) services next year.

Home Health Care Agencies

Home health care agencies in the Hudson Valley region reported the most difficulty recruiting dietitians/nutritionists, LCSWs, experienced RNs, occupational therapists, and speech-language pathologists. Experienced RNs were the most difficult to retain, followed by occupational therapists and speech-language pathologists (Table 75).

Table 75. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Hudson Valley and Capital District Regions, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	4.8	3.3	100%	60%	20%	40%
Home Health Aides	3.5	3.0	100%	100%	0%	0%
Licensed Practical Nurses	3.0	2.5	0%	100%	0%	0%
Occupational Therapists	4.2	3.6	100%	17%	17%	33%
Personal Care Aides/Homemakers	2.0	2.0	N/A	N/A	N/A	N/A
Physical Therapists	3.5	3.0	80%	60%	20%	40%
Registered Nurses						
Newly Licensed RNs	4.0	N/A	0%	100%	0%	0%
Experienced RNs	4.3	4.0	60%	100%	0%	60%
Respiratory Therapists	3.5	2.8	20%	0%	0%	20%
Social Workers						
Licensed Clinical SWs	4.7	3.3	100%	33%	0%	33%
Licensed Master's SWs	3.6	3.2	100%	33%	0%	33%
Speech-Language Pathologists	4.2	3.5	100%	20%	0%	40%

- Two-thirds (67%) reported difficulty hiring part-time workers.
- Forty-three (43%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- Only 1 agency indicated it anticipated expanding services in the next year.

FQHCs

FQHCs in Hudson Valley reported the most difficulty recruiting family physicians, ob/gyn physicians, and psychiatric NPs and reported the most difficulty retaining family NPs, general pediatricians, psychologists, adult NPs, medical assistants, and patient health educators (Table 76).

Table 76. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Hudson Valley Region, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	4.5	2.8
	Internal Medicine	4.0	2.0
	Ob/Gyn	4.4	2.4
	Pediatric	4.1	3.0
	Physician Assistants	2.7	1.6
Nurse Practitioners	Pediatric	3.4	2.7
	Adult	1.8	3.0
	Family	2.5	3.5
	Midwives	2.3	2.3
	Psychiatric	4.4	2.3
Nursing	Registered	3.0	2.8
	Licensed Practical	2.4	2.3
	Medical Assistants	2.0	3.0
Behavioral Health	Psychiatrists	3.8	2.3
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.0	2.5
	Social Workers	2.7	2.3
Oral Health	Dentists	3.4	2.2
	Dental Hygienists	2.3	1.7
	Dental Assistants/Aides/Techs	1.9	2.0
Enabling Services	Care Coordinators/Case Managers	2.5	2.2
	HIV Counselors	2.3	2.0
	Community Health Workers	1.8	2.3
	Patient Health Educators	2.5	3.0
	Nutritionists/Nutrition Educators	3.5	2.6
	Eligibility Assistance	1.5	2.8
	Patient Health Navigators	1.4	2.5
	Outreach Workers	1.7	2.6
Administrative Support	Billing/Data Entry	2.6	2.7
	IT Systems Admin/Maintenance	2.5	2.4

- Eighty-three percent (83%) of FQHCs indicated plans to expand services and expected to hire more primary care physicians, nurses, and medical assistants.
- Eighty-six percent (86%) of FQHCs reported difficulty hiring bilingual staff; Spanish was the language most needed.
- Fifty-seven percent (57%) reported difficulty hiring workers for weekend shifts.

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Hudson Valley region will be for RNs (640), home health aides (620), and personal care aides (590) (Table 77).

Table 77. Employment Projections for Selected Health Occupations in the Hudson Valley Region, 2012 and 2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	13,810	18,670	4,860	35.2%	590
Home Health Aides	9,510	13,890	4,380	46.1%	620
Registered Nurses	17,860	20,790	2,930	16.4%	640
Nursing Assistants	11,510	13,730	2,220	19.3%	440
Licensed Practical and Licensed Vocational Nurses	6,310	8,140	1,830	29.0%	330
Social Workers	5,730	6,560	830	14.5%	200
Medical Assistants	2,470	3,210	740	30.0%	120
Physical Therapists	1,860	2,440	580	31.2%	110
Medical and Health Services Managers	2,740	3,170	430	15.7%	110
Emergency Medical Technicians and Paramedics	1,520	1,930	410	27.0%	80
Physician Assistants	880	1,240	360	40.9%	60
Dental Assistants	2,170	2,510	340	15.7%	90
Dental Hygienists	1,360	1,670	310	22.8%	70
Nurse Practitioners	920	1,210	290	31.5%	50
Speech-Language Pathologists	1,490	1,720	230	15.4%	40
Diagnostic Medical Sonographers	560	790	230	41.1%	30
Pharmacy Technicians	1,320	1,550	230	17.4%	30
Medical Records and Health Info Techs	990	1,220	230	23.2%	50
Clinical, Counseling, and School Psychologists	1,920	2,120	200	10.4%	70
Occupational Therapists	1,070	1,270	200	18.7%	30
Radiologic Technologists	1,190	1,380	190	16.0%	40
Pharmacists	1,690	1,870	180	10.7%	60
Medical and Clinical Laboratory Technicians	740	910	170	23.0%	40
Dietitians and Nutritionists	710	860	150	21.1%	30
Respiratory Therapists	740	890	150	20.3%	30
Cardiovascular Technologists & Technicians	430	560	130	30.2%	20
Surgical Technologists	530	640	110	20.8%	20
Medical and Clinical Laboratory Technologists	720	790	70	9.7%	30
Psychiatric Aides	1,430	1,480	50	3.5%	30
Orderlies	220	250	30	13.6%	0

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

F. Long Island

The Long Island region includes the counties of Nassau and Suffolk.

Population

The Long Island region had a significantly lower percentage of individuals below 100% and 200% of the FPL and had a less diverse population than the state as a whole. Additionally, the region is less racially and ethnically diverse, with larger proportions of the population younger than age 18 or older than 64 years. The district also had similar rates of high school graduates, but a larger percentage of residents with education at bachelor's level or higher (Table 78).

Table 78. Selected Population Characteristics in the Long Island Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	2,839,568	N/A	N/A
Population under 100% FPL	173,729	6.1%	14.9%
Population under 200% FPL	471,530	16.6%	31.3%
Population aged birth to 17 years	733,164	25.8%	24.9%
Population aged 65 and older	419,182	14.8%	13.8%
Population female aged 15 to 44	528,592	18.6%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	773	0.0%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	19,392	0.7%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	11,351	0.4%	0.3%
Black/African American, non-Hispanic	249,154	8.8%	14.4%
Hispanic/Latino	454,519	16.0%	17.9%
Asian/Pacific Islander, non-Hispanic	159,246	5.6%	7.6%
American Indian/Native Alaskan, non-Hispanic	3,644	0.1%	0.2%
Two or more/other	42,858	1.5%	2.1%
Less than high school education	192,433	10.0%	14.8%
High school or equivalent	858,509	44.4%	43.5%
Associate degree	165,967	8.6%	8.4%
Bachelor's degree	394,765	20.4%	18.9%
Master's degree or higher	320,572	16.6%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Long Island region had slightly higher rates of total deaths and deaths due to all cancers and heart disease than the state as a whole, but it had lower rates of deaths due to diabetes. The rate of total hospitalizations was much higher in the Long Island region compared with the statewide and upstate rates. However, the region had fewer preventable hospitalizations than the state as a whole but more than the upstate rate. Similarly, the rate of ED visits on Long Island was lower than the statewide rate, but greater than the upstate rate. The Long Island region also had a higher rate of heart disease hospitalizations than the upstate region and the state as a whole (Table 79).

Table 79. Selected Health Indicators in the Long Island Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	22,086	777.2	752.2	850.6
Deaths due to heart disease, per 100,000	7,322	257.7	225.6	240.1
Deaths due to all cancers, per 100,000	5,299	187.1	180.3	201.5
Deaths due to diabetes, per 100,000	408	14.4	19.7	18.8
Total births, per 1,000 females aged 15 to 44	30,992	58.4	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	1,234	12.6	22.7	19.8
Low-birthweight births, as a percent of total births	2,460	7.9	8.2	7.8
Late/no prenatal care, as a percent of total births	1,130	3.8	5.6	4.1
Infant deaths, per 1,000 live births	129	4.2	5.1	5.6
Total hospitalizations, per 10,000	370,933	1,305.4	1,263.4	1,196.7
Preventable hospitalizations per 10,000	34,065	156.1	156.5	147.5
Adult asthma hospitalizations, per 10,000	2,841	13.0	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	1,288	19.5	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	67,175	236.4	249.7	230.0
CLRD hospitalizations, ^c per 10,000	9,980	35.1	37.8	34.2
Heart disease hospitalizations, per 10,000	38,993	137.2	114.6	117.2
Total ED visits, per 10,000	959,860	3,377.9	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.
^b Primary diagnosis only.
^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

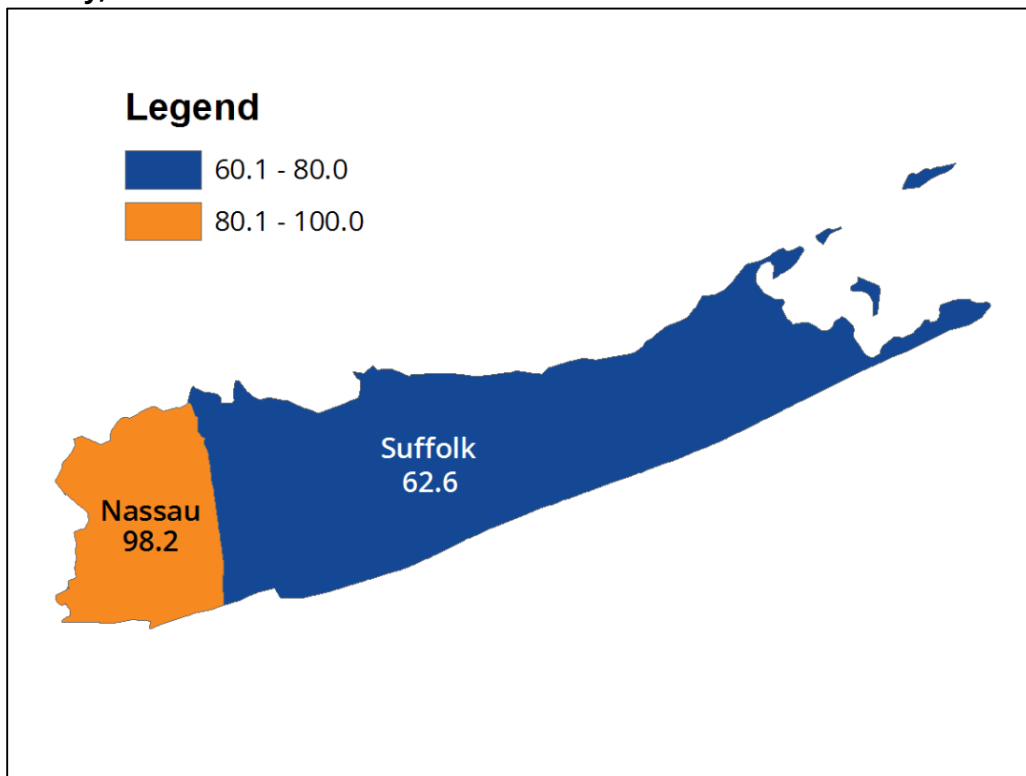
There were more than 2,200 primary care physicians practicing in the Long Island region. Forty percent (40%) were in general internal medicine, 25% were in general pediatrics, and another 22% were in general or family practice. There were 79.5 primary care physicians per 100,000 population in the Long Island region, which was above the statewide rate of 74.5 per 100,000. Nassau County had 98.2 primary care physicians per 100,000 population, whereas Suffolk County only had 62.6 physicians per 100,000 total population (Table 80 and Figure 27).

Table 80. Primary Care Physicians in the Long Island Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	503	17.6
Internal Medicine (General)	919	32.1
Geriatrics	14	3.3
Obstetrics/Gynecology	269	50.4
Pediatrics (General)	571	86.1
Total	2,276	79.5

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 27. Number of Primary Care Physicians per 100,000 Population in the Long Island Region, by County, 2014



Employment

Total Health Sector Employment

Health sector employment in the Long Island region grew by nearly 7% between 2009 and 2013, adding more than 10,600 jobs. Employment in home health care grew the fastest, increasing by 23% between 2009 and 2013. There was also growth in hospital employment (10%) and ambulatory care (6%), while the number of jobs in nursing home and personal care facilities in 2013 decreased 6% below its 2009 level, after experiencing an increase between 2009 to 2011 (Table 81).

Table 81. Number of Health Care Jobs in the Long Island Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	57,061	62,646	64,558	62,754	62,687	5,626	9.9%
Ambulatory care (excluding home health)	59,836	61,385	62,110	62,528	63,485	3,649	6.1%
Nursing home and personal care facilities	24,238	24,244	24,399	23,918	22,722	-1,516	-6.3%
Home health care	12,696	13,120	13,561	14,630	15,580	2,884	22.7%
Total	153,830	161,395	164,628	163,830	164,474	10,644	6.9%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations in the Long Island region is reported in Table 82. RNs (23,800) on Long Island accounted for the most jobs in the first quarter of 2014, followed by personal care aides (16,300), nursing aides (14,750), and home health aides (11,230). Occupational therapy assistants and aides, nuclear medicine technologists, and dietetic technicians had the fewest jobs (250, 220, and 110, respectively).

Wages in selected health occupations for Long Island are reported in Table 83. These wages were based on data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$87.66), followed by medical and health service managers (\$59.02), pharmacists (\$55.61), and NPs (\$55.17). Personal care aides (\$12.57) and home health aides (\$11.38) were the lowest wage earners for the selected health occupations in the Long Island region.

Table 82. Number of Jobs in Selected Health Occupations in the Long Island Region, 2013

Occupation	Employment
Registered Nurses	23,800
Personal Care Aides	16,300
Nursing Assistants	14,750
Home Health Aides	11,230
Licensed Practical Nurses	7,080
Social Workers	5,520
Medical Assistants	4,540
Medical and Health Service Managers	3,920
Dental Assistants	3,720
Pharmacists	2,630
Physical Therapists	2,590
Pharmacy Technicians	2,580
Radiologic Technologists	2,180
Speech-Language Pathologists	2,100
Dental Hygienists	2,030
Physician Assistants	1,950
Medical and Clinical Laboratory Technologists	1,750
Physical Therapy Assistants/Aides	1,600
Medical Secretaries	1,560
Nurse Practitioners	1,500
Medical Records and Health Information Techs	1,370
Occupational Therapists	1,140
Medical and Clinical Laboratory Technicians	1,110
Respiratory Therapists	970
Certified Registered Nurse Anesthetists	810
Surgical Technologists	630
Cardiovascular Technologists & Technicians	610
Dietitians and Nutritionists	600
Orderlies	360
Occupational Therapy Assistants/Aides	250
Nuclear Medicine Technologists	220
Dietetic Technicians	110
Nurse Midwives	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 83. Average Hourly Wage in Selected Health Occupations in the Long Island Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$87.66
Medical and Health Services Managers	\$59.02
Pharmacists	\$55.61
Nurse Practitioners	\$55.17
Physician Assistants	\$48.36
Nurse Midwives	\$44.99
Speech-Language Pathologists	\$43.01
Physical Therapists	\$41.75
Nuclear Medicine Technologists	\$40.17
Occupational Therapists	\$39.63
Registered Nurses	\$39.34
Medical and Clinical Laboratory Technologists	\$35.44
Dental Hygienists	\$35.26
Radiologic Technologists and Technicians	\$34.91
Respiratory Therapists	\$33.37
Dietitians and Nutritionists	\$31.69
Cardiovascular Technologists & Technicians	\$29.04
Occupational Therapy Assistants	\$28.52
Physical Therapist Assistants	\$28.18
Healthcare Social Workers	\$27.70
Mental Health and Substance Abuse Social Workers	\$26.73
Licensed Practical and Licensed Vocational Nurses	\$25.17
Medical and Clinical Laboratory Technicians	\$25.14
Surgical Technologists	\$24.93
Dietetic Technicians	\$20.47
Medical Records and Health Info Techs	\$20.38
Occupational Therapy Aides	\$19.02
Dental Assistants	\$18.22
Medical Secretaries	\$17.90
Nursing Assistants	\$16.89
Medical Assistants	\$16.65
Orderlies	\$15.32
Pharmacy Technicians	\$14.59
Physical Therapist Aides	\$13.47
Personal Care Aides	\$12.57
Home Health Aides	\$11.38

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the number of licensed RNs on Long Island increased by nearly 3,200, or 8%. During the same period, there were significant increases in the number of all licensed health professionals. Social workers (966), speech-language pathologists (663), NPs (642), and PAs (570) were among those occupations with the largest additions. The occupations with the greatest percentage growth in numbers included PAs (30%), NPs (24%), and speech-language pathologists (21%). In contrast, the number of licensed clinical laboratory technicians declined by 60, or by 16%, between 2009 and 2013 (Table 84).

Table 84. Number of Licensed Individuals in Selected Health Occupations in the Long Island Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	39,390	40,185	40,574	41,377	42,592	3202	8.1%
Social Workers	8,280	8,464	8,717	8,965	9,246	966	11.7%
Licensed Practical Nurses	8,814	8,718	8,884	8,922	8,979	165	1.9%
Pharmacists	3,642	3,741	3,805	3,938	4,060	418	11.5%
Speech-Language Pathologists	3,096	3,222	3,389	3,575	3,759	663	21.4%
Physical Therapists	3,273	3,342	3,367	3,490	3,608	335	10.2%
Nurse Practitioners	2,645	2,765	2,890	3,051	3,287	642	24.3%
Physician Assistants	1,896	1,987	2,120	2,248	2,466	570	30.1%
Clinical Laboratory Technologists	2,389	2,410	2,381	2,424	2,414	25	1.0%
Occupational Therapists	1,818	1,860	1,916	2,000	2,102	284	15.6%
Dental Hygienists	1,680	1,699	1,720	1,730	1,784	104	6.2%
Dietitians/Nutritionists	932	966	975	1,023	1,040	108	11.6%
Respiratory Therapists	898	936	983	997	1,023	125	13.9%
Physical Therapy Assistants	968	973	958	990	1,008	40	4.1%
Occupational Therapy Assistants	377	396	413	419	427	50	13.3%
Clinical Laboratory Technicians	371	352	323	327	311	-60	-16.2%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Long Island region reported the most difficulty recruiting medical hospital coders, clinical laboratory technicians, and nurse practitioners. Care coordinators were the most difficult to retain, followed experienced RNs (Table 85).

Table 85. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Long Island Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.5	3.3	13%	4%	4%
CNA/Patient Care Techs	1.1	1.7	0%	0%	60%
Clinical Lab Technicians	3.9	2.1	24%	10%	5%
Clinical Lab Technologists	3.4	2.2	25%	8%	4%
Licensed Clinical Social Workers	2.8	2.2	12%	12%	4%
Licensed Practical Nurses	1.0	1.0	0%	0%	64%
Medical Assistants	1.2	2.0	0%	0%	64%
Medical Hospital Coders	4.1	2.3	28%	4%	8%
Nurse Practitioners	3.6	2.3	8%	8%	63%
Occupational Therapists	3.4	2.0	5%	5%	0%
Pharmacists	3.0	2.0	12%	8%	8%
Physical Therapists	3.3	2.0	13%	13%	0%
Physician Assistants	3.2	2.3	8%	16%	4%
Radiologic Technicians	2.5	1.8	5%	0%	0%
Radiologic Technologists	2.7	2.0	5%	0%	5%
Registered Nurses					
Newly Licensed RNs	1.1	2.0	0%	4%	56%
Experienced RNs	3.2	2.4	16%	12%	68%
Nurse Managers	3.4	1.4	8%	16%	60%
Speech-Language Pathologists	3.5	2.0	5%	5%	0%

- Hospitals in the Long Island region reported plans to increase both outpatient procedural services and ambulatory services, with increased demand for PAs (96%), NPs (91%), and RNs (81%).
- Facilities that downsized during the past year reported that downsizing was due to layoffs.

Nursing Homes

Nursing homes in the Long Island region reported the most difficulty recruiting experienced RNs, followed by nurse managers, licensed practical nurses, occupational therapy assistants, MDS coordinators, and directors of nursing. Personal care assistants were the most difficult to retain, followed by CNAs, LPNs, and experienced RNs (Table 86).

Table 86. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Long Island Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	2.2	3.5	43%	0%	0%	71%
Clerical	2.1	1.6	0%	67%	0%	33%
Dietitians/Nutritionists	2.3	2.0	50%	0%	25%	50%
Licensed Practical Nurses	2.8	2.7	80%	0%	0%	40%
Medical Billers	2.0	1.8	33%	67%	0%	67%
Occupational Therapists	2.6	1.9	25%	50%	0%	50%
Occupational Therapy Assts.	2.8	1.9	60%	60%	0%	20%
Personal Care Assistants	1.7	3.7	50%	0%	25%	50%
Physical Therapists	2.7	2.0	33%	50%	17%	33%
Physical Therapy Assistants	2.4	1.9	33%	50%	17%	33%
Registered Nurses						
Newly Licensed RNs	1.9	2.3	50%	0%	0%	50%
Experienced RNs	3.5	2.7	57%	29%	14%	43%
MDS Coordinators	2.8	1.8	67%	17%	0%	50%
Nurse Managers	2.9	2.3	40%	0%	0%	60%
Directors of Nursing	2.8	2.0	25%	25%	25%	75%
Rec. Therapists/Activities Dirs.	2.5	1.8	50%	0%	0%	50%
Respiratory Therapists	2.6	2.0	100%	0%	0%	0%
Social Workers						
Licensed Clinical SWs	2.6	2.3	33%	33%	33%	33%
Licensed Master's SWs	2.5	2.1	40%	40%	20%	40%
Speech-Language Pathologists	2.4	2.4	0%	33%	33%	33%

Other information reported by nursing homes in the Long Island region included:

- More than one-quarter (29%) of nursing homes in the Long Island region reported difficulty hiring RNs for off shifts (evenings, nights, and weekends).
- Forty-four percent (44%) of nursing homes reported difficulty hiring part-time workers.
- The vast majority of nursing homes (99%) were not planning to expand services next year.

Home Health Care Agencies

Home health care agencies in the Long Island region reported the most difficulty recruiting occupational therapists, experienced RNs, and home health aides. Experienced RNs were also the most difficult to retain, followed by personal care aides/homemakers, occupational therapists, and LPNs (Table 87).

Table 87. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Long Island Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	2.3	1.5	0%	50%	0%	50%
Home Health Aides	3.3	2.5	50%	0%	0%	100%
Licensed Practical Nurses	2.8	2.7	0%	50%	0%	50%
Occupational Therapists	3.8	2.8	100%	0%	25%	25%
Personal Care Aides/Homemakers	3.0	3.0	N/A	N/A	N/A	N/A
Physical Therapists	2.8	2.2	0%	33%	33%	67%
Registered Nurses						
Newly Licensed RNs	2.0	2.0	0%	0%	0%	100%
Experienced RNs	3.6	3.3	20%	40%	20%	20%
Respiratory Therapists	2.5	2.5	0%	0%	0%	20%
Social Workers						
Licensed Clinical SWs	2.0	2.0	0%	0%	0%	100%
Licensed Master's SWs	2.8	2.4	0%	50%	0%	50%
Speech-Language Pathologists	2.8	2.4	0%	33%	33%	67%

- One-quarter (25%) reported difficulty hiring part-time workers.
- Only 7% anticipated expanding services in the next year, with increased demand for RNs, physical therapists, and occupational therapists. None reported anticipating reducing services next year.

FQHCs

There were no responses from FQHCs in the Long Island region.

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Long Island region will be for home health aides (860), RNs (830), and personal care aides (820) (Table 88).

Table 88. Employment Projections for Selected Health Occupations in the Long Island Region, 2012 and 2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	15,620	22,720	7,100	45.5%	820
Home Health Aides	12,890	19,000	6,110	47.4%	860
Registered Nurses	24,290	27,850	3,560	14.7%	830
Nursing Assistants	16,080	18,460	2,380	14.8%	550
Licensed Practical and Licensed Vocational Nurses	6,800	8,490	1,690	24.9%	340
Medical Assistants	5,470	7,090	1,620	29.6%	260
Social Workers	5,870	6,740	870	14.8%	210
Physical Therapists	2,840	3,660	820	28.9%	150
Physician Assistants	2,230	2,980	750	33.6%	120
Dental Assistants	3,760	4,430	670	17.8%	150
Emergency Medical Technicians and Paramedics	2,590	3,130	540	20.8%	120
Medical and Health Services Managers	3,900	4,430	530	13.6%	150
Dental Hygienists	1,980	2,490	510	25.8%	100
Nurse Practitioners	1,550	1,990	440	28.4%	70
Radiologic Technologists	2,420	2,860	440	18.2%	70
Pharmacy Technicians	2,390	2,810	420	17.6%	60
Diagnostic Medical Sonographers	830	1,170	340	41.0%	40
Medical and Clinical Laboratory Technicians	1,190	1,510	320	26.9%	60
Pharmacists	2,640	2,950	310	11.7%	90
Speech-Language Pathologists	2,040	2,330	290	14.2%	60
Medical Records and Health Info Techs	1,310	1,570	260	19.8%	70
Occupational Therapists	1,200	1,450	250	20.8%	50
Medical and Clinical Laboratory Technologists	1,770	1,950	180	10.2%	70
Respiratory Therapists	1,060	1,230	170	16.0%	40
Cardiovascular Technologists & Technicians	640	800	160	25.0%	30
Surgical Technologists	680	820	140	20.6%	20
Dietitians and Nutritionists	680	800	120	17.6%	20
Nurse Anesthetists	430	540	110	25.6%	20
Psychiatric Aides	1,200	1,310	110	9.2%	30
Clinical, Counseling, and School Psychologists	1,870	1,970	100	5.3%	60
Orderlies	350	400	50	14.3%	20

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

G. Mohawk Valley

The Mohawk Valley region includes the counties of Fulton, Herkimer, Montgomery, Oneida, Otsego, and Schoharie.

Population

The Mohawk Valley region population was much less racially and ethnically diverse and older than New York as a whole. The Mohawk Valley region also had a higher percentage of people with a high school diploma or equivalent, but a smaller percentage of people with a bachelor's degree or higher than the state as a whole (Table 89).

Table 89. Selected Population Characteristics in the Mohawk Valley Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	498,251	N/A	N/A
Population under 100% FPL	74,908	15.0%	14.9%
Population under 200% FPL	168,999	33.9%	31.3%
Population aged birth to 17 years	122,490	24.6%	24.9%
Population aged 65 and older	83,414	16.7%	13.8%
Population female aged 15 to 44	91,429	18.3%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	310	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	4,177	0.8%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	1,123	0.2%	0.3%
Black/African American, non-Hispanic	16,203	3.3%	14.4%
Hispanic/Latino	22,547	4.5%	17.9%
Asian/Pacific Islander, non-Hispanic	9,219	1.9%	7.6%
American Indian/Native Alaskan, non-Hispanic	848	0.2%	0.2%
Two or more/other	8,785	1.8%	2.1%
Less than high school education	44,831	13.2%	14.8%
High school or equivalent	183,707	54.0%	43.5%
Associate degree	40,446	11.9%	8.4%
Bachelor's degree	41,980	12.3%	18.9%
Master's degree or higher	29,387	8.6%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Mohawk Valley region had much higher rates of total deaths, deaths due to heart disease, deaths due to all cancer, and deaths due to diabetes than the state as a whole and upstate New York. Additionally, the rates of total hospitalizations as well as hospitalizations due to diabetes, chronic lower respiratory disease, and heart disease were all higher than the state or upstate New York rates. The rates of preventable hospitalizations and ED visits were also much higher in the Mohawk Valley region compared with rates statewide and upstate New York. Although it had a lower total birth rate, the Mohawk Valley had a higher teen birth rate than the state as a whole (Table 90).

Table 90. Selected Health Indicators in the Mohawk Valley Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	5,138	1,031.1	752.2	850.6
Deaths due to heart disease, per 100,000	1,488	298.7	225.6	240.1
Deaths due to all cancers, per 100,000	1,107	221.8	180.3	201.5
Deaths due to diabetes, per 100,000	129	26.0	19.7	18.8
Total births, per 1,000 females aged 15 to 44	5,256	57.5	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	481	26.0	22.7	19.8
Low-birthweight births, as a percent of total births	377	7.2	8.2	7.8
Late/no prenatal care, as a percent of total births	265	5.1	5.6	4.1
Infant deaths, per 1,000 live births	32	6.2	5.1	5.6
Total hospitalizations, per 10,000	65,841	1,321.3	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	7,386	188.2	156.5	147.5
Adult asthma hospitalizations, per 10,000	465	11.8	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	142	13.5	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	14,088	282.7	249.7	230.0
CLRD hospitalizations, ^c per 10,000	2,284	45.8	37.8	34.2
Heart disease hospitalizations, per 10,000	6,812	136.7	114.6	117.2
Total ED visits, per 10,000	224,084	4,496.9	4,007.6	3,657.6
^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details. ^b Primary diagnosis only. ^c Chronic lower respiratory disease.				

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

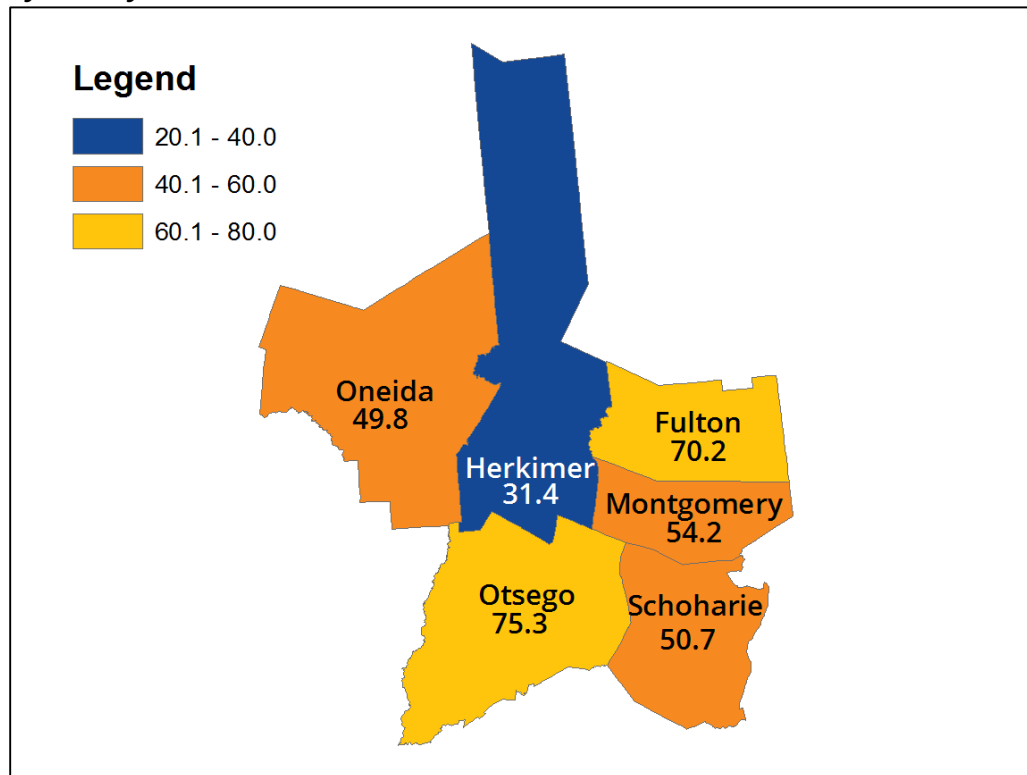
There were more than 260 primary care physicians practicing in the Mohawk Valley region. Forty-two percent (42%) were in family or general practice and 30% were in general internal medicine. There were 53.7 primary care physicians per 100,000 population in the Mohawk Valley region, which was well below the statewide rate of 74.5 per 100,000. Otsego County had the highest rate with nearly 75.3 primary care physicians per 100,000 population, and Herkimer County had the lowest rate with 31.4 per 100,000 (Table 91 and Figure 28).

Table 91. Primary Care Physicians in the Mohawk Valley Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	112	22.7
Internal Medicine (General)	79	16.0
Geriatrics	3	3.6
Obstetrics/Gynecology	22	24.3
Pediatrics (General)	49	46.8
Total	265	53.7

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 28. Number of Primary Care Physicians per 100,000 Population in the Mohawk Valley Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment in the Mohawk Valley region did not change significantly, experiencing a decrease of 37 jobs. Employment in ambulatory care increased by more than 250 jobs, or by 4%, whereas jobs in nursing home and personal care facilities grew by 1%, adding 75 jobs. In contrast, employment in hospitals fell by 381 jobs, or by 3%, and employment in home health care declined by nearly 1% during the same period (Table 92).

Table 92. Number of Health Care Jobs in the Mohawk Valley Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	12,450	12,501	12,359	12,153	12,069	-381	-3.1%
Ambulatory care (excluding home health)	6,476	6,646	6,635	6,757	6,753	277	4.3%
Nursing home and personal care facilities	6,618	6,632	6,561	6,555	6,693	75	1.1%
Home health care	1,398	1,416	1,464	1,396	1,390	-8	-0.6%
Total	26,942	27,195	27,019	26,861	26,905	-37	-0.1%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 93. RNs in the Mohawk Valley region accounted for the most jobs in the first quarter of 2014 (4,790), followed by personal care aides (4,070) and home health aides (3,400). Cardiovascular technologists and technicians, occupational therapy assistants, and dietetic technicians accounted for the fewest jobs, all at 50.

Wages in selected health occupations for Mohawk Valley are reported in Table 94. These wages were based on data for the first quarter of 2014. Pharmacists earned the highest hourly wage in 2014 (\$62.47), followed by nurse midwives (\$48.09) and PAs (\$45.54). Orderlies were the lowest wage earners (\$10.83) in the selected health occupations in the Mohawk Valley region. Please note there were too few certified registered nurse anesthetists to count for NYSDOL analysis.

Table 93. Number of Jobs in Selected Health Occupations in the Mohawk Valley Region, 2013

Occupation	Employment
Registered Nurses	4,790
Personal Care Aides	4,070
Home Health Aides	3,400
Nursing Assistants	3,220
Licensed Practical Nurses	2,090
Social Workers	1,180
Medical and Health Service Managers	710
Pharmacists	520
Pharmacy Technicians	460
Dental Assistants	450
Radiologic Technologists	350
Physical Therapists	330
Medical Assistants	300
Dental Hygienists	280
Physical Therapy Assistants/Aides	260
Medical Secretaries	260
Nurse Practitioners	260
Medical Records and Health Information Techs	230
Occupational Therapists	220
Respiratory Therapists	210
Speech-Language Pathologists	200
Medical and Clinical Laboratory Technologists	170
Orderlies	140
Dietitians and Nutritionists	130
Physician Assistants	120
Medical and Clinical Laboratory Technicians	90
Surgical Technologists	80
Cardiovascular Technologists & Technicians	50
Occupational Therapy Assistants/Aides	50
Dietetic Technicians	50
Certified Registered Nurse Anesthetists	N/A
Nurse Midwives	N/A
Nuclear Medicine Technologists	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 94. Average Hourly Wage in Selected Health Occupations in the Mohawk Valley Region, 2014

Occupation	Average Wage per Hour
Pharmacists	\$62.47
Nurse Midwives	\$48.09
Physician Assistants	\$45.54
Medical and Health Services Managers	\$43.66
Nurse Practitioners	\$41.37
Nuclear Medicine Technologists	\$36.05
Physical Therapists	\$34.91
Speech-Language Pathologists	\$31.98
Dental Hygienists	\$31.39
Occupational Therapists	\$31.33
Mental Health and Substance Abuse Social Workers	\$29.69
Registered Nurses	\$28.80
Respiratory Therapists	\$28.37
Medical and Clinical Laboratory Technologists	\$28.30
Cardiovascular Technologists & Technicians	\$27.21
Radiologic Technologists and Technicians	\$26.66
Dietitians and Nutritionists	\$25.66
Healthcare Social Workers	\$25.13
Medical and Clinical Laboratory Technicians	\$23.57
Occupational Therapy Assistants	\$20.36
Surgical Technologists	\$19.93
Dietetic Technicians	\$18.92
Physical Therapist Assistants	\$18.73
Licensed Practical and Licensed Vocational Nurses	\$17.62
Medical Records and Health Info Techs	\$17.37
Dental Assistants	\$15.70
Pharmacy Technicians	\$14.36
Physical Therapist Aides	\$14.36
Medical Secretaries	\$14.23
Medical Assistants	\$14.15
Nursing Assistants	\$12.45
Personal Care Aides	\$12.39
Home Health Aides	\$12.39
Orderlies	\$10.83
Certified Registered Nurse Anesthetists	N/A
Occupational Therapy Aides	N/A

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the number of licensed RNs in the Mohawk Valley region increased by nearly than 500, or 7%. NPs experienced the highest percentage growth (24%), followed by PAs (19%) and respiratory therapists (18%). In contrast, the number of LPNs, occupational therapy assistants, clinical laboratory technicians, and clinical laboratory technologists experienced declines between 2009 and 2013 in the Mohawk Valley region (Table 95).

Table 95. Number of Licensed Individuals in Selected Health Occupations in the Mohawk Valley Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	6,653	6,786	6,832	6,978	7,137	484	7.3%
Licensed Practical Nurses	3,537	3,505	3,579	3,533	3,518	-19	-0.5%
Social Workers	625	640	681	666	680	55	8.8%
Pharmacists	459	480	498	519	528	69	15.0%
Nurse Practitioners	377	402	418	428	468	91	24.1%
Physical Therapists	326	341	339	357	378	52	16.0%
Clinical Laboratory Technologists	348	343	332	341	342	-6	-1.7%
Occupational Therapists	305	309	320	328	331	26	8.5%
Dental Hygienists	257	265	283	289	289	32	12.5%
Speech-Language Pathologists	210	223	225	227	238	28	13.3%
Physical Therapy Assistants	209	210	204	205	221	12	5.7%
Respiratory Therapists	183	186	194	205	215	32	17.5%
Physician Assistants	174	182	192	194	207	33	19.0%
Occupational Therapy Assistants	158	157	153	154	146	-12	-7.6%
Dietitians/Nutritionists	83	89	90	94	92	9	10.8%
Clinical Laboratory Technicians	99	87	77	74	73	-26	-26.3%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Mohawk Valley region reported that licensed clinical social workers were the most difficult profession to recruit, followed by care coordinators and clinical laboratory technologists. Licensed clinical social workers were also the most difficult to retain, followed by clinical lab technologists and occupational therapists (Table 96).

Table 96. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Mohawk Valley Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.8	2.0	50%	0%	25%
CNA/Patient Care Techs	2.2	2.2	40%	20%	20%
Clinical Lab Technicians	2.0	1.0	0%	0%	100%
Clinical Lab Technologists	3.5	3.3	75%	25%	100%
Licensed Clinical Social Workers	4.0	4.0	100%	0%	100%
Licensed Practical Nurses	1.8	1.8	0%	25%	0%
Medical Assistants	3.0	3.0	0%	0%	33%
Medical Hospital Coders	2.8	2.2	40%	0%	20%
Nurse Practitioners	3.0	2.8	25%	0%	75%
Occupational Therapists	2.7	3.3	33%	33%	33%
Pharmacists	2.3	2.7	0%	25%	50%
Physical Therapists	3.2	2.8	20%	40%	20%
Physician Assistants	3.0	3.0	0%	0%	75%
Radiologic Technicians	1.3	1.7	0%	0%	33%
Radiologic Technologists	3.0	2.5	0%	0%	33%
Registered Nurses					
Newly Licensed RNs	3.2	3.2	40%	0%	40%
Experienced RNs	3.0	3.0	40%	40%	60%
Nurse Managers	3.0	2.3	25%	25%	25%
Speech-Language Pathologists	2.7	2.3	33%	33%	33%

- Hospitals in the Mohawk Valley region reported growth in outpatient demand for NPs (60%), PAs (60%), and RNs (60%).

Nursing Homes

Nursing homes in the Mohawk Valley region reported the most difficulties recruiting MDS coordinators and nurse managers. CNAs were the most difficult to retain, followed by LPNs and experienced RNs (Table 97).

Table 97. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Mohawk Valley Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	3.0	4.0	100%	17%	17%	0%
Clerical	1.8	2.0	0%	0%	0%	0%
Dietitians/Nutritionists	2.6	2.2	0%	100%	0%	0%
Licensed Practical Nurses	3.2	3.4	100%	50%	50%	0%
Medical Billers	2.9	2.2	100%	33%	0%	0%
Occupational Therapists	2.6	2.0	0%	0%	0%	0%
Occupational Therapy Assts.	2.8	2.0	0%	0%	0%	0%
Personal Care Assistants	1.0	2.0	0%	0%	0%	0%
Physical Therapists	2.8	1.8	50%	100%	0%	0%
Physical Therapy Assistants	2.8	1.8	0%	0%	100%	0%
Registered Nurses						
Newly Licensed RNs	2.0	2.6	100%	50%	50%	0%
Experienced RNs	3.0	2.9	25%	100%	50%	0%
MDS Coordinators	3.4	2.6	33%	100%	67%	0%
Nurse Managers	3.4	2.6	40%	80%	40%	0%
Directors of Nursing	3.0	2.0	100%	33%	33%	0%
Rec. Therapists/Activities Dirs.	2.3	2.3	0%	0%	0%	0%
Respiratory Therapists	3.0	2.0	100%	0%	0%	0%
Social Workers						
Licensed Clinical SWs	2.9	2.2	0%	100%	100%	0%
Licensed Master's SWs	3.0	2.3	0%	100%	100%	0%
Speech-Language Pathologists	3.0	2.7	50%	100%	50%	0%

- Nearly half (44%) reported difficulty recruiting part-time workers.
- One-third (33%) reported trouble recruiting workers for off shifts (evenings, nights, and weekends).
- Most nursing homes were not planning to expand (94%) or reduce (97%) services next year.

Home Health Care Agencies

Home health care agencies in the Mohawk Valley region reported the greatest difficulty recruiting occupational therapists, followed by physical therapists, LCSWs, experienced RNs, and LMSWs. Experienced RNs were the most difficult to retain, followed by newly licensed RNs, LMSWs, and LCSWs (Table 98).

Table 98. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Mohawk Valley Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Dietitians/Nutritionists	2.0	1.0	100%	0%	0%	0%
Home Health Aides	2.5	2.0	100%	0%	0%	0%
Licensed Practical Nurses	2.3	1.7	0%	100%	0%	0%
Occupational Therapists	4.0	2.0	N/A	N/A	N/A	N/A
Personal Care Aides/Homemakers	N/A	N/A	N/A	N/A	N/A	N/A
Physical Therapists	4.0	2.0	N/A	N/A	N/A	N/A
Registered Nurses						
Newly Licensed RNs	2.7	3.0	67%	33%	0%	33%
Experienced RNs	3.8	3.3	75%	25%	0%	50%
Respiratory Therapists	N/A	N/A	N/A	N/A	N/A	N/A
Social Workers						
Licensed Clinical SWs	4.0	2.7	100%	0%	0%	0%
Licensed Master's SWs	3.8	2.8	100%	0%	0%	0%
Speech-Language Pathologists	N/A	N/A	N/A	N/A	N/A	N/A

- Half (50%) indicated difficulty hiring bilingual workers; Spanish was the language most needed.
- Sixty percent (60%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).

FQHCs

The number of responses from the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by psychologists and family/general practice physicians, and reported the most difficulty retaining psychiatric NPs, psychologists, and family NPs (Table 99).

Table 99. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.0
	Internal Medicine	3.3	2.0
	Ob/Gyn	3.8	2.5
	Pediatric	2.8	2.3
	Physician Assistants	2.7	2.6
Nurse Practitioners	Pediatric	2.3	2.0
	Adult	3.2	2.3
	Family	3.3	2.8
	Midwives	2.0	2.0
	Psychiatric	4.3	3.7
Nursing	Registered	3.5	2.2
	Licensed Practical	2.6	2.6
	Medical Assistants	1.8	2.5
Behavioral Health	Psychiatrists	4.3	2.8
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.3	2.7
	Social Workers	3.3	2.1
Oral Health	Dentists	3.7	2.3
	Dental Hygienists	2.1	1.5
	Dental Assistants/Aides/Techs	2.1	2.3
Enabling Services	Care Coordinators/Case Managers	2.6	2.3
	HIV Counselors	2.0	2.0
	Community Health Workers	2.0	2.0
	Patient Health Educators	2.0	1.7
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.7	1.5
	Patient Health Navigators	1.8	1.8
	Outreach Workers	2.0	1.8
Administrative Support	Billing/Data Entry	1.8	2.0
	IT Systems Admin/Maintenance	2.7	2.2

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- They indicated difficulty hiring workers for evening shifts (67% of FQHCs), workers for weekends (60%), part-time workers (60%), and bilingual workers (57%).

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Mohawk Valley region will be for personal care aides (160), RNs (150), home health aides (100), and nursing assistants (100) (Table 100).

Table 100. Employment Projections for Selected Health Occupations in the Mohawk Valley Region, 2012 and 2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	4,290	5,560	1,270	29.6%	160
Registered Nurses	4,770	5,350	580	12.2%	150
Home Health Aides	2,480	3,030	550	22.2%	100
Nursing Assistants	3,390	3,780	390	11.5%	100
Licensed Practical and Licensed Vocational Nurses	2,170	2,520	350	16.1%	90
Emergency Medical Technicians and Paramedics	530	710	180	34.0%	30
Physical Therapists	500	610	110	22.0%	20
Medical and Health Services Managers	750	850	100	13.3%	30
Nurse Practitioners	280	380	100	35.7%	20
Diagnostic Medical Sonographers	180	260	80	44.4%	10
Medical Assistants	290	370	80	27.6%	20
Social Workers	1,200	1,270	70	5.8%	40
Physician Assistants	180	250	70	38.9%	10
Radiologic Technologists	410	470	60	14.6%	20
Pharmacy Technicians	540	600	60	11.1%	20
Occupational Therapists	270	320	50	18.5%	0
Respiratory Therapists	230	270	40	17.4%	0
Medical Records and Health Info Techs	250	290	40	16.0%	10
Dietitians and Nutritionists	140	170	30	21.4%	0
Pharmacists	470	500	30	6.4%	10
Dental Hygienists	300	330	30	10.0%	10
Dental Assistants	380	410	30	7.9%	10
Speech-Language Pathologists	270	290	20	7.4%	0
Medical and Clinical Laboratory Technologists	170	190	20	11.8%	0
Medical and Clinical Laboratory Technicians	70	90	20	28.6%	0
Surgical Technologists	80	100	20	25.0%	0
Orderlies	110	130	20	18.2%	0
Cardiovascular Technologists & Technicians	70	80	10	14.3%	0
Clinical, Counseling, and School Psychologists	310	310	0	0.0%	10
Psychiatric Aides	430	410	-20	-4.7%	10

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

H. North Country

The North Country includes the counties of Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and Saint Lawrence.

Population

The North Country region was much less racially and ethnically diverse compared with New York as a whole. Additionally, the region had a greater percentage of people under 200% of the FPL and an equivalent proportion of the population under 100% of the FPL, as compared with the state. A higher percentage of the North Country region population had high school or equivalent or associate degrees, but a much smaller percentage held a bachelor's degree or higher than the state as a whole (Table 101).

Table 101. Selected Population Characteristics in the North Country Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	434,813	N/A	N/A
Population under 100% FPL	64,748	14.9%	14.9%
Population under 200% FPL	145,223	33.4%	31.3%
Population aged birth to 17 years	109,352	25.1%	24.9%
Population aged 65 and older	60,672	14.0%	13.8%
Population female aged 15 to 44	81,397	18.7%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	253	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	4,457	1.0%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	775	0.2%	0.3%
Black/African American, non-Hispanic	15,411	3.5%	14.4%
Hispanic/Latino	14,732	3.4%	17.9%
Asian/Pacific Islander, non-Hispanic	4,986	1.1%	7.6%
American Indian/Native Alaskan, non-Hispanic	5,208	1.2%	0.2%
Two or more/other	8,804	2.0%	2.1%
Less than high school education	38,667	13.5%	14.8%
High school or equivalent	159,460	55.5%	43.5%
Associate degree	31,610	11.0%	8.4%
Bachelor's degree	31,659	11.0%	18.9%
Master's degree or higher	25,906	9.0%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The North Country region had a higher total rate of death and rates of deaths due to cancer and diabetes but a smaller rate of death due to heart disease than the state as a whole. The North Country also had higher rates of hospitalizations due to chronic lower respiratory disease than the state as a whole and upstate New York, but had lower rates for diabetes hospitalizations than the state as a whole. The North Country had significantly higher rates of ED visits than statewide or upstate New York (Table 102).

**Table 102. Selected Health Indicators in the North Country Region, 2010-2012
(3-Year Average)**

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	3,699	850.8	752.2	850.6
Deaths due to heart disease, per 100,000	952	219.0	225.6	240.1
Deaths due to all cancers, per 100,000	851	196.3	180.3	201.5
Deaths due to diabetes, per 100,000	103	23.7	19.7	18.8
Total births, per 1,000 females aged 15 to 44	5,292	64.7	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	446	28.8	22.7	19.8
Low-birthweight births, as a percent of total births	379	7.2	8.2	7.8
Late/no prenatal care, as a percent of total births	193	3.8	5.6	4.1
Infant deaths, per 1,000 live births	30	5.7	5.1	5.6
Total hospitalizations, per 10,000	50,266	1,156.2	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	5,657	166.0	156.5	147.5
Adult asthma hospitalizations, per 10,000	311	9.1	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	105	11.2	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	10,530	242.2	249.7	230.0
CLRD hospitalizations, ^c per 10,000	1,871	43.0	37.8	34.2
Heart disease hospitalizations, per 10,000	4,839	111.3	114.6	117.2
Total ED visits, per 10,000	222,105	5,108.8	4,007.6	3,657.6
^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details. ^b Primary diagnosis only. ^c Chronic lower respiratory disease.				

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

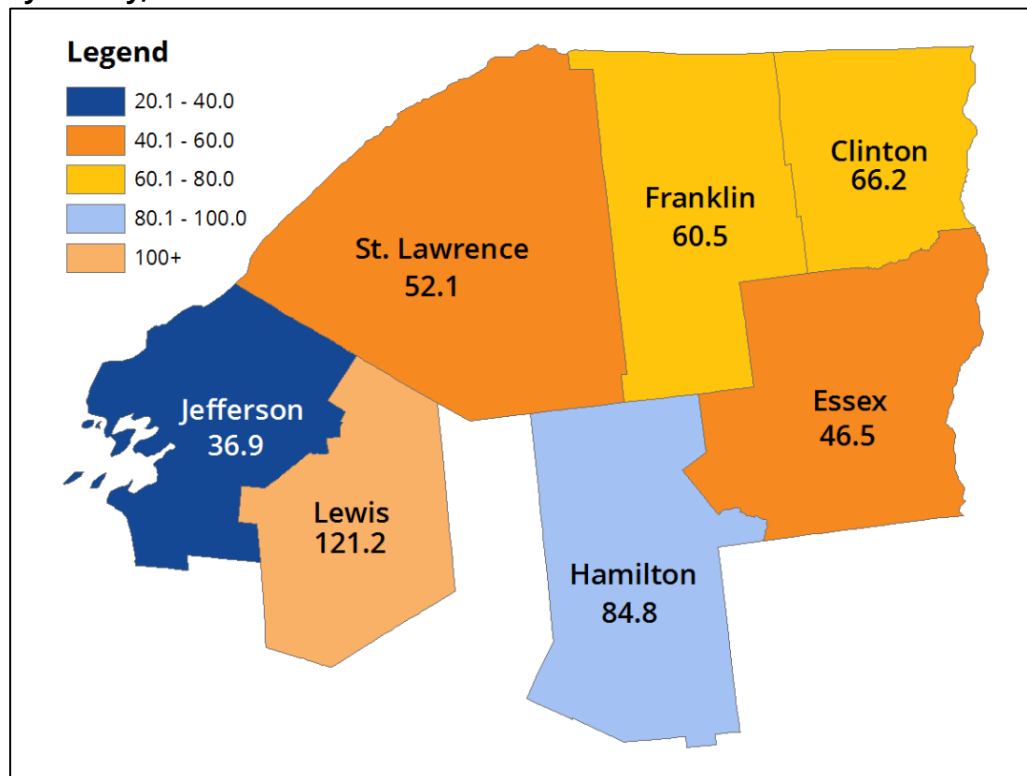
There were 245 primary care physicians practicing in the North Country region. Forty-six percent (46%) were in family or general practice and 24% were in general internal medicine. There were 56.5 primary care physicians per 100,000 population in the North Country region, which was well below the statewide rate of 74.5 per 100,000. Lewis County had the highest rate with nearly 121.2 primary care physicians per 100,000 population, and Jefferson County had the lowest rate with 36.9 per 100,000 (Table 103 and Figure 29).

Table 103. Primary Care Physicians in the North Country Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	112	25.8
Internal Medicine (General)	60	13.8
Geriatrics	0	0.0
Obstetrics/Gynecology	29	35.7
Pediatrics (General)	44	46.9
Total	245	56.5

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 29. Number of Primary Care Physicians per 100,000 Population in the North Country Region, by County, 2014



Employment

Total Health Sector Employment

Total health sector employment in the North Country region grew by nearly 4% between 2009 and 2013, adding just over 650 jobs. Employment in hospitals increased by more than 200 jobs, or 3%, whereas employment in home care grew by 40 jobs (7.3%) and jobs in nursing home and personal care facilities increased by nearly 2,400 (82%). In contrast, there was a decline in ambulatory care jobs by nearly 2,000 positions, or 39%, during the same period (Table 104).

Table 104. Number of Health Care Jobs in the North Country Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	8,764	8,991	9,190	9,251	8,982	218	2.5%
Ambulatory care (excluding home health)	5,020	5,103	5,137	5,180	3,040	-1,980	-39.4%
Nursing home and personal care facilities	2,911	2,937	2,920	2,937	5,286	2,375	81.6%
Home health care	549	532	538	531	589	40	7.3%
Total	17,244	17,564	17,784	17,899	17,897	653	3.8%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 105. RNs in the North Country region accounted for the most jobs in the first quarter of 2014 (3,500), followed by personal care aides (3,300) and nursing assistants (2,000). Nuclear medicine technologists (40), dietetic technicians (40), and certified registered nurse anesthetists (20) had the fewest jobs among the selected health occupations.

Wages in selected health occupations for the North Country region are reported in Table 106. These wages were based on data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$103.45), followed by pharmacists (\$57.94) and PAs (\$52.07). Home health aides (\$11.17) and orderlies (\$8.77) were the lowest wage earners for the selected health occupations in the North Country region.

Table 105. Number of Jobs in Selected Health Occupations in the North Country Region, 2013

Occupation	Employment
Registered Nurses	3,500
Personal Care Aides	3,300
Nursing Assistants	2,000
Licensed Practical Nurses	1,530
Home Health Aides	1,150
Social Workers	850
Medical and Health Service Managers	450
Dental Assistants	380
Pharmacists	320
Physical Therapists	270
Pharmacy Technicians	260
Medical Assistants	230
Dental Hygienists	230
Radiologic Technologists	220
Speech-Language Pathologists	220
Medical and Clinical Laboratory Technologists	200
Nurse Practitioners	180
Physician Assistants	160
Medical Secretaries	140
Medical Records and Health Information Techs	140
Occupational Therapists	140
Physical Therapy Assistants/Aides	120
Surgical Technologists	100
Respiratory Therapists	90
Medical and Clinical Laboratory Technicians	90
Dietitians and Nutritionists	80
Orderlies	60
Cardiovascular Technologists & Technicians	50
Occupational Therapy Assistants/Aides	50
Nuclear Medicine Technologists	40
Dietetic Technicians	40
Certified Registered Nurse Anesthetists	20
Nurse Midwives	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 106. Average Hourly Wage in Selected Health Occupations in the North Country Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$103.45
Pharmacists	\$57.94
Physician Assistants	\$52.07
Medical and Health Services Managers	\$46.16
Nurse Practitioners	\$45.78
Nurse Midwives	\$41.74
Speech-Language Pathologists	\$34.34
Physical Therapists	\$33.21
Occupational Therapists	\$30.89
Registered Nurses	\$30.88
Nuclear Medicine Technologists	\$30.72
Medical and Clinical Laboratory Technologists	\$28.45
Dental Hygienists	\$27.23
Radiologic Technologists and Technicians	\$27.12
Dietitians and Nutritionists	\$27.00
Respiratory Therapists	\$26.47
Cardiovascular Technologists & Technicians	\$25.16
Mental Health and Substance Abuse Social Workers	\$24.30
Medical and Clinical Laboratory Technicians	\$22.75
Healthcare Social Workers	\$21.54
Surgical Technologists	\$19.97
Occupational Therapy Assistants	\$19.90
Physical Therapist Assistants	\$19.35
Medical Records and Health Info Techs	\$18.77
Dietetic Technicians	\$17.71
Licensed Practical and Licensed Vocational Nurses	\$17.69
Dental Assistants	\$15.41
Medical Secretaries	\$15.13
Medical Assistants	\$13.87
Pharmacy Technicians	\$13.63
Physical Therapist Aides	\$12.76
Nursing Assistants	\$12.43
Personal Care Aides	\$12.18
Home Health Aides	\$11.17
Orderlies	\$8.77
Occupational Therapy Aides	N/A

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the number of licensed RNs in the North Country region increased by more than 500, or 10%. NPs (34%) experienced the highest percentage increase in the region, followed by respiratory therapists (28%) and pharmacists (22%) during the same period. Clinical laboratory technician was the only occupation for the North Country region to experience a decline, falling by 18% (Table 107).

Table 107. Number of Licensed Individuals in Selected Health Occupations in the North Country Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	4,979	5,082	5,165	5,260	5,494	515	10.3%
Licensed Practical Nurses	2,604	2,591	2,674	2,679	2,740	136	5.2%
Social Workers	366	375	383	397	414	48	13.1%
Pharmacists	326	336	346	366	396	70	21.5%
Physical Therapists	292	301	301	316	329	37	12.7%
Nurse Practitioners	215	226	238	260	289	74	34.4%
Clinical Laboratory Technologists	254	245	249	259	257	3	1.2%
Speech-Language Pathologists	218	226	237	252	256	38	17.4%
Dental Hygienists	205	225	235	240	245	40	19.5%
Physician Assistants	191	191	200	211	226	35	18.3%
Physical Therapy Assistants	147	151	151	157	165	18	12.2%
Occupational Therapists	129	132	136	139	148	19	14.7%
Respiratory Therapists	69	69	79	81	88	19	27.5%
Occupational Therapy Assistants	84	84	82	85	84	0	0.0%
Dietitians/Nutritionists	77	80	81	81	82	5	6.5%
Clinical Laboratory Technicians	77	77	72	70	63	-14	-18.2%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the North Country region had the most difficulty recruiting clinical laboratory technologists, followed by occupational therapists, clinical laboratory technicians, and physical therapists. Experienced RNs were the most difficult to retain in hospitals across the region, followed CNAs (Table 108).

Table 108. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the North Country Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	2.3	1.3	33%	0%	33%
CNA/Patient Care Techs	1.7	3.3	33%	0%	0%
Clinical Lab Technicians	4.0	2.0	67%	0%	67%
Clinical Lab Technologists	4.5	3.0	75%	25%	75%
Licensed Clinical Social Workers	3.7	2.3	100%	33%	100%
Licensed Practical Nurses	1.3	1.5	0%	25%	25%
Medical Assistants	1.5	1.0	0%	0%	0%
Medical Hospital Coders	3.5	2.5	50%	25%	75%
Nurse Practitioners	3.3	2.0	67%	0%	67%
Occupational Therapists	4.5	3.0	100%	25%	100%
Pharmacists	3.0	2.0	0%	0%	33%
Physical Therapists	4.0	3.0	75%	25%	100%
Physician Assistants	3.8	2.5	25%	25%	75%
Radiologic Technicians	1.0	1.5	0%	0%	0%
Radiologic Technologists	1.8	1.8	0%	25%	25%
Registered Nurses					
Newly Licensed RNs	2.0	3.0	25%	50%	75%
Experienced RNs	3.8	3.5	50%	25%	100%
Nurse Managers	3.8	2.5	75%	50%	75%
Speech-Language Pathologists	3.0	1.7	67%	0%	33%

- Hospitals in the North Country region anticipate outpatient growth, primarily in PAs (100%).
- Facilities that downsized in the past year reported it was due to layoffs and attrition.

Nursing Homes

Nursing homes in the North Country region reported the most difficulty recruiting occupational therapy assistants, followed by speech-language pathologists, occupational therapists, and experienced RNs. Personal care assistants, CNAs, and newly licensed RNs were cited as the most difficult to retain (Table 109).

Table 109. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the North Country Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Certified Nursing Aides	3.1	4.0	100%	67%	33%	33%
Clerical	1.3	1.3	N/A	N/A	N/A	N/A
Dietitians/Nutritionists	3.2	2.4	50%	50%	0%	50%
Licensed Practical Nurses	3.1	2.6	50%	50%	0%	25%
Medical Billers	3.0	2.3	100%	0%	0%	0%
Occupational Therapists	3.9	2.7	67%	33%	0%	67%
Occupational Therapy Assts.	4.0	2.5	50%	50%	0%	0%
Personal Care Assistants	2.5	4.5	0%	100%	0%	0%
Physical Therapists	3.4	2.4	50%	50%	0%	50%
Physical Therapy Assistants	3.0	2.0	N/A	N/A	N/A	N/A
Registered Nurses						
Newly Licensed RNs	2.2	3.6	33%	33%	0%	33%
Experienced RNs	3.9	3.3	50%	75%	0%	50%
MDS Coordinators	3.3	3.3	0%	100%	0%	0%
Nurse Managers	3.2	2.4	67%	67%	0%	33%
Directors of Nursing	3.0	3.0	100%	100%	0%	0%
Rec. Therapists/Activities Dirs.	N/A	N/A	N/A	N/A	N/A	N/A
Respiratory Therapists	2.7	2.0	100%	0%	0%	0%
Social Workers						
Licensed Clinical SWs	2.5	1.8	100%	0%	0%	0%
Licensed Master's SWs	2.5	2.5	100%	0%	0%	0%
Speech-Language Pathologists	4.0	3.3	100%	0%	0%	50%

- More than a one-third (38%) of nursing homes reported difficulty hiring workers for off shifts (evenings, nights, and weekends).

Home Health Care Agencies

Home health care agencies in the North Country region reported difficulty in recruiting many health occupations, including physical therapists, speech-language pathologists, and occupational therapists. Personal care aides and physical therapists were the most difficult to retain, followed by respiratory therapists (Table 110).

Table 110. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the North Country Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Dietitians/Nutritionists	4.0	2.4	80%	20%	20%	40%
Home Health Aides	4.0	3.5	100%	25%	25%	75%
Licensed Practical Nurses	1.8	1.7	67%	33%	0%	33%
Occupational Therapists	4.7	2.8	80%	0%	0%	60%
Personal Care Aides/Homemakers	4.5	4.0	100%	0%	0%	100%
Physical Therapists	5.0	3.8	100%	0%	0%	40%
Registered Nurses						
Newly Licensed RNs	1.4	2.8	0%	50%	0%	50%
Experienced RNs	4.2	3.2	83%	50%	0%	67%
Respiratory Therapists	4.0	4.0	0%	0%	0%	17%
Social Workers						
Licensed Clinical SWs	3.8	2.6	100%	0%	0%	33%
Licensed Master's SWs	3.8	2.6	100%	0%	0%	33%
Speech-Language Pathologists	4.8	2.7	67%	0%	0%	100%

- Three-quarters (75%) of home health care agencies reported difficulty hiring part-time workers.
- Half (50%) reported difficulty hiring workers for off shifts (evenings, nights, and weekends).

FQHCs

The number of responses from the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by psychologists and family/general practice physicians, and reported the most difficulty retaining psychiatric NPs, psychologists, and family NPs (Table 111).

Table 111. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.0
	Internal Medicine	3.3	2.0
	Ob/Gyn	3.8	2.5
	Pediatric	2.8	2.3
	Physician Assistants	2.7	2.6
Nurse Practitioners	Pediatric	2.3	2.0
	Adult	3.2	2.3
	Family	3.3	2.8
	Midwives	2.0	2.0
	Psychiatric	4.3	3.7
Nursing	Registered	3.5	2.2
	Licensed Practical	2.6	2.6
	Medical Assistants	1.8	2.5
Behavioral Health	Psychiatrists	4.3	2.8
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.3	2.7
	Social Workers	3.3	2.1
Oral Health	Dentists	3.7	2.3
	Dental Hygienists	2.1	1.5
	Dental Assistants/Aides/Techs	2.1	2.3
Enabling Services	Care Coordinators/Case Managers	2.6	2.3
	HIV Counselors	2.0	2.0
	Community Health Workers	2.0	2.0
	Patient Health Educators	2.0	1.7
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.7	1.5
	Patient Health Navigators	1.8	1.8
	Outreach Workers	2.0	1.8
Administrative Support	Billing/Data Entry	1.8	2.0
	IT Systems Admin/Maintenance	2.7	2.2

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- They indicated difficulty hiring workers for evening shifts (67% of FQHCs), workers for weekends (60%), part-time workers (60%), and bilingual workers (57%).

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the North Country region will be for personal care aides (100), RNs (100), home health aides (60), nursing assistants (60), and LPNs (60) (Table 112).

Table 112. Employment Projections for Selected Health Occupations in the North Country Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	2,940	3,720	780	26.5%	100
Home Health Aides	1,440	1,780	340	23.6%	60
Registered Nurses	3,730	4,010	280	7.5%	100
Nursing Assistants	1,960	2,180	220	11.2%	60
Licensed Practical and Licensed Vocational Nurses	1,580	1,740	160	10.1%	60
Social Workers	680	740	60	8.8%	10
Emergency Medical Technicians and Paramedics	250	310	60	24.0%	20
Pharmacy Technicians	350	410	60	17.1%	10
Medical and Health Services Managers	500	550	50	10.0%	10
Physical Therapists	270	320	50	18.5%	20
Medical Assistants	290	340	50	17.2%	10
Speech-Language Pathologists	230	270	40	17.4%	0
Dental Hygienists	230	270	40	17.4%	10
Pharmacists	380	410	30	7.9%	10
Physician Assistants	190	220	30	15.8%	0
Nurse Practitioners	150	180	30	20.0%	0
Orderlies	220	250	30	13.6%	0
Dental Assistants	410	440	30	7.3%	10
Dietitians and Nutritionists	100	120	20	20.0%	0
Occupational Therapists	160	180	20	12.5%	0
Medical and Clinical Laboratory Technicians	90	110	20	22.2%	0
Diagnostic Medical Sonographers	70	90	20	28.6%	0
Radiologic Technologists	210	230	20	9.5%	0
Surgical Technologists	80	100	20	25.0%	0
Clinical, Counseling, and School Psychologists	270	280	10	3.7%	10
Respiratory Therapists	90	100	10	11.1%	0
Nurse Anesthetists	20	30	10	50.0%	0
Medical and Clinical Laboratory Technologists	220	230	10	4.5%	10
Cardiovascular Technologists & Technicians	60	70	10	16.7%	0
Medical Records and Health Info Techs	220	230	10	4.5%	10
Psychiatric Aides	630	620	-10	-1.6%	10

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

I. Southern Tier

The Southern Tier region includes the counties of Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tioga, and Tompkins.

Population

Between 2009 and 2013 the Southern Tier region had a larger portion of its population than the state as a whole living under 100% and 200% of the FPL. Additionally, the region was much less racially and ethnically diverse than New York as a whole. The Southern Tier also had a higher percentage of residents with high school or associate degrees, and a lower percentage of people with a bachelor's degree or higher, compared with the state overall (Table 113).

Table 113. Selected Population Characteristics in the Southern Tier Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	656,228	N/A	N/A
Population under 100% FPL	100,103	15.3%	14.9%
Population under 200% FPL	217,303	33.1%	31.3%
Population aged birth to 17 years	162,611	24.8%	24.9%
Population aged 65 and older	104,556	15.9%	13.8%
Population female aged 15 to 44	126,305	19.2%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	385	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	5,806	0.9%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	1,246	0.2%	0.3%
Black/African American, non-Hispanic	21,486	3.3%	14.4%
Hispanic/Latino	18,898	2.9%	17.9%
Asian/Pacific Islander, non-Hispanic	20,552	3.1%	7.6%
American Indian/Native Alaskan, non-Hispanic	1,548	0.2%	0.2%
Two or more/other	12,511	1.9%	2.1%
Less than high school education	46,482	10.6%	14.8%
High school or equivalent	225,777	51.6%	43.5%
Associate degree	51,104	11.7%	8.4%
Bachelor's degree	59,053	13.5%	18.9%
Master's degree or higher	54,998	12.6%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Southern Tier region had higher rates of total deaths, deaths due to cancer, deaths due to diabetes, and deaths due to heart disease than New York as a whole and upstate New York. The Southern Tier region had a lower overall birth rate but had a higher teen birth rate than upstate New York. In addition, the Southern Tier region had a higher rate of ED visits than the state as a whole or upstate New York, although it had a lower rate of total and preventable hospitalizations than the overall statewide rate. Likewise, the region had lower rates of adult and pediatric asthma hospitalizations and heart disease hospitalizations (Table 114).

Table 114. Selected Health Indicators in the Southern Tier Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	6,323	963.6	752.2	850.6
Deaths due to heart disease, per 100,000	1,722	262.4	225.6	240.1
Deaths due to all cancers, per 100,000	1,415	215.3	180.3	201.5
Deaths due to diabetes, per 100,000	155	23.6	19.7	18.8
Total births, per 1,000 females aged 15 to 44	6,614	52.2	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	554	21.3	22.7	19.8
Low-birthweight births, as a percent of total births	490	7.4	8.2	7.8
Late/no prenatal care, as a percent of total births	245	3.8	5.6	4.1
Infant deaths, per 1,000 live births	37	5.6	5.1	5.6
Total hospitalizations, per 10,000	71,909	1,096.0	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	8,349	160.0	156.5	147.5
Adult asthma hospitalizations, per 10,000	406	7.8	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	154	11.5	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	15,108	230.3	249.7	230.0
CLRD hospitalizations, ^c per 10,000	2,435	37.1	37.8	34.2
Heart disease hospitalizations, per 10,000	7,132	108.7	114.6	117.2
Total ED visits, per 10,000	276,842	4,219.3	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.

^b Primary diagnosis only.

^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

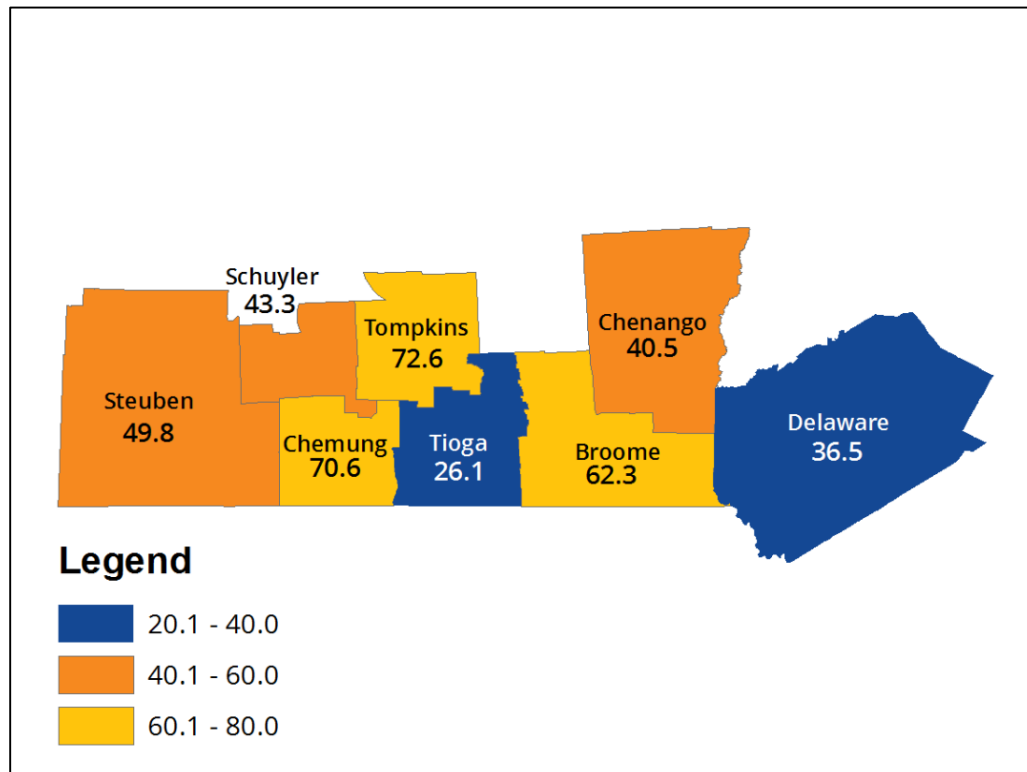
There were more than 350 primary care physicians practicing in the Southern Tier region. Forty-five percent (45%) were in family or general practice and 33% were in general internal medicine. There were 56.9 primary care physicians per 100,000 population in the Southern Tier region, which was well below the statewide rate of 74.5 per 100,000. Tompkins County had the highest rate with 72.6 primary care physicians per 100,000 population, followed by Chemung County with 70.6 per 100,000. Tioga County had the lowest rate with 26.1 per 100,000 (Table 115 and Figure 30).

Table 115. Primary Care Physicians in the Southern Tier Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	168	25.7
Internal Medicine (General)	124	19.0
Geriatrics	0	0.0
Obstetrics/Gynecology	38	30.1
Pediatrics (General)	41	30.8
Total	371	56.9

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 30. Number of Primary Care Physicians per 100,000 Population in the Southern Tier Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment throughout the Southern Tier region grew by more than 900 jobs, or over 3%. Employment in hospitals had the largest percentage increase, growing by 788 jobs, or over 6%, and employment in home health care increased by 60 jobs, or nearly 6%. Employment in nursing home and personal care facilities and ambulatory care settings grew slightly (Table 116).

Table 116. Number of Health Care Jobs in the Southern Tier Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	12,906	12,943	13,319	13,659	13,694	788	6.1%
Ambulatory care (excluding home health)	7,550	7,703	7,740	7,586	7,591	41	0.5%
Nursing homes and personal care facilities	6,637	6,901	6,733	6,706	6,665	28	0.4%
Home health care	1,079	1,102	1,133	1,131	1,139	60	5.6%
Total	28,173	28,648	28,925	29,082	29,089	916	3.3%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 117. RNs in the Southern Tier region accounted for the most jobs in the first quarter of 2014 (7,870), followed by nursing assistants (4,100) and personal care aides (2,620). Occupational therapy assistants and nuclear medicine technologists held the fewest jobs (60 and 50, respectively).

Wages in selected health occupations for the Southern Tier region are reported in Table 118. These wages were based on data for the first quarter of 2014. Pharmacists earned the highest hourly wage in 2014 (\$57.67), followed by PAs (\$44.27) and NPs (\$43.54). Personal care aides (\$12.66) and home health aides (\$11.43) were the lowest wage earners among the selected health care occupations in the Southern Tier region.

Table 117. Number of Jobs in Selected Health Occupations in the Southern Tier Region, 2013

Occupation	Employment
Registered Nurses	7,870
Nursing Assistants	4,100
Personal Care Aides	2,620
Home Health Aides	2,040
Licensed Practical Nurses	1,870
Social Workers	1,600
Radiologic Technologists	650
Medical and Health Service Managers	640
Dental Assistants	620
Pharmacists	610
Medical Assistants	590
Pharmacy Technicians	540
Nurse Practitioners	510
Physical Therapists	450
Dental Hygienists	380
Speech-Language Pathologists	370
Medical Records and Health Information Techs	350
Occupational Therapists	300
Medical and Clinical Laboratory Technologists	290
Surgical Technologists	290
Respiratory Therapists	290
Medical Secretaries	280
Orderlies	260
Physician Assistants	250
Physical Therapy Assistants/Aides	240
Cardiovascular Technologists & Technicians	150
Dietitians and Nutritionists	140
Occupational Therapy Assistants/Aides	60
Nuclear Medicine Technologists	50
Nurse Midwives	N/A
Certified Registered Nurse Anesthetists	N/A
Medical and Clinical Laboratory Technicians	N/A
Dietetic Technicians	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 118. Average Hourly Wage in Selected Health Occupations in the Southern Tier Region, 2014

Occupation	Average Wage per Hour
Pharmacists	\$57.67
Physician Assistants	\$44.27
Nurse Practitioners	\$43.54
Medical and Health Services Managers	\$41.32
Physical Therapists	\$37.06
Nuclear Medicine Technologists	\$36.97
Occupational Therapists	\$33.40
Registered Nurses	\$32.16
Speech-Language Pathologists	\$31.92
Medical and Clinical Laboratory Technologists	\$30.35
Respiratory Therapists	\$30.33
Radiologic Technologists and Technicians	\$28.74
Cardiovascular Technologists & Technicians	\$27.91
Dental Hygienists	\$27.88
Dietitians and Nutritionists	\$27.45
Mental Health and Substance Abuse Social Workers	\$25.93
Physical Therapist Assistants	\$25.29
Healthcare Social Workers	\$24.81
Medical and Clinical Laboratory Technicians	\$23.81
Occupational Therapy Assistants	\$22.61
Surgical Technologists	\$20.30
Licensed Practical and Licensed Vocational Nurses	\$18.22
Medical Records and Health Info Techs	\$17.40
Dietetic Technicians	\$16.71
Dental Assistants	\$15.87
Medical Secretaries	\$14.64
Physical Therapist Aides	\$14.40
Medical Assistants	\$14.27
Nursing Assistants	\$14.08
Pharmacy Technicians	\$13.63
Orderlies	\$13.29
Personal Care Aides	\$12.66
Home Health Aides	\$11.43
Certified Registered Nurse Anesthetists	N/A
Nurse Midwives	N/A
Occupational Therapy Aides	N/A

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 the Southern Tier region experienced the most growth in the number of licensed RNs (409, 5%) and NPs (nearly 300, 91%). Physical therapy assistants experienced the largest percentage increase at 338%, followed by clinical laboratory technologists (120%). In contrast, the region experienced declines in 6 occupations, with dietitians/nutritionists having the largest percentage decrease (68%), followed by occupational therapy assistants (65%) (Table 119).

Table 119. Number of Licensed Individuals in Selected Health Occupations in the Southern Tier Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	7,761	7,854	7,874	7,940	8,170	409	5.3%
Licensed Practical Nurses	3,080	3,049	3,113	3,107	3,178	98	3.2%
Social Workers	1,243	1,299	1,315	1,313	1,373	130	10.5%
Nurse Practitioners	326	338	349	361	623	297	91.1%
Dental Hygienists	369	352	351	350	503	134	36.3%
Pharmacists	507	540	546	568	500	-7	-1.4%
Physical Therapists	450	456	461	476	489	39	8.7%
Speech-Language Pathologists	214	215	206	221	352	138	64.5%
Clinical Laboratory Technologists	155	158	158	152	341	186	120.0%
Occupational Therapists	197	210	227	235	314	117	59.4%
Physician Assistants	454	458	463	479	245	-209	-46.0%
Physical Therapy Assistants	53	53	51	52	232	179	337.7%
Respiratory Therapists	280	278	284	300	163	-117	-41.8%
Dietitians/Nutritionists	470	473	474	481	149	-321	-68.3%
Clinical Laboratory Technicians	118	102	88	94	93	-25	-21.2%
Occupational Therapy Assistants	144	142	139	146	50	-94	-65.3%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Southern Tier reported the most difficulty recruiting clinical laboratory technologists, followed by radiologic technicians and newly licensed RNs. Hospitals in this region indicated they had the most difficulty retaining hospital medical coders, followed by care coordinators and physician assistants (Table 120).

Table 120. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Southern Tier Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	3.4	3.6	40%	20%	40%
CNA/Patient Care Techs	2.9	2.7	57%	71%	14%
Clinical Lab Technicians	3.8	3.3	100%	50%	17%
Clinical Lab Technologists	4.0	3.4	100%	43%	43%
Licensed Clinical Social Workers	3.6	3.2	0%	0%	20%
Licensed Practical Nurses	2.6	2.9	14%	14%	29%
Medical Assistants	3.3	2.5	25%	25%	0%
Medical Hospital Coders	3.6	4.4	100%	40%	20%
Nurse Practitioners	3.4	3.0	80%	0%	20%
Occupational Therapists	2.8	3.2	100%	0%	40%
Pharmacists	3.6	3.4	100%	40%	100%
Physical Therapists	3.0	2.6	100%	0%	40%
Physician Assistants	3.6	3.6	80%	20%	20%
Radiologic Technicians	2.7	2.3	67%	67%	67%
Radiologic Technologists	4.0	2.8	17%	17%	33%
Registered Nurses					
Newly Licensed RNs	4.0	3.4	43%	29%	43%
Experienced RNs	3.1	3.1	86%	29%	86%
Nurse Managers	2.7	3.3	86%	29%	86%
Speech-Language Pathologists	3.2	3.4	40%	0%	40%

- Many hospitals in the Southern Tier region projected growth in ambulatory services, with increasing demand for NPs (71%), PAs (71%), and LCSWs (57%).
- Seventy-one percent (71%) of facilities that reported downsizing said it was due to attrition.

Nursing Homes

Nursing homes in the Southern Tier region indicated that speech-language pathologists were the most difficult to recruit, followed by directors of nursing, physical therapists, and experienced RNs. Newly licensed RNs were the most difficult to retain, followed by experienced CNAs, nurse managers, and directors of nursing (Table 121).

Table 121. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Southern Tier Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Certified Nursing Aides	3.6	3.9	71%	43%	14%	29%
Clerical	1.9	1.8	N/A	N/A	N/A	N/A
Dietitians/Nutritionists	3.1	2.6	40%	40%	0%	60%
Licensed Practical Nurses	3.7	3.5	50%	50%	0%	50%
Medical Billers	2.6	2.2	100%	0%	0%	0%
Occupational Therapists	4.2	3.2	75%	50%	0%	100%
Occupational Therapy Assts.	3.8	3.0	50%	50%	0%	100%
Personal Care Assistants	2.5	3.5	100%	0%	0%	0%
Physical Therapists	4.3	3.0	33%	33%	0%	100%
Physical Therapy Assistants	3.5	3.0	50%	50%	0%	100%
Registered Nurses						
Newly Licensed RNs	2.9	4.0	40%	80%	20%	20%
Experienced RNs	4.3	3.8	44%	56%	11%	56%
MDS Coordinators	3.8	3.2	50%	25%	0%	75%
Nurse Managers	4.0	3.8	80%	40%	20%	40%
Directors of Nursing	4.4	3.8	71%	29%	14%	71%
Rec. Therapists/Activities Dirs.	2.5	2.5	100%	0%	0%	100%
Respiratory Therapists	3.5	2.5	N/A	N/A	N/A	N/A
Social Workers						
Licensed Clinical SWs	3.3	2.3	67%	0%	0%	33%
Licensed Master's SWs	3.3	2.7	67%	33%	0%	33%
Speech-Language Pathologists	4.7	3.0	67%	33%	0%	100%

- Eighty-eight percent (88%) reported difficulty hiring part-time workers.
- Sixty-three (63%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- The majority reported no plans to expand (97%), and none reported plans to reduce services next year.

Home Health Care Agencies

Home health care agencies in the Southern Tier region indicated that personal care aides and licensed clinical social workers were the most difficult to recruit and retain, followed by speech-language pathologists (Table 122).

Table 122. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Southern Tier Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Competition for Workers	Salary Levels	Other
Dietitians/Nutritionists	4.0	4.0	100%	0%	0%	0%
Home Health Aides	3.0	3.0	100%	50%	0%	50%
Licensed Practical Nurses	1.8	2.0	N/A	N/A	N/A	N/A
Occupational Therapists	3.3	2.3	100%	100%	0%	0%
Personal Care Aides/Homemakers	3.5	2.5	100%	0%	0%	0%
Physical Therapists	2.7	2.3	100%	0%	0%	0%
Registered Nurses						
Newly Licensed RNs	2.0	2.0	N/A	N/A	N/A	N/A
Experienced RNs	3.0	2.8	50%	50%	0%	0%
Respiratory Therapists	3.5	3.0	50%	50%	0%	0%
Social Workers						
Licensed Clinical SWs	4.0	4.0	100%	0%	0%	0%
Licensed Master's SWs	3.0	3.0	100%	0%	0%	0%
Speech-Language Pathologists	3.7	3.7	100%	0%	0%	0%

- Twenty-five percent (25%) reported difficulty hiring part-time workers.
- One-third (33%) indicated difficulty hiring bilingual workers, with Spanish reported as the language most commonly needed.

FQHCs

The number of responses from the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatric NPs and psychiatrists, followed by psychologists and family/general practice physicians, and reported the most difficulty retaining psychiatric NPs, psychologists, and family NPs (Table 123).

Table 123. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Capital District, Central New York, Mohawk Valley, North Country, and Southern Tier, 2014

Occupation	Average Assessment of Difficulty		
	Recruitment	Retention	
Physicians	Family/General Practice	3.9	2.0
	Internal Medicine	3.3	2.0
	Ob/Gyn	3.8	2.5
	Pediatric	2.8	2.3
	Physician Assistants	2.7	2.6
Nurse Practitioners	Pediatric	2.3	2.0
	Adult	3.2	2.3
	Family	3.3	2.8
	Midwives	2.0	2.0
	Psychiatric	4.3	3.7
Nursing	Registered	3.5	2.2
	Licensed Practical	2.6	2.6
	Medical Assistants	1.8	2.5
Behavioral Health	Psychiatrists	4.3	2.8
	Psychologists	4.0	3.0
	Substance Abuse Counselors	3.3	2.7
	Social Workers	3.3	2.1
Oral Health	Dentists	3.7	2.3
	Dental Hygienists	2.1	1.5
	Dental Assistants/Aides/Techs	2.1	2.3
Enabling Services	Care Coordinators/Case Managers	2.6	2.3
	HIV Counselors	2.0	2.0
	Community Health Workers	2.0	2.0
	Patient Health Educators	2.0	1.7
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.7	1.5
	Patient Health Navigators	1.8	1.8
	Outreach Workers	2.0	1.8
Administrative Support	Billing/Data Entry	1.8	2.0
	IT Systems Admin/Maintenance	2.7	2.2

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- They indicated difficulty hiring workers for evening shifts (67% of FQHCs), workers for weekends (60%), part-time workers (60%), and bilingual workers (57%).

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Southern Tier region will be for RNs (240), nursing assistants (150), and personal care aides (100) (Table 124).

Table 124. Employment Projections for Selected Health Occupations in the Southern Tier Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	3,180	3,920	740	23.3%	100
Registered Nurses	8,800	9,460	660	7.5%	240
Nursing Assistants	5,010	5,520	510	10.2%	150
Home Health Aides	1,970	2,460	490	24.9%	90
Licensed Practical and Licensed Vocational	1,960	2,190	230	11.7%	70
Social Workers	1,750	1,900	150	8.6%	60
Emergency Medical Technicians and	800	950	150	18.8%	40
Medical Assistants	540	640	100	18.5%	20
Physical Therapists	550	640	90	16.4%	20
Nurse Practitioners	540	630	90	16.7%	20
Radiologic Technologists	760	830	70	9.2%	20
Medical and Health Services Managers	730	790	60	8.2%	30
Physician Assistants	260	310	50	19.2%	20
Occupational Therapists	330	380	50	15.2%	10
Diagnostic Medical Sonographers	140	190	50	35.7%	0
Surgical Technologists	320	370	50	15.6%	10
Medical Records and Health Info Techs	380	430	50	13.2%	10
Speech-Language Pathologists	390	430	40	10.3%	10
Dental Hygienists	430	470	40	9.3%	20
Pharmacy Technicians	530	570	40	7.5%	10
Dental Assistants	660	700	40	6.1%	10
Respiratory Therapists	350	380	30	8.6%	10
Cardiovascular Technologists & Technicians	190	220	30	15.8%	0
Orderlies	300	330	30	10.0%	10
Dietitians and Nutritionists	190	210	20	10.5%	0
Clinical, Counseling, and School Psychologists	410	420	10	2.4%	10
Pharmacists	670	680	10	1.5%	20
Medical and Clinical Laboratory Technologists	370	380	10	2.7%	10
Psychiatric Aides	540	530	-10	-1.9%	10

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022

J. Western New York

The Western New York region includes the counties of Allegany, Cattaraugus, Chautauqua, Erie, and Niagara.

Population

The population of the Western New York region was less racially and ethnically diverse but had similar poverty levels compared with New York as a whole, while being slightly older. Additionally, when compared with the state, the region had a smaller percentage of people with a bachelor's degree or higher but a larger portion of the population with a high school education or equivalent or associate degree (Table 125).

Table 125. Selected Population Characteristics in the Western New York Region, 2009-2013 (5-Year Average)

Population Characteristics ^a	Region		Statewide Percent
	Number	Percent	
Total population	1,397,204	N/A	N/A
Population under 100% FPL	204,462	14.6%	14.9%
Population under 200% FPL	439,774	31.5%	31.3%
Population aged birth to 17 years	342,430	24.5%	24.9%
Population aged 65 and older	224,275	16.1%	13.8%
Population female aged 15 to 44	265,162	19.0%	20.7%
Women aged 15 to 19 who had a birth in past 12 mos.	797	0.1%	0.1%
Women aged 20 to 34 who had a birth in past 12 mos.	11,604	0.8%	0.9%
Women aged 35 to 50 who had a birth in past 12 mos.	3,288	0.2%	0.3%
Black/African American, non-Hispanic	138,576	9.9%	14.4%
Hispanic/Latino	58,699	4.2%	17.9%
Asian/Pacific Islander, non-Hispanic	30,353	2.2%	7.6%
American Indian/Native Alaskan, non-Hispanic	8,986	0.6%	0.2%
Two or more/other	22,831	1.6%	2.1%
Less than high school education	100,869	10.6%	14.8%
High school or equivalent	478,391	50.3%	43.5%
Associate degree	111,402	11.7%	8.4%
Bachelor's degree	144,665	15.2%	18.9%
Master's degree or higher	116,147	12.2%	14.3%

^a Education levels and rates are based on individuals aged 25 years and older.

Source: US Census, American Community Survey, 2009-2013 (5-Year Average)

Health Status

The Western New York region had substantially higher rates of total deaths, deaths due to all cancers, deaths due to heart disease, and deaths due to diabetes than the state as a whole or upstate New York. Although the overall birth rate was lower in the Western New York region than in the state overall, the teen birth rate was higher. The rate of infant deaths was also higher in the Western New York region than statewide or in upstate New York. As compared with the state, the region had lower rates of total, preventable, asthma-related (adult and pediatric), diabetes-related, and respiratory disease-related hospitalizations; however, the region had a higher rate of heart disease hospitalizations than both the state and upstate region. Additionally, the rate of ED visits was higher in the Western New York region than statewide or in upstate New York (Table 126).

Table 126. Selected Health Indicators in the Western New York Region, 2010-2012 (3-Year Average)

Health Indicator	Region		Statewide Rate	Upstate Rate
	Number	Rate ^a		
Total deaths, per 100,000	14,379	1,028.9	752.2	850.6
Deaths due to heart disease, per 100,000	3,971	284.1	225.6	240.1
Deaths due to all cancers, per 100,000	3,237	231.4	180.3	201.5
Deaths due to diabetes, per 100,000	392	28.1	19.7	18.8
Total births, per 1,000 females aged 15 to 44	14,845	55.8	60.3	57.8
Teen births, per 1,000 females aged 15 to 19	1,326	26.8	22.7	19.8
Low-birthweight births, as a percent of total births	1,194	8.1	8.2	7.8
Late/no prenatal care, as a percent of total births	689	5.0	5.6	4.1
Infant deaths, per 1,000 live births	108	7.3	5.1	5.6
Total hospitalizations, per 10,000	168,381	1,204.9	1,263.4	1,196.7
Preventable hospitalizations, per 10,000	15,671	142.7	156.5	147.5
Adult asthma hospitalizations, per 10,000	964	8.8	16.6	10.6
Pediatric asthma hospitalizations, per 10,000	491	16.4	26.9	14.7
Diabetes hospitalizations, ^b per 10,000	32,641	233.6	249.7	230.0
CLRD hospitalizations, ^c per 10,000	4,804	34.4	37.8	34.2
Heart disease hospitalizations, per 10,000	17,019	121.8	114.6	117.2
Total ED visits, per 10,000	561,256	4,016.4	4,007.6	3,657.6

^a All rates are based on total population unless otherwise noted. See the description of the New York State Community Health Indicator Reports on page 8 for details.

^b Primary diagnosis only.

^c Chronic lower respiratory disease.

Source: New York State Community Health Indicator Reports, 2010-2012 (3-Year Average)

Primary Care Physicians

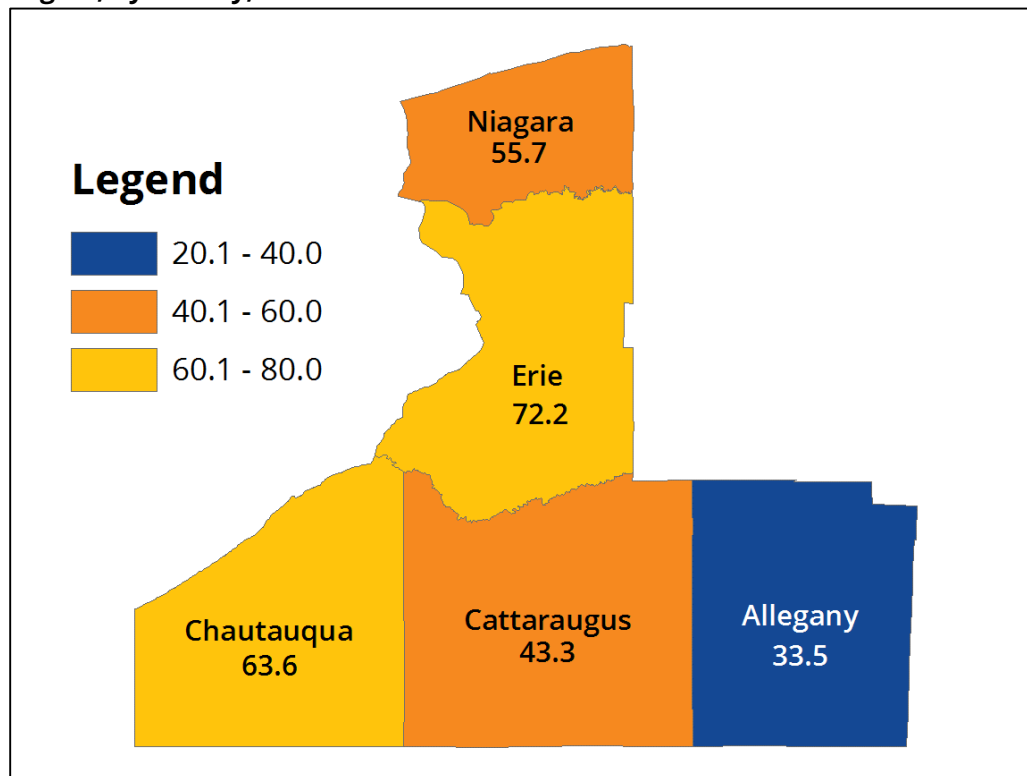
There were more than 900 primary care physicians practicing in the Western New York region. Thirty-four percent (34%) were in family or general practice and another 33% were in general internal medicine. There were 66.0 primary care physicians per 100,000 population in the Western New York region, which was below the statewide rate of 74.5 per 100,000. Erie County had the highest rate with 72.2 primary care physicians per 100,000 population, and Allegany County had the lowest rate with 33.5 per 100,000 (Table 127 and Figure 31).

Table 127. Primary Care Physicians in the Western New York Region, by Specialty, 2014

Specialty	Primary Care Physicians	Per 100,000 Population ^a
Family/General Practice	310	22.2
Internal Medicine (General)	302	21.7
Geriatrics	5	2.2
Obstetrics/Gynecology	118	44.5
Pediatrics (General)	186	62.5
Total	921	66.0

^a All rates are per 100,000 total population except the ob/gyn rate, which is per 100,000 women aged 15 to 44, the pediatrician rate, which is per 100,000 children aged birth to 17 years, and the geriatrics rate, which is per 100,000 population aged 65 and older.

Figure 31. Number of Primary Care Physicians per 100,000 Population in the Western New York Region, by County, 2014



Employment

Total Health Sector Employment

Between 2009 and 2013 health sector employment throughout the Western New York region decreased by 70 jobs, or 0.1%. More than 1,100 jobs (4%) were lost in hospitals between 2009 and 2013, but jobs in home health care increased by 543 jobs, or almost 11.3%, and jobs in ambulatory care increased by over 750 jobs, or 3%. Nursing home and personal care facilities experienced a loss of 219 jobs, or about 1% (Table 128).

Table 128. Number of Health Care Jobs in the Western New York Region, by Setting, 2009-2013

Setting	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Hospitals	27,864	27,348	27,071	26,800	26,717	-1,147	-4.1%
Ambulatory care (excluding home health)	22,725	23,372	23,640	22,958	23,478	753	3.3%
Nursing home and personal care facilities	15,655	15,844	15,644	15,618	15,436	-219	-1.4%
Home health care	4,790	4,892	5,030	5,272	5,333	543	11.3%
Total	71,034	71,456	71,384	70,648	70,964	-70	-0.1%

Source: New York State Department of Labor, ES-202

Employment and Wage by Occupation

Employment for selected health occupations is reported in Table 129. RNs in the Western New York region accounted for the most jobs in the first quarter of 2014 (13,440), followed by personal care aides (8,820) and nursing assistants (6,610). Nuclear medicine technologists (130) and dietetic technicians (90) had the fewest jobs.

Wages in selected health occupations for Western New York are reported in Table 130. These wages were based on data for the first quarter of 2014. Certified registered nurse anesthetists earned the highest hourly wage in 2014 (\$77.21), followed by pharmacists (\$55.17) and nurse midwives (\$50.36). Home health aides (\$11.63), orderlies (\$11.54), and personal care aides (\$11.46) were the lowest wage earners in the selected health occupations in the Western New York region.

Table 129. Number of Jobs in Selected Health Occupations in the Western New York Region, 2013

Occupation	Employment
Registered Nurses	13,440
Personal Care Aides	8,820
Nursing Assistants	6,610
Licensed Practical Nurses	4,940
Home Health Aides	4,310
Social Workers	3,420
Pharmacy Technicians	1,640
Pharmacists	1,540
Medical Secretaries	1,480
Medical and Health Service Managers	1,440
Dental Assistants	1,180
Medical Assistants	1,180
Physical Therapists	1,040
Radiologic Technologists	1,000
Dental Hygienists	980
Speech-Language Pathologists	980
Nurse Practitioners	820
Medical Records and Health Information Techs	760
Occupational Therapists	610
Respiratory Therapists	510
Physician Assistants	450
Physical Therapy Assistants/Aides	450
Medical and Clinical Laboratory Technologists	430
Surgical Technologists	350
Occupational Therapy Assistants/Aides	340
Medical and Clinical Laboratory Technicians	320
Dietitians and Nutritionists	300
Orderlies	230
Cardiovascular Technologists & Technicians	150
Nuclear Medicine Technologists	130
Dietetic Technicians	90
Nurse Midwives	N/A
Certified Registered Nurse Anesthetists	N/A

Source: New York State Department of Labor, Bureau of Labor Statistics, Occupational Wages

Table 130. Average Hourly Wage in Selected Health Occupations in the Western New York Region, 2014

Occupation	Average Wage per Hour
Certified Registered Nurse Anesthetists	\$77.21
Pharmacists	\$55.17
Nurse Midwives	\$50.36
Medical and Health Services Managers	\$45.36
Physician Assistants	\$43.02
Nurse Practitioners	\$42.43
Speech-Language Pathologists	\$34.10
Physical Therapists	\$33.85
Nuclear Medicine Technologists	\$32.67
Registered Nurses	\$32.22
Occupational Therapists	\$31.97
Respiratory Therapists	\$27.93
Medical and Clinical Laboratory Technologists	\$27.37
Dental Hygienists	\$27.22
Radiologic Technologists and Technicians	\$26.50
Dietitians and Nutritionists	\$26.22
Cardiovascular Technologists & Technicians	\$24.70
Surgical Technologists	\$23.56
Healthcare Social Workers	\$22.91
Medical and Clinical Laboratory Technicians	\$21.14
Mental Health and Substance Abuse Social Workers	\$20.82
Physical Therapist Assistants	\$19.94
Medical Records and Health Info Techs	\$19.53
Occupational Therapy Assistants	\$19.50
Licensed Practical and Licensed Vocational Nurses	\$18.74
Dietetic Technicians	\$18.67
Occupational Therapy Aides	\$16.72
Dental Assistants	\$16.67
Medical Assistants	\$15.97
Medical Secretaries	\$15.77
Pharmacy Technicians	\$14.15
Nursing Assistants	\$13.66
Physical Therapist Aides	\$13.14
Home Health Aides	\$11.63
Orderlies	\$11.54
Personal Care Aides	\$11.46

Source: New York State Department of Labor, Labor Statistics, Occupational Wages

Licensed Health Care Professionals

Between 2009 and 2013 in the Western New York region the number of licensed RNs increased by more than 1,550, or nearly 9%, and the number of social workers grew by almost 400, or by nearly 22%. PAs grew the fastest in the Western New York region, increasing by 37%, followed by physical therapy assistants (31%), social workers (22%), and NPs (19%). In contrast, clinical laboratory technicians and occupational therapy assistants experienced declines of 4% and 2%, respectively (Table 131).

Table 131. Number of Licensed Individuals in Selected Health Occupations in the Western New York Region, 2009-2013

Profession	2009	2010	2011	2012	2013	Change Between 2009 and 2013	
						Number	Percent
Registered Nurses	18,408	18,815	18,876	19,260	19,977	1569	8.5%
Licensed Practical Nurses	7,033	7,041	7,182	7,133	7,188	155	2.2%
Social Workers	1,829	1,916	2,038	2,108	2,223	394	21.5%
Pharmacists	1,584	1,613	1,651	1,694	1,735	151	9.5%
Physical Therapists	1,255	1,267	1,274	1,323	1,383	128	10.2%
Nurse Practitioners	1,139	1,164	1,212	1,254	1,351	212	18.6%
Speech-Language Pathologists	1,079	1,105	1,146	1,172	1,203	124	11.5%
Dental Hygienists	1,071	1,090	1,131	1,138	1,157	86	8.0%
Clinical Laboratory Technologists	969	988	983	989	977	8	0.8%
Occupational Therapists	765	767	786	812	848	83	10.8%
Physician Assistants	585	622	665	712	802	217	37.1%
Occupational Therapy Assistants	603	586	602	601	592	-11	-1.8%
Respiratory Therapists	441	451	455	480	495	54	12.2%
Physical Therapy Assistants	300	322	337	351	393	93	31.0%
Dietitians/Nutritionists	312	318	316	337	353	41	13.1%
Clinical Laboratory Technicians	196	192	196	194	188	-8	-4.1%

Source: New York State Education Department, Office of Professions

Demand for Health Workers

Hospitals

Hospitals in the Western New York region reported the most difficulty recruiting clinical laboratory technologists, followed by NPs and PAs. Hospitals in Western New York indicated the most difficulty retaining CNAs, followed by LPNs and nurse managers (Table 132).

Table 132. Recruitment and Retention Difficulties for Hospitals in Selected Health Occupations in the Western New York Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties		
	Recruitment	Retention	Shortage of Workers	Salary Levels	Geographic Location
Care Coordinators	2.4	2.4	50%	50%	13%
CNA/Patient Care Techs	1.9	3.9	11%	56%	22%
Clinical Lab Technicians	3.5	2.3	63%	0%	13%
Clinical Lab Technologists	4.3	2.9	88%	63%	63%
Licensed Clinical Social Workers	2.0	1.8	50%	63%	25%
Licensed Practical Nurses	2.9	3.4	50%	63%	13%
Medical Assistants	1.3	3.0	0%	57%	14%
Medical Hospital Coders	2.4	2.9	63%	13%	13%
Nurse Practitioners	3.9	2.5	88%	75%	88%
Occupational Therapists	2.3	2.0	63%	50%	25%
Pharmacists	2.9	2.7	71%	14%	86%
Physical Therapists	2.6	2.3	63%	63%	25%
Physician Assistants	3.8	2.5	88%	63%	88%
Radiologic Technicians	1.0	1.5	0%	0%	0%
Radiologic Technologists	1.1	1.5	0%	0%	0%
Registered Nurses					
Newly Licensed RNs	2.7	2.3	56%	33%	67%
Experienced RNs	2.4	2.4	22%	33%	44%
Nurse Managers	4.0	3.3	78%	78%	78%
Speech-Language Pathologists	2.4	2.0	63%	50%	25%

- Many hospitals in the Western New York region projected growth in ambulatory services, with increasing demand for LCSWs (75%), RNs (63%), nurse managers (63%), and care coordinators (63%).
- Twenty-two percent (22%) of facilities that reported downsizing said it was due to attrition.

Nursing Homes

Nursing homes in the Western New York region reported the most difficulty recruiting experienced RNs, followed by CNAs, nurse managers, and MDS coordinators. CNAs were the most difficult to retain, followed by LPNs and experienced RNs (Table 133).

Table 133. Recruitment and Retention Difficulties for Nursing Homes in Selected Health Occupations in the Western New York Region, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Certified Nursing Aides	3.7	4.3	62%	69%	15%	23%
Clerical	2.2	1.6	0%	60%	40%	20%
Dietitians/Nutritionists	2.6	2.1	33%	67%	67%	0%
Licensed Practical Nurses	3.3	3.8	75%	42%	17%	25%
Medical Billers	2.4	1.8	50%	0%	50%	0%
Occupational Therapists	3.2	2.8	50%	50%	30%	20%
Occupational Therapy Assts.	2.9	2.8	43%	57%	43%	0%
Personal Care Assistants	2.0	3.5	0%	100%	100%	0%
Physical Therapists	3.2	2.9	50%	50%	38%	13%
Physical Therapy Assistants	2.8	2.5	50%	50%	50%	0%
Registered Nurses						
Newly Licensed RNs	2.9	3.5	55%	36%	36%	36%
Experienced RNs	3.9	3.6	50%	50%	33%	25%
MDS Coordinators	3.5	3.3	29%	43%	43%	29%
Nurse Managers	3.6	3.4	40%	70%	30%	10%
Directors of Nursing	3.3	2.2	60%	40%	60%	0%
Rec. Therapists/Activities Dirs.	2.5	2.2	50%	0%	50%	0%
Respiratory Therapists	3.0	2.8	0%	0%	100%	0%
Social Workers						
Licensed Clinical SWs	2.8	2.7	33%	33%	33%	17%
Licensed Master's SWs	3.0	2.8	50%	25%	50%	0%
Speech-Language Pathologists	2.8	2.7	60%	40%	40%	20%

- Forty-seven percent (47%) reported difficulty hiring part-time workers.
- Sixty-three (63%) indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- The majority reported no plans to either expand (95%), and none reported plans to reduce services next year.

Home Health Care Agencies

The number of responses for home health care agencies in the Finger Lakes region was too low to analyze separately, so it was combined with the Western New York region for analysis. Home health care agencies in the combined 2 regions indicated the most difficulty recruiting dietitians/nutritionists, physical therapists, LMSWs, and speech-language pathologists. Personal care aides/homemakers and newly licensed RNs were the most difficult to retain (Table 134).

Table 134. Recruitment and Retention Difficulties for Home Health Care Agencies in Selected Health Occupations in the Finger Lakes and Western New York Regions, 2014

Occupation	Average Assessment of Difficulty		Percentage of Respondents Indicating Reasons for Difficulties			
	Recruitment	Retention	Shortage of Workers	Salary Levels	Benefits	Location
Dietitians/Nutritionists	4.3	3.0	100%	33%	0%	67%
Home Health Aides	3.3	3.1	40%	60%	20%	80%
Licensed Practical Nurses	3.3	2.7	50%	50%	25%	100%
Occupational Therapists	3.7	3.0	50%	50%	25%	50%
Personal Care Aides/Homemakers	3.6	4.0	50%	75%	0%	75%
Physical Therapists	4.3	3.2	67%	17%	0%	100%
Registered Nurses						
Newly Licensed RNs	3.0	3.7	0%	33%	33%	67%
Experienced RNs	3.9	3.3	17%	50%	33%	67%
Respiratory Therapists	3.0	3.3	0%	0%	0%	33%
Social Workers						
Licensed Clinical SWs	3.8	3.3	33%	33%	33%	100%
Licensed Master's SWs	4.0	2.8	33%	33%	33%	100%
Speech-Language Pathologists	4.0	3.3	33%	0%	0%	67%

- Seventy-one percent (71%) reported difficulty hiring part-time workers.
- All agencies indicated difficulty hiring workers for off shifts (evenings, nights, and weekends).
- No agencies reported plans to reduce services next year.

FQHCs

The number of responses from the Finger Lakes and Western New York regions were too low to analyze separately, so the responses from these regions were combined. FQHCs in these regions reported the most difficulty recruiting psychiatrists, psychiatric NPs, and family physicians, and reported the most difficulty retaining psychiatric NPs, dentists, general internists, and dental assistants/aides/technicians (Table 135).

Table 135. Recruitment and Retention Difficulties for FQHCs in Selected Health Occupations in the Finger Lakes and Western New York Regions, 2014

Occupation		Average Assessment of Difficulty	
		Recruitment	Retention
Physicians	Family/General Practice	3.9	2.3
	Internal Medicine	3.6	2.5
	Ob/Gyn	3.3	2.0
	Pediatric	2.8	1.8
	Physician Assistants	3.0	2.4
Nurse Practitioners	Pediatric	1.7	2.0
	Adult	3.0	2.0
	Family	2.8	2.2
	Midwives	1.0	1.0
	Psychiatric	4.0	4.0
Nursing	Registered	2.3	1.5
	Licensed Practical	2.0	2.0
	Medical Assistants	2.0	2.0
Behavioral Health	Psychiatrists	4.5	2.0
	Psychologists	2.5	1.0
	Substance Abuse Counselors	3.0	N/A
	Social Workers	2.5	1.6
Oral Health	Dentists	3.5	2.8
	Dental Hygienists	2.0	1.3
	Dental Assistants/Aides/Techs	2.8	2.5
Enabling Services	Care Coordinators/Case Managers	2.1	1.7
	HIV Counselors	2.5	2.0
	Community Health Workers	1.8	1.5
	Patient Health Educators	1.5	1.3
	Nutritionists/Nutrition Educators	2.3	1.7
	Eligibility Assistance	1.3	1.7
	Patient Health Navigators	2.0	1.5
	Outreach Workers	1.7	1.3
Administrative Support	Billing/Data Entry	2.0	1.7
	IT Systems Admin/Maintenance	2.2	2.0

- Eighty-six percent (86%) of FQHCs in these regions indicated plans to expand services.
- Thirty-three percent (33%) indicated difficulty hiring part-time workers and bilingual workers. None indicated difficulty hiring workers for evening shifts.

Employment Projections by Health Occupation

According to the NYSDOL, between 2012 and 2022 the largest numbers of average annual job openings projected in the Western New York region will be for RNs (370), personal care aides (310), and home health aides (250) (Table 136).

Table 136. Employment Projections for Selected Health Occupations in the Western New York Region, 2012-2022

Occupation	2012	2022	Change Between 2012 and 2022		Average Annual Openings ^a
			Number	Percent	
Personal Care Aides	9,020	11,550	2,530	28.0%	310
Home Health Aides	5,480	6,990	1,510	27.6%	250
Registered Nurses	13,390	14,450	1,060	7.9%	370
Licensed Practical and Licensed Vocational Nurses	5,260	6,210	950	18.1%	220
Nursing Assistants	7,330	8,010	680	9.3%	210
Social Workers	3,570	3,900	330	9.2%	110
Physical Therapists	1,180	1,430	250	21.2%	60
Dental Hygienists	1,100	1,350	250	22.7%	60
Nurse Practitioners	850	1,060	210	24.7%	40
Pharmacy Technicians	1,660	1,870	210	12.7%	40
Medical Assistants	1,070	1,270	200	18.7%	40
Dental Assistants	1,110	1,270	160	14.4%	40
Physician Assistants	440	570	130	29.5%	20
Medical and Health Services Managers	1,420	1,540	120	8.5%	50
Occupational Therapists	680	800	120	17.6%	20
Speech-Language Pathologists	1,090	1,200	110	10.1%	30
Medical Records and Health Info Techs	860	970	110	12.8%	30
Pharmacists	1,420	1,520	100	7.0%	40
Radiologic Technologists	1,090	1,190	100	9.2%	30
Emergency Medical Technicians and Paramedics	810	910	100	12.3%	30
Diagnostic Medical Sonographers	280	370	90	32.1%	10
Surgical Technologists	340	390	50	14.7%	10
Medical and Clinical Laboratory Technicians	320	360	40	12.5%	20
Dietitians and Nutritionists	340	370	30	8.8%	0
Respiratory Therapists	510	540	30	5.9%	10
Cardiovascular Technologists & Technicians	150	170	20	13.3%	0
Clinical, Counseling, and School Psychologists	760	770	10	1.3%	20
Medical and Clinical Laboratory Technologists	440	450	10	2.3%	10

^a Annual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the profession.

Source: New York State Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2012-2022



School of Public Health | University at Albany, SUNY
1 University Place, Suite 220 | Rensselaer, NY 12144-3445

<https://chws.albany.edu>