

The Health Care Workforce in New York State: Trends in the Supply of and Demand for Health Care Workers



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CHWS

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AT-A-GLANCE

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

OVERVIEW

This report utilizes primary and secondary data sources to describe New York's health workforce at both the state and regional levels. It includes information on the health status of New Yorkers, the health care system, and the supply of and demand for health workers.

PURPOSE

The goal is to provide health care providers and policy makers with information on the current New York health workforce to assist them in their health workforce planning efforts.



HEALTH CARE EMPLOYMENT

Jobs in health care grew statewide, but growth varied by geography and health care setting

Between 2018 and 2022:

- Number of jobs in health care settings downstate (Long Island and New York City) increased, while health care jobs in all upstate regions declined
- Jobs in home health care and in ambulatory care increased, while jobs in nursing homes and hospitals declined

WORKFORCE SHORTAGES

Pervasive shortages continue for a variety of professions across all health care settings

- Registered nurses (RNs) and licensed practical nurses (LPNs)
- Entry-level aides (nursing aides, certified nurse aides, home health aides, personal care aides, and medical assistants)

Various reasons have been cited for recruitment and retention difficulties

- General workforce shortages
- Better opportunities within and outside of health care



NURSING EDUCATIONAL PIPELINE

RN production is expected to hold steady

- Applications and acceptances to RN education programs were about the same between 2022 and 2023

Multiple factors are limiting the expansion of RN education programs

- Faculty shortages
- Insufficient amount of clinical training sites
- Caps on how many students can be accepted

PREFACE

This report, prepared by the Center for Health Workforce Studies (CHWS), provides information drawn from a variety of data sources to describe and analyze New York State's health workforce. The report includes primary data collected by CHWS on registered nurse (RN) education and on health care workforce recruitment and retention challenges in New York State.

A key goal of this report is to assist policy makers and other stakeholders to:

- Address the most pressing health care workforce needs
- Make informed decisions on health care workforce education and job training investments
- Guide health workforce policies, including decisions related to the capacity of health profession education programs
- Inform current and prospective students about profession-specific health care employment prospects and opportunities

This report was prepared by CHWS staff, Robert Martiniano, Alexandra Romero, Oluwabusayomi Akeju, Byunggu Kang, and Matthew Allegretti. Funding for this report was provided by the 1199 SEIU Hospital League Health Care Industry Planning and Placement Fund, Inc.

Established in 1996, CHWS is an academic research center based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate information 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. CHWS is a national leader in the field of health workforce research.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of SUNY or 1199 SEIU/Hospital League Health Care Industry Planning and Placement Fund, Inc.

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I. EXECUTIVE SUMMARY

BACKGROUND

The health care workforce is a vital part of New York's health care delivery system. Efforts to expand access to care, improve the quality of care, and improve the cultural competence of the health care delivery system depend on the availability of a diverse, well-trained, and adequately sized health care workforce.

The COVID-19 pandemic caused major disruptions to New York's health care delivery system as well as its workforce. While the immediate pandemic impacts on health care delivery have dissipated, there have been persistent challenges that have affected the state's health care workforce. The "great retirement," especially of registered nurses (RNs), has drained the health care system of experienced workers and mentors. Post-pandemic job growth has also provided many existing health care workers with better job opportunities both in and outside of health care. Additionally, increased competition for entry level workers, such as nurse aides, home health aides, or personal care aides, from retail and other services employment sectors has contributed to a shortage of available workers in those and other health care occupations. Finally, declining college enrollments as led to a shortfall of qualified graduates in the health care workforce pipeline.

Health care providers have used a variety of strategies to address their workforce recruitment and retention issues. Recruitment strategies include sign-on bonuses, increased outreach to potential employees through job fairs, internship and externship opportunities, and participating in health career programs at high schools and middle schools. Retention strategies include retention bonuses, upgrading programs or career ladders or lattices, and retention coordinators. Health care providers are also needing to address workplace culture as part of retention strategies, understanding that the work environment is as important as salary and benefits. They are needed to address workplace violence and burnout to ensure both patient and worker safety. Additionally, health care organizations are offering nurse residency programs to recruit and retain RNs, to mentor newly trained RNs, and to provide supervised patient care experiences. Finally, health care providers continue to use state and federal incentive programs that provide loan repayment or scholarships in return for obligated service in underserved communities. In 2022, over 2,000 health care providers were fulfilling service obligations in New York State.

FUTURE OUTLOOK

While the health care system has been recession proof, it was not pandemic proof. As outlined in this report, jobs in health care settings decreased throughout New York State between 2019 and 2020, and in many parts of the state, the number of these jobs have not grown back to pre-pandemic levels. Federal projections as also shown in this report indicates that the number of jobs in health care settings will continue to grow, especially in home health care, though at a slower pace than in the past. Workforce shortages as well as the expanded use of technology, such as telehealth, have created opportunities for health care providers to use the existing health care workforce more effectively, including adopting new models of care and creating new health workers who assist in the delivery and management of care, such as community health workers, health coaches, and patient navigators.

Consequently, it is critical to continually monitor the supply of and demand for health workers in the state, to understand the magnitude of shortages and their impact on access to care. In addition, it is important to assess the capacity of production from the state's health professions education pipeline. Timely workforce data and analyses are necessary to assess current and future health care workforce needs and deficits.

KEY FINDINGS

This report presents data and information drawn from primary and secondary data sources to describe New York's health care workforce and provides analysis of data at the state and regional levels. The report includes information on the health status of New Yorkers, the health care system, and the supply of and demand for health workers. It is designed to assist stakeholders in their health care workforce planning efforts. Key findings include:

Jobs in health care grew statewide, but growth varied by geography and health care setting

Between 2018 and 2022:

- Number of jobs in health care settings downstate (Long Island and New York City) increased, while health care jobs in all upstate regions declined
- Jobs in home health care and in ambulatory care increased, while jobs in nursing homes and hospitals declined

Pervasive shortages continue for a variety of professions across all health care settings

- RNs and licensed practical nurses (LPNs)
- Entry-level aides (nursing aides, certified nurse aides, home health aides, personal care aides, and medical assistants)

RN production is expected to hold steady

- Applications and acceptances to RN education programs were about the same between 2022 and 2023

Multiple factors are limiting the expansion of RN education programs

- Faculty shortages
- Insufficient amount of clinical training sites
- Caps on how many students can be accepted

OBJECTIVES AND GOALS

The objectives of this report are to:

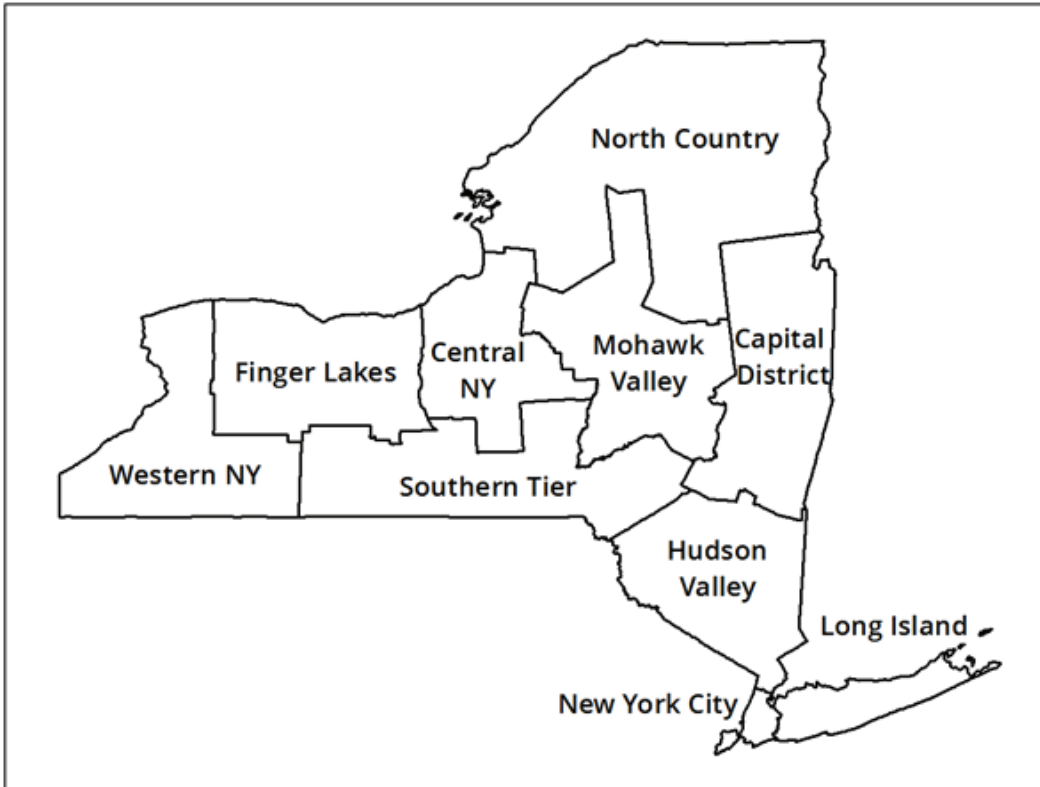
- Describe health care employment, graduation, and licensure trends in New York State statewide and regionally.
- Identify the health care professions and occupations currently and projected to be in greatest demand.

Key goals of this report are to assist policy makers and other stakeholders to:

- Make informed decisions on health care workforce education and job training investments.
- Address the most pressing health care workforce needs.
- Guide health care workforce policies, including decisions related to the capacity of health profession education programs.
- Inform current and prospective students about profession-specific health care employment prospects and opportunities.

The New York State Department of Labor (NYSDOL) has divided the state into several regions. Figure 1 is a map of the NYSDOL regions used in this report. For a list of counties in each region, please see Section C (Geographic Areas) in the [Appendix](#), page 241. Each regional profile page has a list of counties profiled in that region as well.

Figure 1. Map of the New York State Department of Labor Regions



II. NEW YORK STATE HEALTH SECTOR EMPLOYMENT

NEW YORK STATE HIGHLIGHTS

Health Care Employment

- Growth in jobs in health care settings in all upstate* New York region declined between 2018 and 2022.
- Jobs in health care settings in the Long Island and New York City regions increased between 2020 and 2022.
- Jobs in health care settings in upstate New York have not reached pre-pandemic levels.
- Job growth is the fastest in home health care, followed by ambulatory care. Jobs in hospitals and in nursing homes declined between 2018 and 2022.

Employer Demand Surveys

- RNs are among the most difficult to recruit and retain in all health care settings throughout New York State.
- Psychiatrists and behavioral health nurse practitioners are among the most difficult to recruit in hospitals.
- LPNs, and certified nurse aides/assistants are also among the most difficult to recruit and retain in nursing homes and in adult care facilities.
- Home health aides and personal care aides are the most difficult to recruit and retain in home health care.
- A general shortage of workers was cited as one of the main reasons for recruitment difficulties of health care workers. Leaving for better salaries was cited across all health care settings as a main reason for retention difficulties.
- Federally qualified health centers also reported recruitment and retention difficulties for LPNs and medical assistants.

Health Care Production and Projected Workforce Need

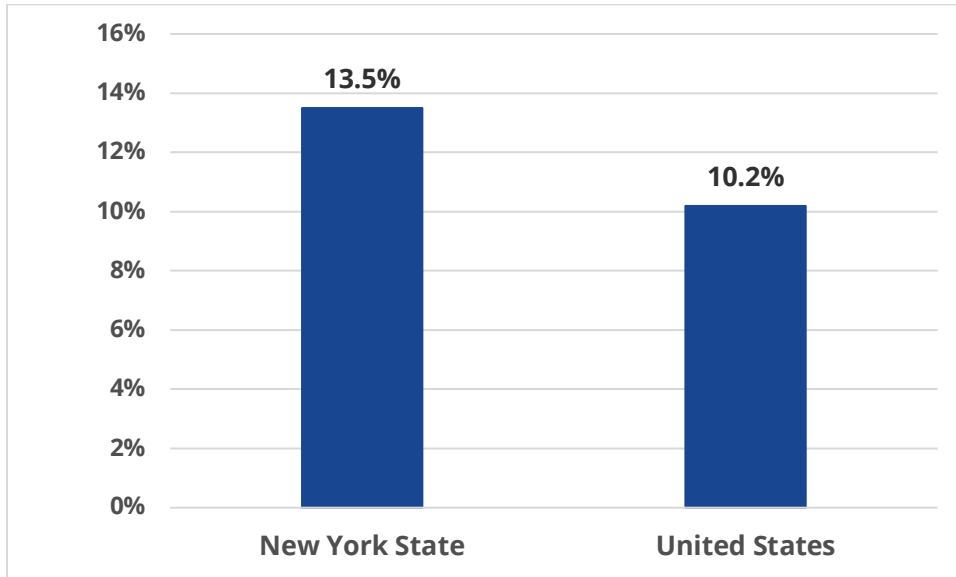
- The number of newly licensed nurse practitioners, physician assistants, and RNs has substantially increased between 2019 and 2023. In contrast, the number of newly licensed LPNs has slightly decreased during the same time period.
- The majority of deans and directors of RN educational programs indicated that acceptances to their programs were about the same between 2022 and 2023. They are also reporting many jobs for newly trained RNs, especially in hospitals and nursing homes.
- Home health and personal care aides are among the fastest growing health occupation in New York State, with nearly 94,000 projected average annual openings.
- There are more than 14,000 projected average annual openings for RNs.

* The downstate regions include Long Island and New York City and Long Island. The remaining regions are considered upstate.

1. Health Care Employment

A. Overview

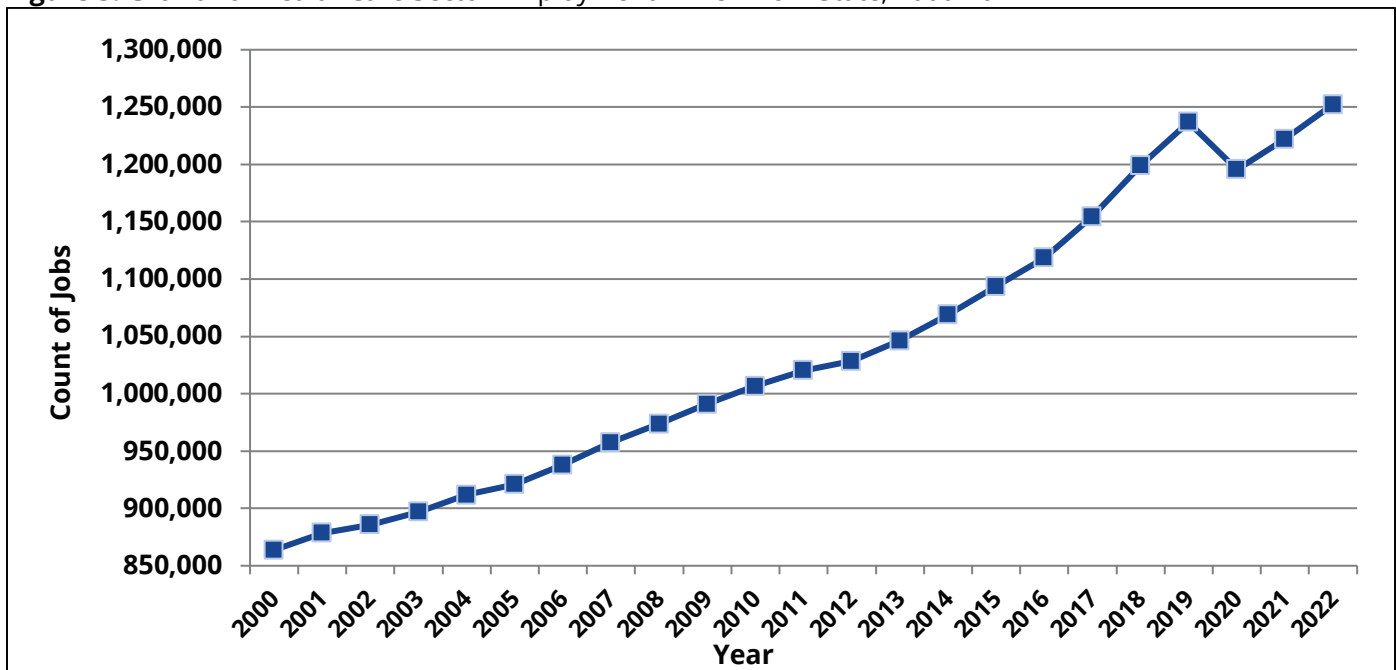
Figure 2. Health Care Sector Employment as a Percentage of Total Employment, 2022



Sources: New York State Department of Labor, Quarterly Census of Employment and Wages; Bureau of Labor Statistics, Employment, Hours, and Earnings from the Current Employment Statistics survey, Series CEU0000000001, CEU6562100001, CEU6562200001, CEU6562300001, CEU6562320001, and CEU6562390001.

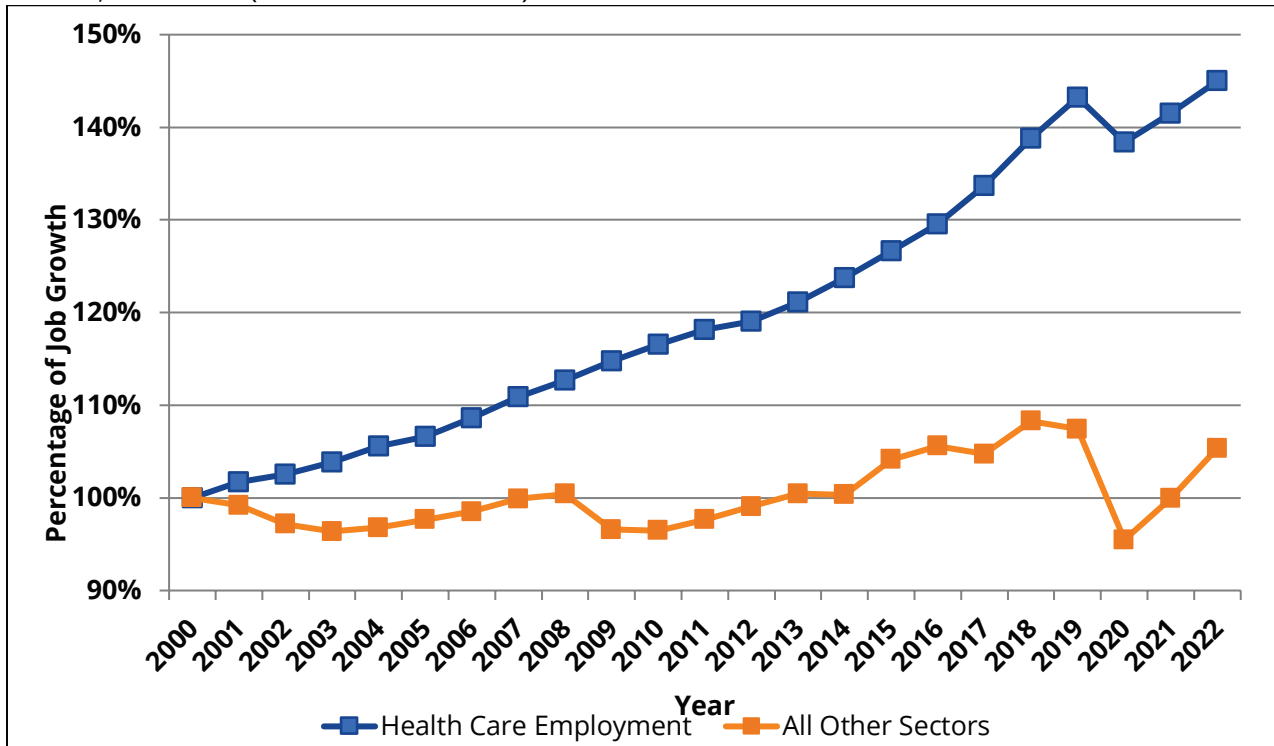
Note: Does not include employment at federally operated facilities such as VA hospitals.

Figure 3. Growth of Health Care Sector Employment in New York State, 2000-2022



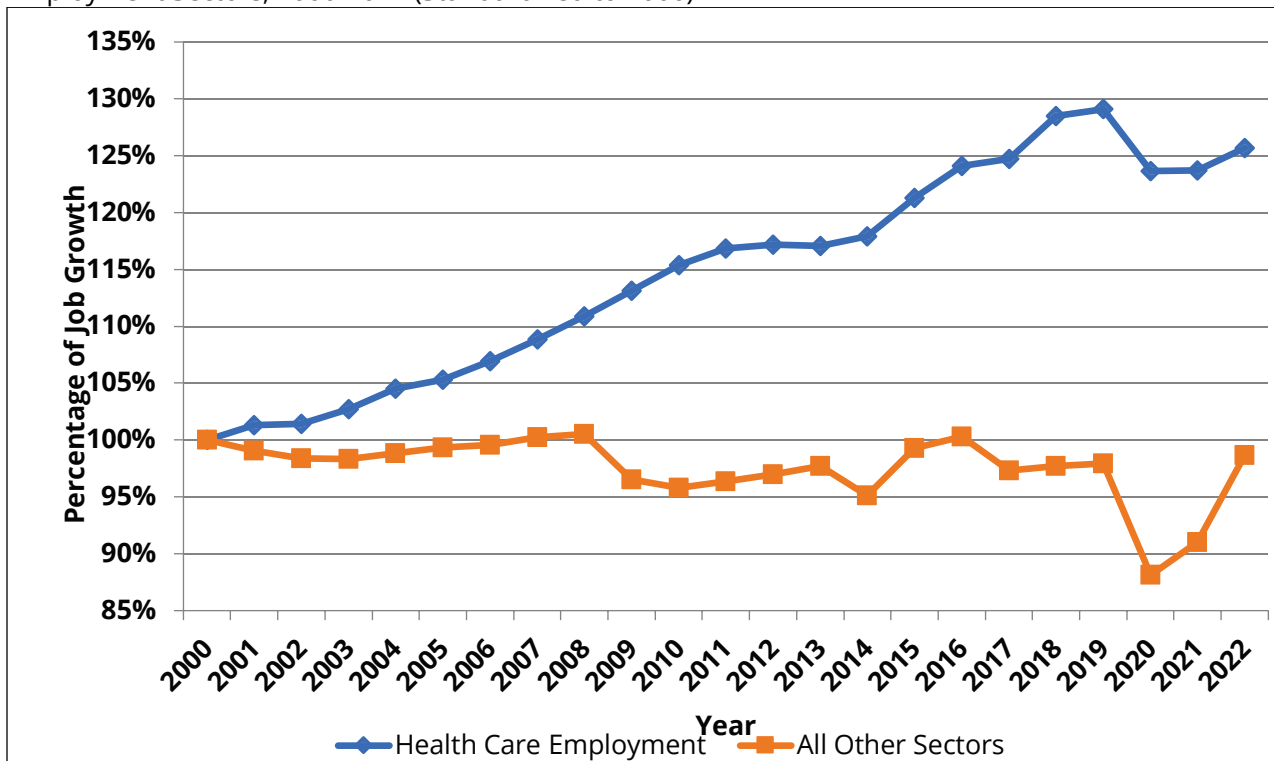
Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Figure 4. Growth of Employment in New York State, Health Care Sector and All Other Employment Sectors, 2000-2022 (Standardized to 2000)



Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Figure 5. Growth of Employment in Regions Outside of New York City, Health Care Sector and All Other Employment Sectors, 2000-2022 (Standardized to 2000)



Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

2. Population and Health Care Indicators of New York State

Table 1. Selected Population Characteristics for New York State, 2018-2022

Population Characteristics	Number	% of Total Population
Total population	19,994,379	N/A
Population under 100% FPL	2,655,662	13.6%
Population under 200% FPL	5,527,984	28.3%
Population aged birth to 17 years	4,128,443	20.6%
Population aged 65 and older	3,402,284	17.0%
Population female aged 15 to 44	3,968,468	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	4,391	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	144,714	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	79,243	3.9%
Black/African American, non-Hispanic	2,767,223	13.8%
Hispanic/Latino	3,895,714	19.5%
Asian/Pacific Islander, non-Hispanic	1,758,202	8.8%
American Indian/Native Alaskan, non-Hispanic	38,481	0.2%
Two or more/other races	613,623	3.1%
Population with less than a high school education ^b	1,740,787	12.4%
Population with a high school diploma or equivalent ^b	3,494,392	24.9%
Population with an associate degree ^b	1,238,616	8.8%
Population with a bachelor's degree ^b	3,033,763	21.6%
Population with a master's degree or higher ^b	2,405,652	17.2%
Home ownership ^c	4,128,119	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 2. Selected Health Indicators for New York State

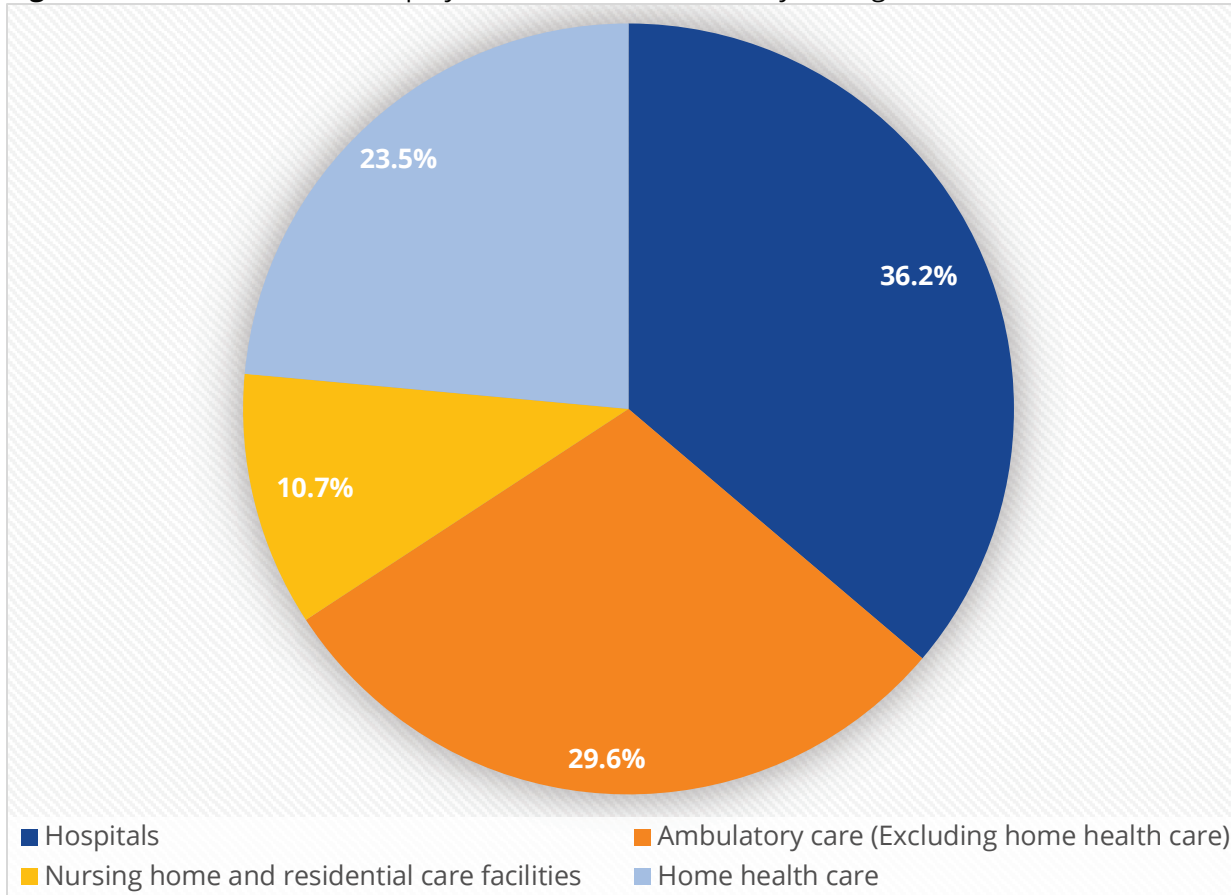
Health Indicator	Statewide	
	Number	Rate
Total deaths, per 100,000	516,974	881.7
Deaths due to heart disease, per 100,000	135,955	231.9
Deaths due to all cancers, per 100,000	101,440	173.1
Deaths due to diabetes, per 100,000	14,414	24.6
Total births, per 1,000 females aged 15 to 44	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	19,095	10.9
Low-birthweight births, as a percent of total births	40,411	6.4
Late/no prenatal care, as a percent of total births	34,266	5.3
Infant deaths, per 1,000 live births	2,764	4.2
Total hospitalizations, per 10,000	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	11,691	7.6
Pediatric asthma hospitalization, per 10,000	19,462	15.9
Diabetes hospitalizations, per 10,000	124,485	21.2
CLRD hospitalizations, per 10,000	140,504	24.0
Heart disease hospitalizations, per 10,000	585,521	99.9
Total ED visits, per 10,000	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.
Source: New York State Community Health Indicator Reports.

3. Health Care Sector

A. Employment Data Statewide and By Region

Figure 6. Health Care Sector Employment in New York State, by Setting, 2022



Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Table 3. The Number of Jobs in Health Care in New York State, by Setting, 2000, 2018, and 2022

Setting	2000	2018	2022	Change Between 2018-2022		Change Between 2000-2022	
				Number	Percent	Number	Percent
Hospitals	410,300	457,363	453,363	-4,000	-0.9%	43,063	10.5%
Ambulatory care (Excluding home health care)	245,600	347,411	370,460	23,049	6.6%	124,860	50.8%
Nursing home and residential care facilities	143,200	160,319	133,635	-26,684	-16.6%	-9,565	-6.7%
Home health care	64,600	233,833	294,875	61,042	26.1%	230,275	356.5%
Total	863,700	1,198,926	1,252,333	53,407	4.5%	388,633	45.0%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Table 4. The Number of Jobs in Health Care Settings in New York State, by Downstate and Upstate, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Number
Downstate	748,911	791,648	769,184	792,433	825,039	76,128	10.2%
Upstate	442,466	445,269	426,296	420,804	416,383	-26,083	-5.9%
Total	1,198,926	1,243,738	1,202,529	1,222,000	1,252,333	53,407	4.5%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: The downstate category includes the Department of Labor regions of New York City and Long Island. The upstate category includes the remainder of the regions.

Note: Regional totals do not add up to the total due to errors in coding counties and regions.

Table 5. The Number of Jobs in Health Care Settings in New York State, by Department of Labor Region, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Capital District	60,374	59,272	57,012	55,545	54,221	-6,153	-10.2%
Central NY	40,538	41,907	39,161	38,232	37,849	-2,689	-6.6%
Finger Lakes	69,298	69,772	66,607	66,094	66,593	-2,705	-3.9%
Hudson Valley	121,722	123,422	120,117	120,714	120,750	-972	-0.8%
Long Island	186,482	194,047	186,101	191,804	195,154	8,672	4.7%
Mohawk Valley	26,984	26,527	25,010	23,802	22,851	-4,133	-15.3%
New York City	562,429	597,601	583,083	600,629	629,885	67,456	12.0%
North Country	19,026	19,244	18,388	18,056	16,545	-2,481	-13.0%
Southern Tier	29,148	29,083	27,767	27,219	27,040	-2,108	-7.2%
Western NY	75,376	76,042	72,234	71,142	70,534	-4,842	-6.4%
Total	1,198,926	1,243,738	1,202,529	1,222,000	1,252,333	53,407	4.5%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: Regional totals do not add up to the total due to errors in coding counties and regions.

Table 6. Employment in Health Care Settings per 100,000 in New York State, by Department of Labor Region, 2010 and 2022

Region	2010		2022	
	Jobs per 100,000 Population	% Of Jobs in Health Care	Jobs per 100,000 Population	% Of Jobs in Health Care
Capital District	5,052.0	11.1%	4,883.3	10.7%
Central NY	4,683.8	11.0%	4,885.3	11.4%
Finger Lakes	5,011.6	11.4%	5,497.9	12.5%
Hudson Valley	4,825.5	12.9%	5,046.1	13.3%
Long Island	5,697.2	13.6%	6,708.2	15.4%
Mohawk Valley	5,437.3	14.2%	4,744.2	12.7%
New York City	5,324.2	12.1%	7,556.3	14.5%
North Country	4,054.5	11.6%	3,956.0	11.4%
Southern Tier	4,354.4	10.9%	4,274.8	11.1%
Western NY	5,105.2	11.7%	5,001.2	11.7%
Total	5,195.5	12.3%	6,364.4	13.5%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

B. Hospital Employment

Table 7. Hospital Employment in New York State, by Downstate and Upstate, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Number
Downstate	279,037	284,309	287,772	288,182	288,398	9,361	3.4%
Upstate	178,270	178,737	172,511	167,533	164,152	-14,118	-7.9%
Total	457,363	463,079	460,283	455,899	453,363	-4,000	-0.9%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: The downstate category includes the Department of Labor regions of New York City and Long Island. The upstate category includes the remainder of the regions.

Table 8. Hospital Employment in New York State, by Department of Labor Region, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Capital District	25,225	24,537	23,328	21,774	20,986	-4,239	-16.8%
Central NY	14,066	14,210	13,603	13,165	12,928	-1,138	-8.1%
Finger Lakes	33,911	34,532	33,594	34,239	34,465	554	1.6%
Hudson Valley	42,156	42,400	41,898	40,720	40,504	-1,652	-3.9%
Long Island	73,929	76,005	76,195	77,308	76,301	2,372	3.2%
Mohawk Valley	11,838	11,785	10,678	9,632	8,986	-2,852	-24.1%
New York City	205,108	208,304	211,577	210,874	212,097	6,989	3.4%
North Country	9,710	9,796	9,369	9,125	8,197	-1,513	-15.6%
Southern Tier	13,535	13,681	13,198	12,978	12,645	-890	-6.6%
Western NY	27,829	27,796	26,843	25,900	25,441	-2,388	-8.6%
Total	457,363	463,079	460,312	455,899	453,363	-4,000	-0.9%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

C. Nursing and Residential Care Facility Employment

Table 9. Nursing and Residential Care Facility Employment in New York State, by Downstate and Upstate, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Downstate	74,324	74,416	69,277	65,769	64,390	-9,934	-13.4%
Upstate	85,671	85,256	79,536	72,056	69,195	-16,476	-19.2%
Total	160,319	159,713	148,877	137,867	133,635	-26,684	-16.6%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: The downstate category includes the Department of Labor regions of New York City and Long Island. The upstate category includes the remainder of the regions.

Table 10. Nursing and Residential Care Facility Employment in New York State, by Department of Labor Region, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Capital District	11,423	11,250	10,323	9,278	8,678	-2,745	-24.0%
Central NY	8,370	8,547	8,112	7,157	6,775	-1,595	-19.1%
Finger Lakes	13,948	13,730	12,916	12,014	11,878	-2,070	-14.8%
Hudson Valley	20,405	20,665	19,363	17,961	17,359	-3,046	-14.9%
Long Island	24,490	25,282	23,492	22,227	22,089	-2,401	-9.8%
Mohawk Valley	6,418	6,278	5,911	5,224	5,021	-1,397	-21.8%
New York City	49,834	49,134	45,785	43,542	42,301	-7,533	-15.1%
North Country	2,887	2,813	2,675	2,324	2,022	-865	-30.0%
Southern Tier	6,738	6,584	6,126	5,524	5,366	-1,372	-20.4%
Western NY	15,482	15,389	14,110	12,574	12,096	-3,386	-21.9%
Total	160,319	159,713	148,877	137,867	133,635	-26,684	-16.6%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

D. Ambulatory Care Employment

Table 11. Ambulatory Care Settings Employment (Excluding Home Health Care) in New York State, by Downstate and Upstate, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Downstate	196,004	203,012	185,310	201,304	213,966	17,962	9.2%
Upstate	146,374	148,048	138,866	146,725	149,988	3,614	2.5%
Total	347,411	355,904	328,957	353,897	370,460	23,049	6.6%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: The downstate category includes the Department of Labor regions of New York City and Long Island. The upstate category includes the remainder of the regions.

Table 12. Ambulatory Care Settings Employment (Excluding Home Health Care) in New York State, by Department of Labor Region, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Capital District	20,226	20,132	19,096	20,514	20,736	510	2.5%
Central NY	15,924	16,919	15,208	15,804	16,040	116	0.7%
Finger Lakes	16,350	16,256	15,163	15,251	15,843	-507	-3.1%
Hudson Valley	47,357	47,262	43,721	46,710	48,003	646	1.4%
Long Island	66,852	68,700	63,302	68,361	71,788	4,936	7.4%
Mohawk Valley	6,967	6,929	7,003	7,576	7,500	533	7.7%
New York City	129,152	134,312	122,008	132,943	142,178	13,026	10.1%
North Country	5,703	5,917	5,642	5,930	5,678	-25	-0.4%
Southern Tier	7,796	7,857	7,495	7,824	8,223	427	5.5%
Western NY	26,051	26,776	25,538	27,116	27,965	1,914	7.3%
Total	347,111	355,904	328,957	353,897	370,460	23,049	6.6%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

E. Home Health Care Employment

Table 13. Home Health Care Employment in New York State, by Downstate and Upstate, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Downstate	199,546	229,911	226,825	237,178	258,285	58,739	29.4%
Upstate	32,151	33,228	35,383	34,490	33,048	897	2.8%
Total	233,833	265,402	264,383	274,337	294,875	61,042	26.1%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Note: The downstate category includes the Department of Labor regions of New York City and Long Island. The upstate category includes the remainder of the regions.

Table 14. Home Health Care Employment in New York State, by Department of Labor Region, 2018–2022

Region	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Capital District	3,500	3,353	4,265	3,979	3,821	321	9.2%
Central NY	2,178	2,231	2,238	2,106	2,106	-72	-3.3%
Finger Lakes	5,089	5,254	4,934	4,590	4,407	-682	-13.4%
Hudson Valley	11,804	13,095	15,135	15,323	14,884	3,080	26.1%
Long Island	21,211	24,060	23,112	23,908	24,976	3,765	17.8%
Mohawk Valley	1,761	1,535	1,418	1,370	1,344	-417	-23.7%
New York City	178,335	205,851	203,713	213,270	233,309	54,974	30.8%
North Country	726	718	702	677	648	-78	-10.7%
Southern Tier	1,079	961	948	893	806	-273	-25.3%
Western NY	6,014	6,081	5,743	5,552	5,032	-982	-16.3%
Total	233,833	265,402	264,383	274,337	294,875	61,042	26.1%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

F. Employment and Salaries by Occupation

Table 15. The Number of Jobs in Selected Health Care Occupations in New York State, 2018–2022

Occupational Title	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Audiologists	1,010	720	760	630	1010	0	0.0%
Cardiovascular Technologists and Technicians	3,280	3,370	3,360	3,360	3,290	10	0.3%
Clinical Laboratory Technologists and	18,050	18,110	17,470	17,030	16,990	-1,060	-5.9%
Dental Assistants	19,110	19,520	14,420	19,930	19,040	-70	-0.4%
Dental Hygienists	11,300	11,620	9,190	10,020	13,360	2,060	18.2%
Diagnostic Medical Sonographers	5,210	5,880	5,970	6,020	5,910	700	13.4%
Dietetic Technicians	1,090	1,040	1,060	920	830	-260	-23.9%
Dietitians and Nutritionists	4,710	4,640	4,450	4,880	5,200	490	10.4%
Emergency Medical Technicians and	17,520	18,610	19,620	17,690	18,720	1,200	6.9%
Healthcare Social Workers	13,290	15,720	18,290	21,910	25,210	11,920	89.7%
Home Health and Personal Care Aides	390,880	444,880	469,370	478,620	504,160	113,280	29.0%
Licensed Practical and Licensed Vocational	46,500	46,320	44,440	40,470	38,590	-7,910	-17.0%
Magnetic Resonance Imaging Technologists	2,300	2,410	2,140	2,230	2,750	450	19.6%
Medical Assistants	26,080	27,730	25,490	31,360	35,720	9,640	37.0%
Medical Records and Health Information	10,180	N/A	N/A	8,910	10,910	730	7.1%
Medical Secretaries and Administrative	8,890	8,950	9,320	44,290	41,590	32,700	367.8%
Medical Transcriptionists	1,450	2,700	2,550	3,030	4,070	2,620	180.7%
Medical and Health Services Managers	25,830	25,740	24,360	23,730	25,430	-400	-1.6%
Mental Health and Substance Abuse Social	11,470	11,540	11,020	11,870	12,170	700	6.1%
Nuclear Medicine Technologists	1,040	970	870	880	820	-220	-21.2%
Nurse Anesthetists	1,770	1,900	1,920	2,130	1,690	-80	-4.5%
Nurse Midwives	450	480	460	490	790	340	75.6%
Nurse Practitioners	13,710	14,060	14,850	15,190	17,470	3,760	27.4%
Nursing Assistants	91,400	85,090	81,440	85,490	80,100	-11,300	-12.4%
Occupational Therapists	9,740	12,460	10,560	8,320	8,660	-1,080	-11.1%
Occupational Therapy Assistants and Aides	2,640	3,140	2,770	2,380	2,180	-460	-17.4%
Orderlies	3,240	3,070	3,210	4,060	3,750	510	15.7%
Pharmacists	20,400	20,180	19,460	18,680	19,930	-470	-2.3%
Pharmacy Aides	2,050	1,670	1,920	2,940	2,560	510	24.9%
Pharmacy Technicians	19,320	20,360	18,970	20,650	23,550	4,230	21.9%
Phlebotomists	6,190	6,360	5,800	6,460	7,170	980	15.8%
Physical Therapist Assistants and Aides	7,790	8,700	8,100	6,470	7,300	-490	-6.3%
Physical Therapists	16,660	17,710	16,150	16,130	15,300	-1,360	-8.2%
Physician Assistants	12,060	13,270	13,760	13,670	14,790	2,730	22.6%
Psychiatric Aides	5,560	5,770	5,420	5,230	N/A	N/A	N/A
Radiologic Technologists and Technicians	12,780	12,620	12,170	15,180	13,060	280	2.2%
Recreational Therapists	1,500	1,450	1,430	1,530	1,430	-70	-4.7%
Registered Nurses (RNs)	182,490	178,320	178,550	188,300	190,470	7,980	4.4%
Respiratory Therapists	5,740	5,860	6,040	6,590	6,530	790	13.8%
Speech-Language Pathologists	12,750	13,130	12,950	13,150	13,760	1,010	7.9%
Surgical Technologists	5,750	5,620	5,510	5,720	5,700	-50	-0.9%

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

Table 16. The Median Salaries for Selected Health Care Occupations in New York State, 2018–2022

Occupational Title	Median Salary					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Dollars	Percent
Audiologists	\$79,630	\$80,780	\$81,060	\$92,890	\$81,182	\$1,552	2.0%
Cardiovascular Technologists and Technicians	\$63,180	\$63,600	\$65,810	\$63,930	\$74,923	\$11,743	18.6%
Clinical Laboratory Technologists & Technicians	\$63,810	\$66,230	\$69,380	\$76,190	\$82,700	\$18,890	29.6%
Dental Assistants	\$38,170	\$39,510	\$42,510	\$47,250	\$48,327	\$10,157	26.6%
Dental Hygienists	\$77,210	\$77,790	\$76,950	\$78,470	\$92,451	\$15,241	19.7%
Diagnostic Medical Sonographers	\$74,830	\$77,380	\$80,260	\$79,810	\$89,277	\$14,447	19.3%
Dietetic Technicians	\$41,880	\$41,220	\$40,710	\$45,570	\$49,497	\$7,617	18.2%
Dietitians and Nutritionists	\$66,670	\$67,740	\$70,140	\$75,000	\$79,590	\$12,920	19.4%
Emergency Medical Technicians ^a	\$41,140	\$41,630	\$44,210	\$36,930	\$41,374	\$234	0.6%
Healthcare Social Workers	\$60,910	\$59,000	\$58,050	\$58,240	\$57,023	(\$3,887)	-6.4%
Home Health Aides ^b	\$24,920	\$27,910	\$30,920	\$30,300	\$35,191	\$10,271	41.2%
Licensed Practical and Licensed Vocational	\$48,620	\$49,800	\$51,110	\$50,410	\$59,889	\$11,269	23.2%
Magnetic Resonance Imaging Technologists	\$82,830	\$86,130	\$90,500	\$84,890	\$102,583	\$19,753	23.9%
Medical Assistants	\$36,640	\$37,450	\$38,660	\$37,860	\$45,816	\$9,176	25.0%
Medical Secretaries & Administrative Assistants	\$39,220	\$39,530	\$40,680	\$44,150	\$46,732	\$7,512	19.2%
Medical Transcriptionists	\$40,140	\$30,840	\$31,510	\$30,640	\$36,793	(\$3,347)	-8.3%
Medical and Health Services Managers	\$123,100	\$126,780	\$134,310	\$131,410	\$140,752	\$17,652	14.3%
Mental Health and Substance Abuse Social	\$59,250	\$60,730	\$61,660	\$75,230	\$78,043	\$18,793	31.7%
Nuclear Medicine Technologists	\$86,990	\$87,680	\$91,400	\$98,680	\$103,820	\$16,830	19.4%
Nurse Anesthetists	\$177,100	\$185,580	\$200,090	N/A	\$235,040	\$57,940	32.7%
Nurse Midwives	\$111,940	\$116,040	\$119,250	\$127,110	\$132,256	\$20,316	18.2%
Nurse Practitioners	\$118,550	\$119,490	\$124,020	\$128,220	N/A	N/A	N/A
Nursing Assistants	\$36,610	\$38,580	\$40,760	\$38,130	\$46,073	\$9,463	25.9%
Occupational Therapists	\$83,530	\$81,720	\$84,760	\$92,420	\$89,698	\$6,168	7.4%
Occupational Therapy Aides	\$40,740	\$41,040	\$58,260	\$59,050	\$53,785	\$13,045	32.0%
Occupational Therapy Assistants	\$60,050	\$64,370	\$62,490	\$61,600	\$68,345	\$8,295	13.8%
Orderlies	\$35,500	\$37,970	\$41,190	\$38,690	\$47,343	\$11,843	33.4%
Paramedics ^a	\$41,140	\$41,630	\$44,210	\$57,060	\$62,874	\$21,734	52.8%
Personal Care Aides ^b	\$25,990	\$27,910	\$30,920	\$30,300	\$35,191	\$9,201	35.5%
Pharmacists	\$124,220	\$124,630	\$124,320	\$128,920	\$137,685	\$13,465	10.8%
Pharmacy Aides	\$27,810	\$27,960	\$30,940	\$29,910	\$34,167	\$6,357	22.9%
Pharmacy Technicians	\$32,580	\$33,550	\$35,050	\$36,790	\$38,326	\$5,746	17.6%
Phlebotomists	\$39,930	\$41,860	\$43,370	\$46,380	\$47,488	\$7,558	18.9%
Physical Therapy Aides	\$28,080	\$30,140	\$31,740	\$29,990	\$35,613	\$7,533	26.8%
Physical Therapy Assistants	\$54,100	\$55,980	\$56,200	\$61,290	\$63,130	\$9,030	16.7%
Physical Therapists	\$85,100	\$89,260	\$91,770	\$95,620	\$100,917	\$15,817	18.6%
Physician Assistants	\$117,060	\$121,690	\$124,690	\$128,940	\$139,528	\$22,468	19.2%
Psychiatric Aides	\$44,720	\$43,980	\$45,760	\$47,560	\$49,085	\$4,365	9.8%
Psychiatric Technicians	\$43,590	\$40,550	\$43,300	\$46,470	\$51,105	\$7,515	17.2%
Radiation Therapists	\$97,200	\$105,090	\$104,970	\$107,420	\$113,794	\$16,594	17.1%
Radiologic Technologists and Technicians	\$68,560	\$70,480	\$73,550	\$76,920	\$83,351	\$14,791	21.6%
Recreational Therapists	\$53,970	\$55,080	\$56,490	\$59,770	\$63,832	\$9,862	18.3%
Registered Nurses	\$85,300	\$87,330	\$89,840	\$96,170	\$104,230	\$18,930	22.2%
Respiratory Therapists	\$75,030	\$77,460	\$80,400	\$78,610	\$93,938	\$18,908	25.2%
Speech-Language Pathologists	\$82,170	\$88,910	\$89,850	\$98,990	\$104,606	\$22,436	27.3%
Surgical Technologists	\$53,410	\$55,560	\$58,080	\$59,760	\$66,230	\$12,820	24.0%

^a Emergency medical technicians and paramedics were reported as one occupational category through 2020.

^b Home health aides and personal care aides were reported as separate occupational categories through 2018.

N/A, not available.

Sources: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics.

Table 17. The Salary Range for Selected Health Care Occupations in New York State, 2023

Occupational Title	Salary Level		
	Entry	Median	Experienced
Audiologists	\$60,535	\$81,182	\$100,212
Cardiovascular Technologists and Technicians	\$48,973	\$74,923	\$91,760
Clinical Laboratory Technologists and Technicians	\$49,695	\$82,700	\$93,705
Dental Assistants	\$37,914	\$48,372	\$56,116
Dental Hygienists	\$69,344	\$92,451	\$97,508
Diagnostic Medical Sonographers	\$74,705	\$89,277	\$101,809
Dietetic Technicians	\$36,646	\$49,497	\$55,826
Dietitians and Nutritionists	\$57,215	\$79,590	\$95,873
Emergency Medical Technicians	\$36,009	\$41,374	\$53,674
Healthcare Social Workers	\$41,980	\$57,023	\$73,148
Home Health and Personal Care Aides	\$33,696	\$35,191	\$39,833
Licensed Practical and Licensed Vocational Nurses	\$48,010	\$59,889	\$65,656
Magnetic Resonance Imaging Technologists	\$78,659	\$102,583	\$107,202
Medical Assistants	\$37,384	\$45,816	\$50,326
Medical Secretaries and Administrative Assistants	\$35,914	\$46,732	\$51,229
Medical Transcriptionists	\$32,466	\$36,793	\$43,452
Medical and Health Services Managers	\$93,508	\$140,752	\$215,783
Mental Health and Substance Abuse Social Workers	\$52,303	\$78,043	\$97,988
Nuclear Medicine Technologists	\$82,328	\$103,820	\$111,588
Nurse Anesthetists	\$194,571	\$235,040	N/A
Nurse Midwives	\$108,136	\$132,256	\$147,824
Nurse Practitioners	N/A	N/A	N/A
Nursing Assistants	\$36,193	\$46,073	\$50,027
Occupational Therapists	\$67,213	\$89,689	\$114,809
Occupational Therapy Aides	\$41,379	\$53,785	\$77,338
Occupational Therapy Assistants	\$50,013	\$68,345	\$78,802
Orderlies	\$36,465	\$47,343	\$49,402
Paramedics	\$49,341	\$62,874	\$71,174
Pharmacists	\$104,658	\$137,685	\$151,254
Pharmacy Aides	\$31,583	\$34,167	\$41,111
Pharmacy Technicians	\$34,157	\$38,326	\$46,564
Phlebotomists	\$37,241	\$47,488	\$55,001
Physical Therapy Aides	\$31,969	\$35,613	\$39,452
Physical Therapy Assistants	\$50,443	\$63,130	\$72,913
Physical Therapists	\$75,584	\$100,917	\$123,555
Physician Assistants	\$110,141	\$139,528	\$156,172
Psychiatric Aides	\$39,696	\$49,085	\$54,366
Psychiatric Technicians	\$39,118	\$51,105	\$57,640
Radiation Therapists	\$87,238	\$113,794	\$164,824
Radiologic Technologists and Technicians	\$64,026	\$83,351	\$94,465
Recreational Therapists	\$47,457	\$63,832	\$74,733
Registered Nurses	\$73,799	\$104,230	\$119,064
Respiratory Therapists	\$73,583	\$93,938	\$105,587
Speech-Language Pathologists	\$67,377	\$104,606	\$128,675
Surgical Technologists	\$49,733	\$66,230	\$75,820

N/A, not available.

Source: U.S. Bureau of Labor Statistics, Occupational Employment and Wage Statistics, May 2022 Data.

2. Employer Demand Surveys

A. Hospitals

Table 18. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at New York State Hospitals

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	55.9%	83.3%
Clinical Laboratory Technicians	80.5%	73.9%
Clinical Laboratory Technologists	93.5%	83.3%
Environmental (janitorial, housekeeping) Service Aides	41.8%	61.6%
Food Services/Dietary	84.7%	80.3%
Licensed Mental Health Counselors	80.7%	85.7%
Licensed Practical Nurses	72.6%	87.5%
Management/Executive Staff	85.7%	75.7%
Nurse Practitioners (Behavioral Health)	90.5%	88.3%
Nurse Practitioners (All other)	64.0%	82.3%
Pharmacists	67.0%	44.7%
Physician Assistants	77.9%	66.7%
Psychiatrists	95.5%	89.7%
Respiratory Therapists	92.5%	83.8%
Registered Nurses	90.3%	97.5%
Licensed Clinical Social Workers	92.1%	88.9%
Licensed Master's Social Workers	55.9%	83.3%
Surgical Technicians	80.5%	73.9%

Table 19. Reasons for Recruitment Difficulties at New York State Hospitals

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/ Patient Care Techs	32.7%	69.2%	15.4%	0.0%	42.3%
Clinical Laboratory Technicians	32.9%	81.4%	1.4%	1.4%	50.0%
Clinical Laboratory Technologists	29.1%	84.9%	2.3%	14.0%	55.8%
Dietitians/Nutritionists	7.9%	50.0%	2.6%	0.0%	42.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	76.4%	4.2%	1.4%	19.4%
Licensed Master's Social Workers (LMSWs)	29.9%	50.8%	1.5%	0.0%	55.2%
Licensed Mental Health Counselors (LMHCs)	0.0%	24.4%	2.2%	0.0%	22.2%
Licensed Practical Nurses (LPNs)	5.1%	52.6%	3.9%	1.3%	55.1%
Nurse Practitioners (Behavioral Health)	0.0%	77.6%	0.0%	14.9%	17.9%
Nurse Practitioners (All other)	0.0%	67.3%	3.6%	1.8%	23.6%
Pharmacists	1.6%	36.1%	3.3%	1.6%	29.5%
Physician Assistants	0.0%	70.2%	4.5%	1.5%	20.9%
Psychiatrists	1.6%	75.0%	1.6%	0.0%	15.6%
Respiratory Therapists	29.1%	70.9%	31.4%	17.4%	64.0%
Registered Nurses (RNs)	33.3%	59.5%	7.1%	4.8%	25.0%
Surgical Technicians	6.2%	60.5%	6.2%	14.8%	54.3%

Table 20. Reasons for Retention Difficulties at New York State Hospitals

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	58.5%	27.7%	86.2%	9.2%
Clinical Laboratory Technicians	5.9%	35.3%	97.1%	5.9%
Clinical Laboratory Technologists	35.0%	21.7%	95.0%	26.7%
Dietitians/Nutritionists	44.4%	31.1%	88.9%	2.2%
Licensed Clinical Social Workers (LCSWs)	37.7%	26.4%	92.5%	0.0%
Licensed Master's Social Workers (LMSWs)	38.9%	25.9%	92.6%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	46.4%	53.6%	0.0%
Licensed Practical Nurses (LPNs)	46.4%	37.5%	91.1%	8.9%
Nurse Practitioners (Behavioral Health)	0.0%	22.6%	73.6%	3.8%
Nurse Practitioners (All other)	2.0%	27.5%	94.1%	5.9%
Pharmacists	0.0%	57.1%	85.7%	14.3%
Physician Assistants	2.4%	31.0%	92.9%	4.8%
Psychiatrists	0.0%	19.2%	90.4%	5.8%
Respiratory Therapists	0.0%	24.2%	96.8%	40.3%
Registered Nurses (RNs)	38.5%	33.3%	79.5%	46.2%
Surgical Technicians	32.8%	21.9%	96.9%	4.7%

Hospitals reported that the most effective strategies for addressing recruitment and retention issues of their workforce included:

- Providing financial assistance for childcare services or onsite childcare
- Increased hourly pay
- Increased pay for extra shifts or longer/irregular hours
- Retention bonuses

B. Nursing Homes and Adult Care Facilities

Table 21. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at New York State Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	94.0%	87.9%
CNA Trainees/Temporary Nurse Aides	68.9%	85.0%
Dietitians/Nutritionists	65.6%	21.3%
Home Health Aides	93.5%	84.6%
Infection Preventionist Practitioners	69.6%	27.9%
Licensed Clinical Social Workers (LCSWs)	45.0%	28.8%
Licensed Master Social Workers (LMSWs)	70.2%	30.5%
Licensed Practical Nurse (LPNs)	94.9%	78.9%
MDS Coordinators	67.7%	26.3%
Nurse Directors/Managers	87.8%	46.2%
Nurse Educators	66.7%	36.0%
Occupational Therapists	70.5%	25.9%
Occupational Therapy Assistants	67.2%	26.9%
Paid Feeding Assistants	38.5%	33.3%
Personal Care Aides	94.6%	84.4%
Physical Therapists	73.8%	30.2%
Physical Therapy Assistants	66.1%	24.5%
Registered Nurses (RNs) Newly Licensed	92.2%	78.4%
Registered Nurses (RNs) Experienced	96.8%	76.0%
Residential Care Aide (ACF/ALR)	82.9%	85.4%
Respiratory Therapists	82.4%	62.1%
Speech-Language Pathologists	70.6%	37.5%

Table 22. Reasons for Recruitment Difficulties at New York State Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	65.1%	92.1%	4.8%	31.8%
CNA Trainees/Temporary Nurse Aides	71.0%	93.6%	3.2%	25.8%
Dietitians/Nutritionists	14.3%	85.7%	2.4%	26.2%
Home Health Aides	81.4%	100.0%	2.3%	16.3%
Infection Preventionist Practitioners	28.1%	81.3%	6.3%	6.3%
Licensed Clinical Social Workers (LCSWs)	14.8%	74.1%	0.0%	14.8%
Licensed Master Social Workers (LMSWs)	18.2%	75.8%	3.0%	18.2%
Licensed Practical Nurse (LPNs)	50.5%	93.6%	4.3%	47.3%
MDS Coordinators	19.1%	92.9%	2.4%	14.3%
Nurse Directors/Managers	26.2%	87.7%	6.2%	16.9%
Nurse Educators	23.5%	91.2%	0.0%	11.8%
Occupational Therapists	9.3%	76.7%	0.0%	23.3%
Occupational Therapy Assistants	12.8%	74.4%	0.0%	5.1%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	77.1%	77.1%	2.9%	5.7%
Physical Therapists	8.9%	77.8%	0.0%	20.0%
Physical Therapy Assistants	13.5%	73.0%	0.0%	5.4%
Registered Nurses (RNs) Newly Licensed	29.8%	93.6%	6.4%	25.5%
Registered Nurses (RNs) Experienced	42.9%	92.3%	5.5%	19.8%
Residential Care Aide (ACF/ALR)	91.2%	88.2%	2.9%	14.7%
Respiratory Therapists	7.1%	92.9%	0.0%	21.4%
Speech-Language Pathologists	13.9%	80.6%	0.0%	16.7%

Table 23. Reasons for Recruitment Difficulties at New York State Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	39.7%	42.9%	38.1%	55.6%
CNA Trainees/ Temporary Nurse Aides	54.8%	35.5%	48.4%	38.7%
Dietitians/Nutritionists	0.0%	2.4%	26.2%	4.8%
Home Health Aides	18.6%	25.6%	14.0%	20.9%
Infection Preventionist Practitioners	0.0%	0.0%	3.1%	3.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	7.4%	14.8%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	6.1%	9.1%	3.0%
Licensed Practical Nurse (LPNs)	6.5%	18.3%	30.1%	19.4%
MDS Coordinators	0.0%	4.8%	16.7%	2.4%
Nurse Directors/Managers	0.0%	10.8%	13.9%	7.7%
Nurse Educators	0.0%	8.8%	5.9%	5.9%
Occupational Therapists	2.3%	11.6%	20.9%	2.3%
Occupational Therapy Assistants	2.6%	12.8%	25.6%	5.1%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	5.7%	8.6%	11.4%	8.6%
Physical Therapists	0.0%	4.4%	20.0%	4.4%
Physical Therapy Assistants	2.7%	5.4%	27.0%	5.4%
Registered Nurses (RNs) Newly Licensed	0.0%	12.8%	27.7%	21.3%
Registered Nurses (RNs) Experienced	0.0%	9.9%	17.6%	13.2%
Residential Care Aide (ACF/ALR)	8.8%	17.7%	32.4%	14.7%
Respiratory Therapists	0.0%	7.1%	28.6%	3.6%
Speech-Language Pathologists	0.0%	2.8%	19.4%	8.3%

Table 24. Reasons for Retention Difficulties at New York State Nursing Homes and Assisted Living

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	32.8%	19.0%	77.6%	22.4%
CNA Trainees/ Temporary Nurse Aides	41.2%	8.8%	82.4%	0.0%
Dietitians/Nutritionists	5.9%	0.0%	70.6%	0.0%
Home Health Aides	9.1%	15.2%	93.9%	3.0%
Infection Preventionist Practitioners	0.0%	8.3%	25.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	5.9%	0.0%	35.3%	0.0%
Licensed Master Social Workers (LMSWs)	5.6%	0.0%	38.9%	0.0%
Licensed Practical Nurse (LPNs)	21.1%	40.9%	87.3%	11.3%
MDS Coordinators	13.3%	0.0%	46.7%	0.0%
Nurse Directors/Managers	20.0%	23.3%	60.0%	13.3%
Nurse Educators	16.7%	11.1%	44.4%	5.6%
Occupational Therapists	0.0%	7.1%	57.1%	7.1%
Occupational Therapy Assistants	0.0%	7.1%	57.1%	0.0%
Paid Feeding Assistants	100.0%	0.0%	100.0%	0.0%
Personal Care Aides	7.4%	3.7%	85.2%	0.0%
Physical Therapists	12.5%	6.3%	62.5%	6.3%
Physical Therapy Assistants	8.3%	8.3%	75.0%	16.7%
Registered Nurses (RNs) Newly Licensed	2.5%	17.5%	62.5%	0.0%
Registered Nurses (RNs) Experienced	8.2%	12.3%	67.1%	15.1%
Residential Care Aide (ACF/ALR)	11.4%	14.3%	85.7%	5.7%
Respiratory Therapists	0.0%	11.1%	66.7%	5.6%
Speech-Language Pathologists	13.3%	0.0%	46.7%	0.0%

Table 25. Reasons for Retention Difficulties at New York State Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	17.2%	31.0%	17.2%	32.8%
CNA Trainees/ Temporary Nurse Aides	8.8%	17.7%	14.7%	26.5%
Dietitians/Nutritionists	5.9%	5.9%	0.0%	5.9%
Home Health Aides	15.2%	12.1%	9.1%	24.2%
Infection Preventionist Practitioners	0.0%	0.0%	8.3%	0.0%
Licensed Clinical Social Workers (LCSWs)	11.8%	11.8%	5.9%	0.0%
Licensed Master Social Workers (LMSWs)	11.1%	5.6%	5.6%	0.0%
Licensed Practical Nurse (LPNs)	14.1%	19.7%	14.1%	11.3%
MDS Coordinators	0.0%	6.7%	6.7%	0.0%
Nurse Directors/Managers	16.7%	6.7%	26.7%	6.7%
Nurse Educators	11.1%	5.6%	27.8%	5.6%
Occupational Therapists	7.1%	7.1%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	7.1%	0.0%	0.0%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	7.4%	7.4%	3.7%	11.1%
Physical Therapists	12.5%	6.3%	0.0%	0.0%
Physical Therapy Assistants	16.7%	8.3%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	10.0%	10.0%	25.0%	0.0%
Registered Nurses (RNs) Experienced	8.2%	9.6%	43.8%	1.4%
Residential Care Aide (ACF/ALR)	8.6%	14.3%	8.6%	20.0%
Respiratory Therapists	5.6%	0.0%	0.0%	0.0%
Speech-Language Pathologists	20.0%	6.7%	0.0%	0.0%

Nursing homes and adult care facilities indicated that the most effective strategies for addressing recruitment and retention issues of their workforce included:

- Increased hourly pay
- Increased pay for extra shifts or longer/irregular hours
- Career advancement opportunities (e.g., home health aide to LPN or LPN to RN)
- Paid sick leave

C. Home Health Care

Table 26. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at New York State Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	19.2%	7.7%
Home Health Aides	66.7%	42.6%
Homemakers	48.7%	33.3%
Intake Coordinator /Schedulers	23.2%	9.6%
Licensed Clinical Social Workers (LCSWs)	28.1%	12.9%
Licensed Master Social Workers (LMSWs)	35.7%	10.7%
Licensed Practical Nurse (LPNs)	66.7%	22.5%
Occupational Therapists	48.4%	13.8%
Occupational Therapy Assistants	14.3%	16.7%
Personal Care Aides	64.7%	42.0%
Physical Therapists	48.6%	12.5%
Physical Therapy Assistants	29.4%	6.7%
Registered Nurses (RNs)	74.1%	30.6%
Respiratory Therapists	50.0%	0.0%
Speech-Language Pathologists	60.7%	24.0%

Table 27. Reasons for Recruitment Difficulties at New York State Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	14.1%	9.0%	0.0%	0.0%
Home Health Aides	55.6%	21.3%	7.4%	25.9%
Homemakers	33.3%	17.9%	5.1%	17.9%
Intake Coordinator	14.2%	10.2%	0.9%	0.9%
Licensed Clinical Social Workers (LCSWs)	25.0%	6.3%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	32.1%	10.7%	0.0%	3.6%
Licensed Practical Nurse (LPNs)	58.3%	8.3%	0.0%	4.2%
Occupational Therapists	48.4%	3.2%	0.0%	0.0%
Occupational Therapy Assistants	14.3%	0.0%	0.0%	0.0%
Personal Care Aides	52.0%	24.5%	8.8%	28.4%
Physical Therapists	42.9%	2.9%	0.0%	0.0%
Physical Therapy Assistants	23.5%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	67.2%	12.1%	0.0%	5.2%
Respiratory Therapists	50.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	60.7%	3.6%	0.0%	0.0%

Table 28. Reasons for Recruitment Difficulties at New York State Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	3.8%	11.5%	2.6%
Home Health Aides	29.6%	40.7%	20.4%
Homemakers	20.5%	25.6%	12.8%
Intake Coordinator	3.7%	13.0%	5.6%
Licensed Clinical Social Workers (LCSWs)	0.0%	25.0%	9.4%
Licensed Master Social Workers (LMSWs)	0.0%	21.4%	17.9%
Licensed Practical Nurse (LPNs)	12.5%	43.8%	25.0%
Occupational Therapists	9.7%	19.4%	9.7%
Occupational Therapy Assistants	0.0%	14.3%	14.3%
Personal Care Aides	34.3%	44.1%	20.6%
Physical Therapists	8.6%	20.0%	8.6%
Physical Therapy Assistants	0.0%	11.8%	5.9%
Registered Nurses (RNs)	17.2%	55.2%	25.0%
Respiratory Therapists	50.0%	0.0%	0.0%
Speech-Language Pathologists	14.3%	28.6%	7.1%

Table 29. Reasons for Retention Difficulties at New York State Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	83.3%	50.0%	66.7%	16.7%	33.3%
Home Health Aides	81.4%	69.8%	34.9%	18.6%	53.5%
Homemakers	83.3%	58.3%	33.3%	25.0%	58.3%
Intake Coordinator	60.0%	40.0%	50.0%	10.0%	30.0%
Licensed Clinical Social Workers (LCSWs)	75.0%	25.0%	25.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	66.7%	33.3%	33.3%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	81.8%	45.5%	45.5%	18.2%	0.0%
Occupational Therapists	75.0%	25.0%	75.0%	0.0%	25.0%
Occupational Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Personal Care Aides	83.3%	71.4%	33.3%	16.7%	64.3%
Physical Therapists	75.0%	50.0%	75.0%	0.0%	25.0%
Physical Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Registered Nurses (RNs)	78.8%	54.6%	66.7%	18.2%	6.1%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	50.0%	33.3%	66.7%	0.0%	16.7%

Table 30. Reasons for Retention Difficulties at New York State Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	16.7%	33.3%	16.7%	16.7%	0.0%
Home Health Aides	62.8%	41.9%	51.2%	62.8%	41.9%
Homemakers	58.3%	41.7%	58.3%	66.7%	33.3%
Intake Coordinator	60.0%	20.0%	10.0%	10.0%	40.0%
Licensed Clinical Social Workers (LCSWs)	25.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	33.3%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	36.4%	27.3%	18.2%	0.0%	0.0%
Occupational Therapists	75.0%	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	59.5%	45.2%	47.6%	59.5%	54.8%
Physical Therapists	75.0%	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	36.4%	21.2%	9.1%	3.0%	15.2%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	50.0%	0.0%	33.3%	0.0%	16.7%

Home health care agencies reported that the most effective strategies for addressing recruitment and retention issues of their workforce included:

- Sign-on bonuses
- Increased hourly pay
- Paid sick leave
- Increased pay for extra shifts or longer/irregular hours

D. Federally Qualified Health Centers

On November 19, 2023, the Center for Health Workforce Studies staff held a focus group with the CHCANYS Workforce Committee to discuss recruitment and retention issues within federally qualified health centers (FQHCS). Participants indicated that the occupations were the most difficult to recruit and retain included:

- RNs, LPNs, and medical assistants
- Experienced RNs as managers
- Dentists (especially rural areas), dental hygienists, and dental assistants
- Behavioral health occupations
- Physicians

Participants also indicated that they needed employees that were bi-lingual and that FQHCs needed a more diverse workforce. Reasons cited for recruitment and retention difficulties included:

- 1 year residency requirement for dentists
- Competition for workers within and outside of health care
- Congestion pricing (commuting into NYC)
- Decline in RN graduations
- Ghosting
- Not wanting to work in rural areas
- Quality of candidates
- Salary expectations
- Schedule flexibility
- Violence on public transportation
- Work-life balance/no weekends

The participants identified potential solutions, which included:

- Expand J-1 Visa waivers to behavioral health professionals
- Increased availability to childcare services
- Increased salaries
- Increased use of J-1 Visa waivers for physicians
- Increased use of NHSC/Nurse Corps
- Recruitment/sign-on bonuses
- Tax incentives for health care workers who travel

Participants also noted that while recruitment and sign-on bonuses assisted in recruiting employees, many left after collecting their bonus payments.

3. Health Care Workforce Production and Projected Need

A. Licenses

Table 31. The Number of Licensed Individuals in Selected Health Care Professions in New York State, 2019-2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	1,816	1,867	1,894	1,891	1,944	128	7.0%
Clinical Laboratory Technologists	13,409	13,699	13,564	13,564	13,843	434	3.2%
Dental Assistants	1,470	1,556	1,573	1,578	1,533	63	4.3%
Dental Hygienists	11,741	11,967	12,036	12,204	12,148	407	3.5%
Dietitians/Nutritionists	6,044	6,189	6,486	6,463	6,689	645	10.7%
Licensed Practical Nurses (LPNs)	67,717	69,050	68,322	67,825	67,506	-211	-0.3%
Nurse Practitioners ^a	26,952	29,843	32,750	34,659	39,767	12,815	47.5%
Occupational Therapists	14,433	15,363	15,942	16,409	17,147	2,714	18.8%
Occupational Therapy Assistants	4,513	4,786	4,818	4,849	4,706	193	4.3%
Pharmacists	27,473	28,099	28,971	29,564	29,746	2,273	8.3%
Physical Therapists	23,876	24,922	25,838	26,490	27,208	3,332	14.0%
Physical Therapist Assistants	6,636	6,880	6,992	7,052	6,909	273	4.1%
Physician Assistants	16,721	18,256	19,449	20,340	21,906	5,185	31.0%
Registered Nurses (RNs)	309,241	328,204	345,212	355,195	393,924	84,683	27.4%
Respiratory Therapists	6,560	6,956	7,041	7,212	7,606	1,046	15.9%
Social Workers ^b	56,947	59,149	61,722	63,555	67,121	10,174	17.9%
Speech-Language Pathologists	19,406	20,282	20,865	21,291	22,207	2,801	14.4%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

B. Graduations

Table 32. The Number of Graduations for Selected Health Care Occupations in New York State, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	2,065	1,974	2,115	2,138	2,201	136	6.6%
Cardiovascular Technologists and Technicians	13	14	10	8	13	0	0.0%
Clinical Laboratory Technicians	127	102	106	82	143	16	12.6%
Clinical Laboratory Technologists	312	302	321	301	323	11	3.5%
Clinical Nutritionists	194	185	185	162	163	-31	-16.0%
Creative Arts Therapists ^b	232	242	220	211	208	-24	-10.3%
Dental Assistants	393	371	335	290	414	21	5.3%
Dental Hygienists	487	405	442	435	428	-59	-12.1%
Dietitians	418	420	406	402	374	-44	-10.5%
Electrocardiograph Technologists and Technicians	164	132	151	83	25	-139	-84.8%
EMTs and Paramedics	249	335	223	208	212	-37	-14.9%
Health Care Administrators	1,815	2,009	1,941	2,012	2,241	426	23.5%
License Practical Nurses (LPNs)	2,351	2,383	2,442	2,586	2,325	-26	-1.1%
Marriage and Family Therapists	122	118	102	114	102	-20	-16.4%
Medical Assistants	3,842	3,339	3,028	2,380	2,840	-1,002	-26.1%
Mental Health Counselors	844	925	997	1,024	892	48	5.7%
Nuclear Medical Technologists	21	30	23	30	28	7	33.3%
Nurse Anesthetist	51	50	33	40	40	-11	-21.6%
Nurse Midwives	30	38	32	26	26	-4	-13.3%
Nursing and Patient Care Aides and Assistants	471	422	474	470	668	197	41.8%
Occupational Therapists	1,005	1,071	1,106	1,080	1,095	90	9.0%
Occupational Therapy Assistants	316	259	327	112	286	-30	-9.5%
Opticians, Dispensing	52	51	80	52	31	-21	-40.4%
Optometrists	89	90	96	99	90	1	1.1%
Pharmacists	1,044	1,000	1,012	980	945	-99	-9.5%
Pharmacy Technicians/Assistants	217	186	179	60	115	-102	-47.0%
Phlebotomists	448	402	431	226	166	-282	-62.9%
Physical Therapists	1,407	1,446	1,373	1,171	1,350	-57	-4.1%
Physical Therapy Assistants	283	261	264	169	303	20	7.1%
Physician Assistants	1,222	1,281	1,299	1,260	1,474	252	20.6%
Radiation Therapists and Technologists	661	693	676	701	752	91	13.8%
Recreational Therapists	143	158	164	141	112	-31	-21.7%
Registered Nurses (RNs) ^c	9,053	9,540	10,261	10,430	10,585	1,532	16.9%
Registered Nurses with Advanced Education ^d	1,453	1,653	1,670	2,040	2,007	554	38.1%
Respiratory Therapists	166	151	173	194	187	21	12.7%
Respiratory Therapy Assistants	67	69	69	40	46	-21	-31.3%
Social Workers ^e	5,066	5,353	5,375	5,819	5,760	694	13.7%
Substance Abuse/Addiction Counseling	261	289	227	270	287	26	10.0%
Surgical Technology/Technologist	318	278	293	216	238	-80	-25.2%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

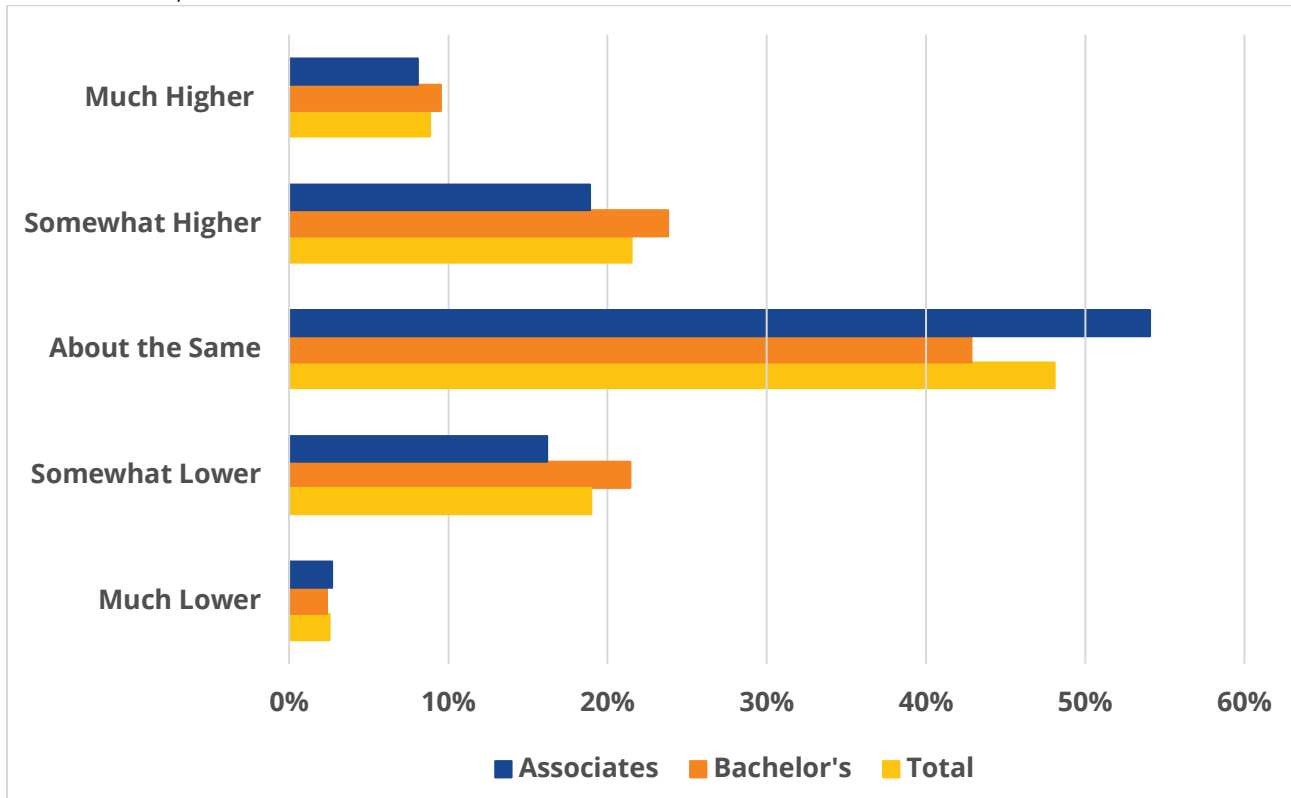
^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

C. Registered Nurse Education Trends in New York State

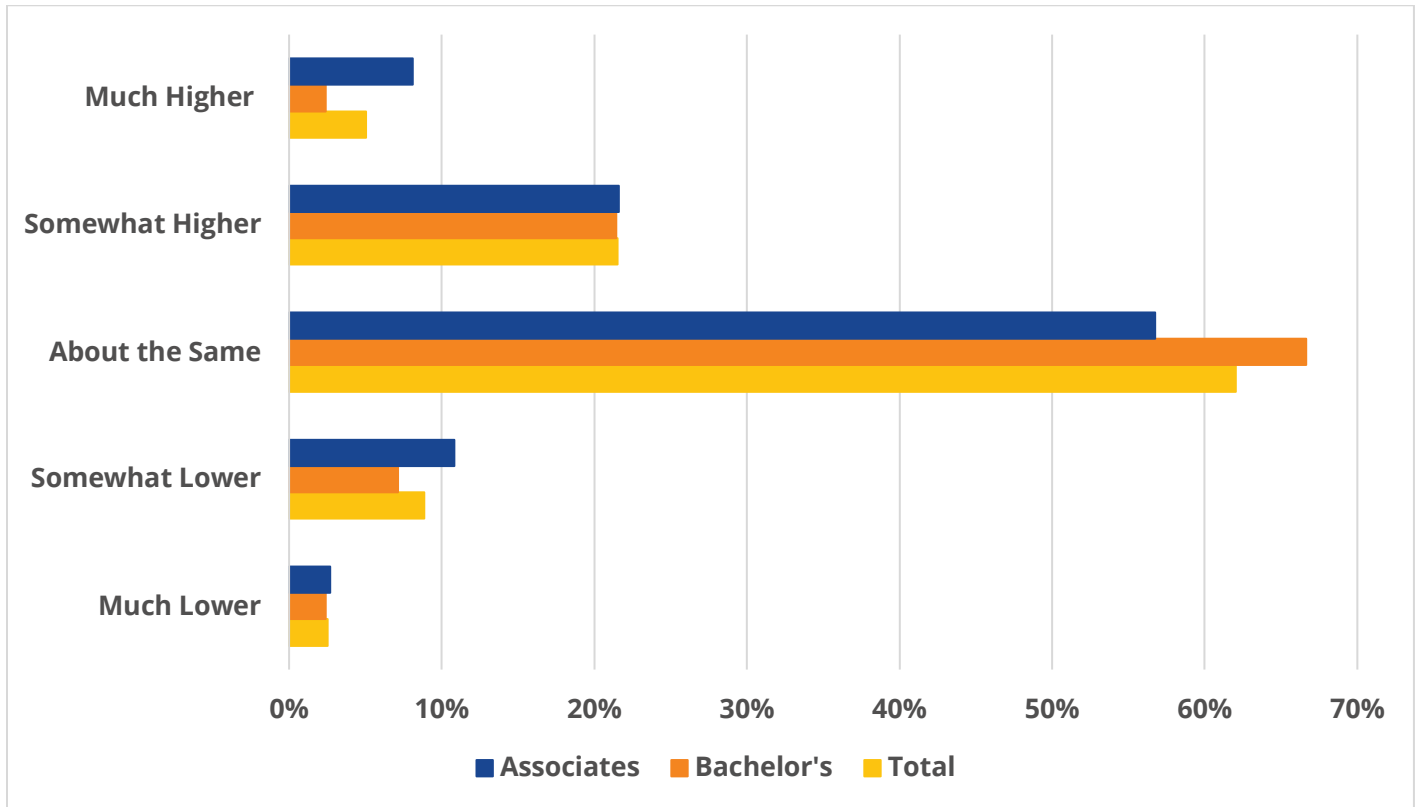
Every year, CHWS surveys the state’s RN education program deans and directors to monitor the production of RNs in the state. The most recent survey was conducted in the fall of 2023 and included questions about applications and acceptances to the nursing program as well as perspectives on the local job market for RN graduates. The 2023 survey also included questions on faculty, including questions on retention and strategies for addressing recruitment and retention faculty issues. Of the programs eligible to participate in the survey, we received 84 responses for a 61% response rate.

Figure 7. Change in Applications Among RN Education Programs^a by Degree Type Compared to the Previous Year, 2022-2023.



^a Includes associate degree and pre-licensure bachelor's degree programs.

Figure 8. Change in Acceptances Among RN Education Programs^a by Degree Type Compared to the Previous Year, 2022-2023



^a Includes associate degree and pre-licensure bachelor's degree programs.

Table 33. Reasons for Turning Qualified Applicants Among RN Education Programs ^{a, b} by Degree Type, 2023

Degree Type	Budget Constraints	Insufficient Classroom Space	Insufficient Number of Clinical Training Sites	Insufficient Number of Qualified Faculty	Program Cap on the Number of Students
Associates	15.4%	0.0%	30.0%	69.2%	53.8%
Bachelor's	40.0%	45.0%	75.0%	75.0%	55.0%
Total	30.3%	27.3%	57.6%	72.7%	54.5%

^a Includes associate degree and pre-licensure bachelor's degree programs.

^b For those RN education programs that indicated they turned away qualified applicants.

Table 34. Perception of Regional Job Market, 2023^a

Degree Type	Overall	Hospitals	Nursing Homes	Home Health Care	Ambulatory Care
Associates	94.1%	94.3%	94.1%	90.9%	82.3%
Bachelor's	90.0%	85.3%	82.9%	70.7%	48.8%

^a The Percent of respondents who indicated many jobs on the survey compared to the total number of survey respondents.

D. Employment Projections

Table 35. Employment Projections for Selected Health Care Occupations for New York State, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Audiologists	840	1,090	250	29.8%	65
Cardiovascular Technologists and Technicians	3,760	4,340	580	15.4%	343
Clinical Laboratory Technologists and Technicians	19,980	23,350	3,370	16.9%	1,699
Dental Assistants	17,710	21,120	3,410	19.3%	2,588
Dental Hygienists	11,500	13,630	2,130	18.5%	979
Diagnostic Medical Sonographers	6,620	8,560	1,940	29.3%	727
Dietetic Technicians	1,140	1,350	210	18.4%	108
Dietitians and Nutritionists	5,050	6,100	1,050	20.8%	480
Emergency Medical Technicians & Paramedics	21,130	25,510	4,380	20.7%	1,951
Healthcare Social Workers	20,020	25,360	5,340	26.7%	2,604
Home Health and Personal Care Aides	510,870	710,570	199,700	39.1%	93,648
Licensed Practical and Licensed Vocational Nurses	48,730	57,740	9,010	18.5%	4,918
Magnetic Resonance Imaging Technologists	2,390	2,770	380	15.9%	220
Medical and Health Services Managers	27,630	39,270	11,640	42.1%	3,699
Medical Assistants	28,160	35,820	7,660	27.2%	4,469
Medical Secretaries and Administrative Assistants	10,760	12,680	1,920	17.8%	1,442
Medical Transcriptionists	2,810	2,880	70	2.5%	401
Mental Health & Substance Abuse Social Workers	12,200	15,390	3,190	26.1%	1,578
Nuclear Medicine Technologists	960	1,110	150	15.6%	87
Nurse Anesthetists	2,360	2,820	460	19.5%	175
Nurse Midwives	510	590	80	15.7%	36
Nurse Practitioners	16,840	26,200	9,360	55.6%	2,060
Nursing Assistants	90,150	105,510	15,360	17.0%	13,338
Occupational Therapists	11,460	14,300	2,840	24.8%	982
Occupational Therapy Assistants and Aides	2,850	4,040	1,190	29.5%	543
Orderlies	3,600	4,130	530	14.7%	520
Pharmacists	20,230	22,280	2,050	10.1%	1,005
Pharmacy Aides	1,950	2,120	170	8.7%	280
Pharmacy Technicians	19,480	24,850	5,370	27.6%	2,094
Phlebotomists	6,430	8,330	1,900	29.5%	1,044
Physical Therapist Assistants and Aides	9,160	12,770	3,610	28.3%	1,659
Physical Therapists	18,510	23,650	5,140	27.8%	1,369
Physician Assistants	15,500	21,630	6,130	39.5%	1,635
Psychiatric Aides	5,880	6,670	790	13.4%	837
Psychiatric Technicians	2,770	3,340	570	20.6%	272
Radiation Therapists	1,470	1,710	240	16.3%	104
Radiologic Technologists and Technicians	13,590	15,820	2,230	16.4%	1,257
Recreational Therapists	1,550	1,820	270	17.4%	153
Registered Nurses (RNs)	197,160	230,580	33,420	17.0%	14,430
Respiratory Therapists	6,710	8,780	2,070	30.8%	568
Speech-Language Pathologists	14,010	19,570	5,560	39.7%	1,549
Surgical Technologists	6,100	7,060	960	15.7%	558

^a Annual openings reflect creation of new positions or replacement for those retiring or otherwise leaving.

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020-2030.

III. Regional Profiles

A. Capital District

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Capital District has a higher percentage of its population 65 years of age or older than the state as a whole.
- The rates of total deaths, deaths due to all cancers, and deaths due to diabetes are all higher in the Capital District than the New York State rates.

Health Care Employment

- Overall, the number of jobs in health care settings in the Capital District declined between 2018 and 2022.
- The number of jobs in home health care increased between 2018 and 2022. In contrast, the number of jobs in hospitals and in nursing homes declined in the Capital District during the same time period.

Employer Demand Surveys

- RNs are among the most difficult to recruit and retain in all health care settings throughout the Capital District.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, LPNs, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Licensed clinical social workers, licensed master social workers, and LPNs are also among the most difficult to recruit and retain in nursing homes and in adult care facilities.
- Home health care agencies also indicated that home health aides, LPNs, and personal care aides are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- There are almost 2,500 projected average annual openings in the Capital District for home health and personal care aides and more than 1,000 projected average annual openings for nursing assistants.

1. Population and Health Care Indicators

Table 36. Selected Population Characteristics for the Capital District, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	1,108,289	N/A	5.5%
Population under 100% FPL	111,776	10.4%	13.6%
Population under 200% FPL	249,247	23.3%	28.3%
Population aged birth to 17 years	208,359	18.8%	20.6%
Population aged 65 and older	210,168	19.0%	17.0%
Population female aged 15 to 44	209,681	18.9%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	300	0.9%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	7,930	7.3%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	3,072	2.9%	3.9%
Black/African American, non-Hispanic	71,667	6.5%	13.8%
Hispanic/Latino	60,183	5.4%	19.5%
Asian/Pacific Islander, non-Hispanic	45,612	4.1%	8.8%
American Indian/Native Alaskan, non-Hispanic	962	0.1%	0.2%
Two or more/other races	44,723	4.0%	3.1%
Population with less than a high school education ^b	60,711	7.7%	12.4%
Population with a high school diploma or equivalent ^b	205,083	26.2%	24.9%
Population with an associate degree ^b	93,536	11.9%	8.8%
Population with a bachelor's degree ^b	162,259	20.7%	21.6%
Population with a master's degree or higher ^b	137,137	17.5%	17.2%
Home ownership ^c	299,412	65.4%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 37. Selected Health Indicators for the Capital District

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	32,246	991.2	516,974	881.7
Deaths due to heart disease, per 100,000	7,620	234.2	135,955	231.9
Deaths due to all cancers, per 100,000	6,816	209.7	101,440	173.1
Deaths due to diabetes, per 100,000	932	28.6	14,414	24.6
Total births, per 1,000 females aged 15 to 44	30,668	50.2	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,044	10.4	19,095	10.9
Low-birthweight births, as a percent of total births	1,811	6.1	40,411	6.4
Late/no prenatal care, as a percent of total births	2,400	8.0	34,266	5.3
Infant deaths, per 1,000 live births	167	5.4	2,764	4.2
Total hospitalizations, per 10,000	343,735	1,056.5	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	1,405	4.3	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	315	3.9	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	351	3.9	11,691	7.6
Pediatric asthma hospitalization, per 10,000	501	8.0	19,462	15.9
Diabetes hospitalizations, per 10,000	5,775	17.8	124,485	21.2
CLRD hospitalizations, per 10,000	7,276	22.4	140,504	24.0
Heart disease hospitalizations, per 10,000	32,341	99.4	585,521	99.9
Total ED visits, per 10,000	1,045,228	3,212.7	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.
Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 38. The Number of Jobs in Health Care in the Capital District, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	25,225	24,537	23,328	21,774	20,986	-4,239	-16.8%
Ambulatory care (excluding home health)	20,226	20,132	19,096	20,514	20,736	510	2.5%
Nursing home and residential care facilities	11,423	11,250	10,323	9,278	8,678	-2,745	-24.0%
Home health care	3,500	3,353	4,265	3,979	3,821	321	9.2%
Total	60,374	59,272	57,012	55,545	54,221	-6,153	-10.2%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 39. The Number of Jobs and Median Salary for Selected Occupations in the Capital District, 2022

Occupational Title	Number of Jobs	Median Salary
Audiologists	50	\$84,461
Cardiovascular Technologists and Technicians	N/A	\$67,576
Clinical Laboratory Technologists and Technicians	920	\$67,364
Dental Assistants	1,070	\$50,680
Dental Hygienists	740	\$83,084
Diagnostic Medical Sonographers	270	\$83,118
Dietitians and Nutritionists	290	\$75,912
Emergency Medical Technicians	830	\$37,549
Healthcare Social Workers	1,310	\$50,229
Home Health & Personal Care Aides	11,900	\$33,696
Licensed Practical and Licensed Vocational Nurses	2,870	\$51,811
Magnetic Resonance Imaging Technologists	N/A	\$84,554
Medical Assistants	1,530	\$39,273
Medical Secretaries and Administrative Assistants	2,320	\$39,796
Medical Transcriptionists	110	\$39,860
Medical and Health Services Managers	1,610	\$107,740
Mental Health and Substance Abuse Social Workers	580	\$66,781
Nuclear Medicine Technologists	50	\$100,041
Nurse Anesthetists	210	\$223,649
Nurse Practitioners	910	\$122,383
Nursing Assistants	4,560	\$37,147
Occupational Therapists	560	\$82,739
Occupational Therapy Assistants	100	\$58,592
Orderlies	100	\$33,248
Paramedics	610	\$51,404
Pharmacists	1,190	\$131,979
Pharmacy Aides	100	\$31,522
Pharmacy Technicians	1,420	\$38,163
Phlebotomists	270	\$39,976
Physical Therapist Aides	130	\$34,513
Physical Therapist Assistants	220	\$55,697
Physical Therapists	870	\$86,664
Physician Assistants	930	\$127,777
Psychiatric Aides	N/A	\$48,405
Radiation Therapists	N/A	\$95,798
Radiologic Technologists and Technicians	680	\$68,648
Registered Nurses	11,420	\$83,410
Respiratory Therapists	340	\$76,793
Speech-Language Pathologists	730	\$86,202
Surgical Technologists	270	\$52,395

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 40. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 41. Reasons for Recruitment Difficulties at Hospitals in Upstate New York Regions
(Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 42. Reasons for Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 43. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	66.7%	83.3%
CNA Trainees/Temporary Nurse Aides	83.3%	66.7%
Dietitians/Nutritionists	60.0%	20.0%
Home Health Aides	50.0%	0.0%
Infection Preventionist Practitioners	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	100.0%	100.0%
Licensed Practical Nurse (LPNs)	85.7%	75.0%
MDS Coordinators	33.3%	0.0%
Nurse Directors/Managers	83.3%	50.0%
Nurse Educators	33.3%	33.3%
Occupational Therapists	50.0%	0.0%
Occupational Therapy Assistants	-	-
Paid Feeding Assistants	-	-
Personal Care Aides	66.7%	33.3%
Physical Therapists	50.0%	0.0%
Physical Therapy Assistants	-	-
Registered Nurses (RNs) Newly Licensed	50.0%	0.0%
Registered Nurses (RNs) Experienced	83.3%	16.7%
Residential Care Aide (ACF/ALR)	75.0%	50.0%
Respiratory Therapists	100.0%	0.0%
Speech-Language Pathologists	50.0%	0.0%

Table 44. Reasons for Recruitment Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	50.0%	100.0%	0.0%	75.0%
CNA Trainees/ Temporary Nurse Aides	60.0%	100.0%	0.0%	60.0%
Dietitians/Nutritionists	0.0%	33.3%	0.0%	0.0%
Home Health Aides	0.0%	100.0%	0.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	66.7%
Licensed Practical Nurse (LPNs)	33.3%	100.0%	0.0%	33.3%
MDS Coordinators	0.0%	100.0%	0.0%	0.0%
Nurse Directors/Managers	40.0%	100.0%	0.0%	40.0%
Nurse Educators	0.0%	100.0%	0.0%	0.0%
Occupational Therapists	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	100.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	100.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	40.0%	100.0%	0.0%	40.0%
Residential Care Aide (ACF/ALR)	33.3%	66.7%	33.3%	0.0%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%

Table 45. Reasons for Recruitment Difficulties at Capital District Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	25.0%	50.0%	25.0%	50.0%
CNA Trainees/ Temporary Nurse Aides	20.0%	40.0%	20.0%	40.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	33.3%	16.7%	33.3%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	20.0%	20.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	50.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-!	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	33.3%	66.7%	33.3%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 46. Reasons for Retention Difficulties at Capital District Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	80.0%	60.0%	80.0%	40.0%
CNA Trainees/ Temporary Nurse Aides	75.0%	25.0%	100.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	100.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	100.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	33.3%	100.0%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	33.3%	33.3%	100.0%	0.0%
Nurse Educators	100.0%	100.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	100.0%	100.0%	100.0%	0.0%
Residential Care Aide (ACF/ALR)	50.0%	50.0%	50.0%	50.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 47. Reasons for Retention Difficulties at Capital District Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	60.0%	40.0%	0.0%	60.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	50.0%	0.0%	75.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	66.7%	66.7%	0.0%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	100.0%	0.0%	0.0%	50.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 48. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Capital District Home Health Care Agencies

Occupation	Recruiting	Retaining
Compliance Officers	21.4%	14.3%
Home Health Aides	60.0%	61.9%
Homemakers	44.4%	50.0%
Intake Coordinator /Schedulers	31.6%	20.0%
Licensed Clinical Social Workers (LCSWs)	25.0%	0.0%
Licensed Master Social Workers (LMSWs)	25.0%	0.0%
Licensed Practical Nurse (LPNs)	54.6%	50.0%
Occupational Therapists	60.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	52.4%	59.1%
Physical Therapists	60.0%	0.0%
Physical Therapy Assistants	33.3%	0.0%
Registered Nurses (RNs)	84.2%	50.0%
Respiratory Therapists	-	-
Speech-Language Pathologists	50.0%	0.0%

Table 49. Reasons for Recruitment Difficulties at Capital District Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	33.3%	66.7%	0.0%	0.0%
Home Health Aides	16.7%	8.3%	0.0%	8.3%
Homemakers	75.0%	0.0%	0.0%	50.0%
Intake Coordinator	66.7%	50.0%	0.0%	16.7%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	83.3%	16.7%	0.0%	16.7%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	90.9%	18.2%	9.1%	36.4%
Physical Therapists	66.7%	0.0%	0.0%	0.0%
Physical Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	100.0%	12.5%	0.0%	6.3%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 50. Reasons for Recruitment Difficulties at Capital District Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	33.3%	66.7%	0.0%
Home Health Aides	8.3%	16.7%	8.3%
Homemakers	50.0%	50.0%	25.0%
Intake Coordinator	33.3%	66.7%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	100.0%
Licensed Practical Nurse (LPNs)	33.3%	66.7%	33.3%
Occupational Therapists	33.3%	33.3%	0.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	45.5%	100.0%	36.4%
Physical Therapists	33.3%	33.3%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%
Registered Nurses (RNs)	31.3%	81.3%	50.0%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%

Table 51. Reasons for Retention Difficulties at Capital District Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	50.0%	50.0%	50.0%	50.0%
Home Health Aides	15.4%	15.4%	7.7%	7.7%	15.4%
Homemakers	50.0%	50.0%	25.0%	25.0%	50.0%
Intake Coordinator	50.0%	50.0%	50.0%	0.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	83.3%	66.7%	50.0%	33.3%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	76.9%	69.2%	30.8%	15.4%	61.5%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	100.0%	55.6%	66.7%	22.2%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

Table 52. Reasons for Retention Difficulties at Capital District Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	50.0%	0.0%	0.0%	0.0%
Home Health Aides	7.7%	7.7%	15.4%	15.4%	0.0%
Homemakers	25.0%	25.0%	50.0%	50.0%	0.0%
Intake Coordinator	25.0%	25.0%	25.0%	25.0%	50.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	33.3%	16.7%	33.3%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	61.5%	38.5%	46.2%	46.2%	38.5%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	44.4%	22.2%	22.2%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

2. Health Care Workforce Production and Projected Need

a. Graduations

Table 53. The Number of Graduations for Selected Health Care Occupations in the Capital District, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	83	69	89	86	86	3	3.6%
Cardiovascular Technologists and Technicians	5	8	4	0	0	-5	-100.0%
Clinical Laboratory Technologists	21	20	22	17	18	-3	-14.3%
Dental Assistants	16	14	16	7	11	-5	-31.3%
Dental Hygienists	30	35	36	35	42	12	40.0%
Electrocardiograph Technologists and Technicians	9	7	8	9	7	-2	-22.2%
EMTs and Paramedics	26	53	38	36	44	18	69.2%
Health Care Administrators	23	41	51	75	109	86	373.9%
License Practical Nurses (LPNs)	283	232	233	238	229	-54	-19.1%
Medical Assistants	149	131	97	79	77	-72	-48.3%
Mental Health Counselors	30	52	47	51	39	9	30.0%
Nurse Anesthetist	25	23	18	23	22	-3	-12.0%
Occupational Therapists	38	36	37	42	44	6	15.8%
Occupational Therapy Assistants	44	42	65	5	40	-4	-9.1%
Pharmacists	232	225	218	210	189	-43	-18.5%
Physical Therapists	37	37	29	30	40	3	8.1%
Physician Assistants	42	40	41	40	42	0	0.0%
Radiation Therapists and Technologists	27	21	23	21	50	23	85.2%
Registered Nurses (RNs) ^b	494	517	515	505	520	26	5.3%
Registered Nurses with Advanced Education ^c	46	49	36	54	47	1	2.2%
Respiratory Therapists	22	18	19	12	18	-4	-18.2%
Social Workers ^d	271	259	268	221	259	-12	-4.4%
Substance Abuse/Addiction Counseling	52	50	35	32	33	-19	-36.5%
Surgical Technology/Technologist	12	18	16	16	22	10	83.3%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^c Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^d Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 54. The Number of Licensed Individuals in Selected Health Care Professions in the Capital District, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	80	82	79	77	85	5	6.3%
Clinical Laboratory Technologists	713	731	701	667	674	-39	-5.5%
Dental Assistants	154	161	165	164	154	0	0.0%
Dental Hygienists	874	881	881	899	894	20	2.3%
Dietitians/Nutritionists	386	393	403	404	395	9	2.3%
Licensed Practical Nurses (LPNs)	5,066	5,187	5,107	5,080	5,068	2	0.0%
Nurse Practitioners ^a	1,198	1,298	1,417	1,480	1,694	496	41.4%
Occupational Therapists	694	728	757	777	809	115	16.6%
Occupational Therapy Assistants	351	356	351	350	343	-8	-2.3%
Pharmacists	1,603	1,592	1,625	1,668	1,602	-1	-0.1%
Physical Therapists	1,196	1,194	1,235	1,271	1,289	93	7.8%
Physical Therapist Assistants	292	306	307	317	288	-4	-1.4%
Physician Assistants	897	967	1,003	1,030	1,081	184	20.5%
Registered Nurses (RNs)	17,511	17,898	18,331	18,458	18,571	1,060	6.1%
Respiratory Therapists	434	453	446	446	460	26	6.0%
Social Workers ^b	2,628	2,712	2,786	2,869	3,007	379	14.4%
Speech-Language Pathologists	964	969	992	1,011	1,019	55	5.7%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 55. Employment Projections for Selected Health Care Occupations for the Capital District, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	310	360	50	16.1%	25
Clinical Laboratory Technologists and Technicians	1,310	1,520	210	16.0%	111
Dental Assistants	830	990	160	19.3%	116
Dental Hygienists	860	1,020	160	18.6%	66
Diagnostic Medical Sonographers	380	490	110	28.9%	41
Dietitians and Nutritionists	350	410	60	17.1%	26
Emergency Medical Technicians and Paramedics	1,630	2,000	370	22.7%	147
Healthcare Social Workers	840	1,030	190	22.6%	109
Home Health and Personal Care Aides	13,710	18,800	5,090	37.1%	2,469
Licensed Practical and Licensed Vocational Nurses	4,020	4,770	750	18.7%	405
Magnetic Resonance Imaging Technologists	190	220	30	15.8%	23
Medical and Health Services Managers	1,750	2,430	680	38.9%	228
Medical Assistants	1,220	1,540	320	26.2%	192
Medical Secretaries	710	850	140	19.7%	94
Medical Transcriptionists	80	80	0	0.0%	10
Mental Health and Substance Abuse Social Workers	710	930	220	31.0%	92
Nuclear Medicine Technologists	70	80	10	14.3%	1
Nurse Anesthetists	260	310	50	19.2%	25
Nurse Practitioners	820	1,250	430	52.4%	93
Nursing Assistants	6,710	7,940	1,230	18.3%	1,013
Occupational Therapists	630	800	170	27.0%	57
Occupational Therapy Assistants	130	170	40	30.8%	24
Orderlies	190	220	30	15.8%	23
Pharmacists	1,140	1,290	150	13.2%	55
Pharmacy Aides	100	100	0	0.0%	20
Pharmacy Technicians	1,360	1,700	340	25.0%	144
Phlebotomists	250	320	70	28.0%	37
Physical Therapist Assistants	290	420	130	44.8%	63
Physical Therapists	1,030	1,320	290	28.2%	69
Physician Assistants	1,030	1,380	350	34.0%	105
Psychiatric Aides	130	150	20	15.4%	22
Radiologic Technologists	920	1,080	160	17.4%	86
Registered Nurses (RNs)	12,580	14,710	2,130	16.9%	913
Respiratory Therapists	450	580	130	28.9%	33
Speech-Language Pathologists	620	860	240	38.7%	74
Surgical Technologists	320	380	60	18.8%	36

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

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020-2030.

B. Central New York

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Central New York region has a slightly higher percentage of its population 65 years of age or older than the state as a whole.
- The rates of deaths due to all cancers and due to diabetes are higher in the Central New York region than the state as a whole.

Health Care Employment

- Overall, the number of jobs in health care settings in the Central New York region declined between 2018 and 2022.
- The number of jobs in hospitals, nursing homes, and in home health care all declined in the Central New York region between 2018 and 2022. In contrast, the number of jobs in ambulatory care slightly grew in the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Central New York region.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Certified nurse aides/assistants, home health aides, nurse directors/managers, and respiratory therapists are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Central New York region also indicated that home health aides and personal care aides are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- There are nearly 1,700 projected average annual openings in the Central New York region for home health and personal care aides.

1. Population and Health Care Indicators

Table 56. Selected Population Characteristics for Central New York, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Regional's Population	
Total population	781,620	N/A	3.9%
Population under 100% FPL	103,666	13.9%	13.6%
Population under 200% FPL	220,793	29.7%	28.3%
Population aged birth to 17 years	160,181	20.5%	20.6%
Population aged 65 and older	140,504	18.0%	17.0%
Population female aged 15 to 44	150,853	19.3%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	125	0.4%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	6,448	8.4%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	2,680	3.7%	3.9%
Black/African American, non-Hispanic	55,021	7.0%	13.8%
Hispanic/Latino	34,494	4.4%	19.5%
Asian/Pacific Islander, non-Hispanic	21,704	2.8%	8.8%
American Indian/Native Alaskan, non-Hispanic	2,379	0.3%	0.2%
Two or more/other races	29,693	3.8%	3.1%
Population with less than a high school education ^b	48,539	9.1%	12.4%
Population with a high school diploma or equivalent ^b	153,859	28.7%	24.9%
Population with an associate degree ^b	69,425	13.0%	8.8%
Population with a bachelor's degree ^b	94,084	17.6%	21.6%
Population with a master's degree or higher ^b	76,258	14.2%	17.2%
Home ownership ^c	214,055	68.0%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 57. Selected Health Indicators for Central New York Region

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	23,107	993.3	516,974	881.7
Deaths due to heart disease, per 100,000	4,934	212.1	135,955	231.9
Deaths due to all cancers, per 100,000	4,599	197.8	101,440	173.1
Deaths due to diabetes, per 100,000	607	26.1	14,414	24.6
Total births, per 1,000 females aged 15 to 44	24,130	53.9	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,059	12.3	19,095	10.9
Low-birthweight births, as a percent of total births	1,410	6.1	40,411	6.4
Late/no prenatal care, as a percent of total births	887	3.7	34,266	5.3
Infant deaths, per 1,000 live births	124	5.1	2,764	4.2
Total hospitalizations, per 10,000	254,444	1,093.8	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	987	4.2	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	190	3.4	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	176	7.8	11,691	7.6
Pediatric asthma hospitalization, per 10,000	486	10.1	19,462	15.9
Diabetes hospitalizations, per 10,000	5,221	22.4	124,485	21.2
CLRD hospitalizations, per 10,000	5,612	24.1	140,504	24.0
Heart disease hospitalizations, per 10,000	23,073	99.2	585,521	99.9
Total ED visits, per 10,000	891,057	3,830.4	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.
Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 58. The Number of Jobs in Health Care in Central New York, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	14,066	14,210	13,603	13,165	12,928	-1,138	-8.1%
Ambulatory care (excluding home health)	15,924	16,919	15,208	15,804	16,040	116	0.7%
Nursing home and residential care facilities	8,370	8,547	8,112	7,157	6,775	-1,595	-19.1%
Home health care	2,178	2,231	2,238	2,106	2,106	-72	-3.3%
Total	40,538	41,907	39,161	38,232	37,849	-2,689	-6.6%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 59. Number of Jobs and Median Salary for Selected Health Care Occupations in Central New York, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	N/A	\$88,533
Cardiovascular Technologists and Technicians	N/A	N/A
Clinical Laboratory Technologists and Technicians	560	\$71,970
Dental Assistants	860	\$41,203
Dental Hygienists	560	\$81,690
Diagnostic Medical Sonographers	230	\$82,218
Dietitians and Nutritionists	260	\$64,949
Emergency Medical Technicians	460	\$37,310
Healthcare Social Workers	830	\$50,756
Home Health & Personal Care Aides	6,740	\$33,696
Licensed Practical and Licensed Vocational Nurses	2,470	\$51,703
Magnetic Resonance Imaging Technologists	90	\$85,650
Medical Assistants	1,120	\$39,222
Medical Secretaries and Administrative Assistants	2,000	\$39,734
Medical Transcriptionists	50	\$43,049
Medical and Health Services Managers	770	\$117,236
Mental Health and Substance Abuse Social Workers	340	\$67,698
Nuclear Medicine Technologists	N/A	\$94,431
Nurse Practitioners	810	\$113,003
Nursing Assistants	3,240	\$37,727
Occupational Therapists	380	\$84,652
Occupational Therapy Assistants	80	\$51,316
Orderlies	110	\$36,503
Paramedics	350	\$51,445
Pharmacists	670	\$136,234
Pharmacy Aides	200	\$33,376
Pharmacy Technicians	1,010	\$37,410
Phlebotomists	200	\$39,925
Physical Therapist Aides	60	\$30,282
Physical Therapist Assistants	200	\$55,214
Physical Therapists	680	\$85,489
Physician Assistants	590	\$126,168
Psychiatric Technicians	50	\$38,533
Radiation Therapists	N/A	\$85,923
Radiologic Technologists and Technicians	560	\$76,614
Registered Nurses	8,090	\$80,370
Respiratory Therapists	240	\$80,187
Speech-Language Pathologists	470	\$83,676
Surgical Technologists	240	\$60,354

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 60. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 61. Reasons for Recruitment Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 62. Reasons for Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 63. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Central New York Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	88.9%
CNA Trainees/Temporary Nurse Aides	75.0%	100.0%
Dietitians/Nutritionists	87.5%	50.0%
Home Health Aides	100.0%	100.0%
Infection Preventionist Practitioners	71.4%	42.9%
Licensed Clinical Social Workers (LCSWs)	83.3%	83.3%
Licensed Master Social Workers (LMSWs)	87.5%	71.4%
Licensed Practical Nurse (LPNs)	90.0%	77.8%
MDS Coordinators	66.7%	33.3%
Nurse Directors/Managers	90.0%	80.0%
Nurse Educators	75.0%	44.4%
Occupational Therapists	77.8%	33.3%
Occupational Therapy Assistants	62.5%	37.5%
Paid Feeding Assistants	0.0%	50.0%
Personal Care Aides	0.0%	0.0%
Physical Therapists	77.8%	44.4%
Physical Therapy Assistants	50.0%	0.0%
Registered Nurses (RNs) Newly Licensed	62.5%	62.5%
Registered Nurses (RNs) Experienced	77.8%	77.8%
Residential Care Aide (ACF/ALR)	33.3%	66.7%
Respiratory Therapists	100.0%	100.0%
Speech-Language Pathologists	50.0%	25.0%

Table 64. Reasons for Recruitment Difficulties at Central New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	100.0%	77.8%	11.1%	55.6%
CNA Trainees/ Temporary Nurse Aides	100.0%	100.0%	0.0%	50.0%
Dietitians/Nutritionists	28.6%	100.0%	14.3%	42.9%
Home Health Aides	100.0%	100.0%	0.0%	100.0%
Infection Preventionist Practitioners	20.0%	100.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	20.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	14.3%	100.0%	0.0%	14.3%
Licensed Practical Nurse (LPNs)	44.4%	100.0%	11.1%	55.6%
MDS Coordinators	33.3%	100.0%	0.0%	16.7%
Nurse Directors/Managers	22.2%	100.0%	11.1%	33.3%
Nurse Educators	33.3%	100.0%	0.0%	16.7%
Occupational Therapists	28.6%	85.7%	0.0%	28.6%
Occupational Therapy Assistants	20.0%	100.0%	0.0%	20.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	28.6%	85.7%	0.0%	28.6%
Physical Therapy Assistants	66.7%	100.0%	0.0%	33.3%
Registered Nurses (RNs) Newly Licensed	40.0%	100.0%	0.0%	20.0%
Registered Nurses (RNs) Experienced	28.6%	85.7%	0.0%	28.6%
Residential Care Aide (ACF/ALR)	100.0%	100.0%	0.0%	0.0%
Respiratory Therapists	0.0%	100.0%	0.0%	100.0%
Speech-Language Pathologists	50.0%	50.0%	0.0%	50.0%

Table 65. Reasons for Recruitment Difficulties at Central New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	88.9%	77.8%	55.6%	66.7%
CNA Trainees/ Temporary Nurse Aides	83.3%	66.7%	50.0%	66.7%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	14.3%
Home Health Aides	100.0%	100.0%	0.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	20.0%	20.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	14.3%	14.3%	0.0%
Licensed Practical Nurse (LPNs)	22.2%	55.6%	44.4%	44.4%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	44.4%	22.2%	0.0%
Nurse Educators	0.0%	50.0%	0.0%	0.0%
Occupational Therapists	0.0%	57.1%	14.3%	0.0%
Occupational Therapy Assistants	0.0%	80.0%	20.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	14.3%	14.3%	0.0%
Physical Therapy Assistants	0.0%	33.3%	33.3%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	60.0%	0.0%	20.0%
Registered Nurses (RNs) Experienced	0.0%	42.9%	0.0%	14.3%
Residential Care Aide (ACF/ALR)	100.0%	0.0%	100.0%	0.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 66. Reasons for Retention Difficulties at Central New York Nursing Homes and Assisted Living Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	50.0%	12.5%	100.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	12.5%	87.5%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	25.0%	0.0%
Home Health Aides	0.0%	0.0%	100.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	100.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	40.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	40.0%	0.0%
Licensed Practical Nurse (LPNs)	14.3%	14.3%	100.0%	28.6%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	37.5%	25.0%	50.0%	12.5%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	100.0%	0.0%	100.0%	0.0%
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	25.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	20.0%	40.0%	0.0%
Registered Nurses (RNs) Experienced	14.3%	14.3%	42.9%	0.0%
Residential Care Aide (ACF/ALR)	50.0%	50.0%	100.0%	0.0%
Respiratory Therapists	0.0%	100.0%	100.0%	100.0%
Speech-Language Pathologists	0.0%	0.0%	100.0%	0.0%

Table 67. Reasons for Retention Difficulties at Central New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	12.5%	37.5%	12.5%	37.5%
CNA Trainees/ Temporary Nurse Aides	0.0%	25.0%	0.0%	12.5%
Dietitians/Nutritionists	25.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	20.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	20.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	14.3%	28.6%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	25.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	14.3%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	50.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 68. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Central New York Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	11.1%	7.7%
Home Health Aides	54.6%	44.4%
Homemakers	25.0%	25.0%
Intake Coordinator /Schedulers	23.5%	5.9%
Licensed Clinical Social Workers (LCSWs)	33.3%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%
Licensed Practical Nurse (LPNs)	75.0%	25.0%
Occupational Therapists	33.3%	0.0%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	50.0%	50.0%
Physical Therapists	16.7%	0.0%
Physical Therapy Assistants	33.3%	0.0%
Registered Nurses (RNs)	84.6%	23.1%
Respiratory Therapists	-	-
Speech-Language Pathologists	66.7%	0.0%

Table 69. Reasons for Recruitment Difficulties at Central New York Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	0.0%	100.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%	0.0%
Intake Coordinator	75.0%	25.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	50.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	0.0%	0.0%	0.0%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	85.7%	14.3%	14.3%	42.9%
Physical Therapists	100.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	90.9%	9.1%	0.0%	9.1%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	-	-	-	-

Table 70. Reasons for Recruitment Difficulties at Central New York Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	0.0%	100.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%
Intake Coordinator	25.0%	75.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	50.0%	50.0%
Licensed Practical Nurse (LPNs)	0.0%	50.0%	33.3%
Occupational Therapists	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	28.6%	85.7%	0.0%
Physical Therapists	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%
Registered Nurses (RNs)	18.2%	72.7%	45.5%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%

Table 71. Reasons for Retention Difficulties at Central New York Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	100.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%	0.0%	0.0%
Intake Coordinator	100.0%	0.0%	0.0%	0.0%	100.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	100.0%	50.0%	50.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	100.0%	57.1%	14.3%	0.0%	85.7%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	100.0%	33.3%	66.7%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

Table 72 Reasons for Retention Difficulties at Central New York Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%	0.0%	0.0%
Intake Coordinator	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	42.9%	28.6%	42.9%	28.6%	28.6%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	33.3%	0.0%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 73. The Number of Graduations for Selected Health Care Occupations in Central New York, 2018–2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	119	95	99	96	102	-17	-14.3%
Clinical Laboratory Technologists	20	15	15	32	30	10	50.0%
Dental Assistants	49	56	46	48	68	19	38.8%
Health Care Administrators	46	49	29	29	50	4	8.7%
License Practical Nurses (LPNs)	125	143	174	124	107	-18	-14.4%
Marriage and Family Therapists	18	37	29	34	19	1	5.6%
Medical Assistants	116	123	113	146	82	-34	-29.3%
Mental Health Counselors	35	32	26	34	27	-8	-22.9%
Nursing and Patient Care Aides and Assistants	20	0	0	0	0	-20	-100.0%
Occupational Therapists	29	35	39	38	22	-7	-24.1%
Occupational Therapy Assistants	30	25	40	16	21	-9	-30.0%
Pharmacy Technicians/Assistants	12	3	0	0	0	-12	-100.0%
Physical Therapists	41	38	40	18	61	20	48.8%
Physical Therapy Assistants	16	22	28	19	24	8	50.0%
Physician Assistants	87	107	102	107	105	18	20.7%
Radiation Therapists and Technologists	11	10	14	11	10	-1	-9.1%
Recreational Therapists	37	38	30	26	20	-17	-45.9%
Registered Nurses (RNs) ^b	458	416	505	530	490	32	7.0%
Registered Nurses with Advanced Education ^c	67	87	55	104	83	16	23.9%
Respiratory Therapists	10	11	9	15	12	2	20.0%
Social Workers ^d	153	108	129	134	137	-16	-10.5%
Substance Abuse/Addiction Counseling	23	28	18	26	33	10	43.5%
Surgical Technology/Technologist	15	11	9	10	20	5	33.3%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^c Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^d Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 74. Number of Licensed Individuals in Selected Health Care Professions in Central New York, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	97	100	102	106	107	10	10.3%
Clinical Laboratory Technologists	497	508	497	479	469	-28	-5.6%
Dental Assistants	236	232	226	228	225	-11	-4.7%
Dental Hygienists	551	555	544	543	525	-26	-4.7%
Dietitians/Nutritionists	214	214	218	220	215	1	0.5%
Licensed Practical Nurses (LPNs)	4,672	4,699	4,558	4,520	4,438	-234	-5.0%
Nurse Practitioners ^a	1,322	1,434	1,525	1,552	1,711	389	29.4%
Occupational Therapists	461	481	506	524	568	107	23.2%
Occupational Therapy Assistants	123	142	154	156	158	35	28.5%
Pharmacists	844	834	862	881	886	42	5.0%
Physical Therapists	922	920	945	976	961	39	4.2%
Physical Therapist Assistants	314	314	320	327	320	6	1.9%
Physician Assistants	595	627	659	694	711	116	19.5%
Registered Nurses (RNs)	12,581	12,788	13,175	13,235	13,405	824	6.5%
Respiratory Therapists	382	395	368	364	358	-24	-6.3%
Social Workers ^b	1,491	1,522	1,611	1,644	1,727	236	15.8%
Speech-Language Pathologists	593	602	611	622	623	30	5.1%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 75. Employment Projections for Selected Health Care Occupations for Central New York, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	90	100	10	11.1%	1
Clinical Laboratory Technologists and Technicians	700	820	120	17.1%	62
Dental Assistants	660	780	120	18.2%	92
Dental Hygienists	750	880	130	17.3%	63
Diagnostic Medical Sonographers	310	410	100	32.3%	40
Dietitians and Nutritionists	240	300	60	25.0%	26
Emergency Medical Technicians and Paramedics	710	890	180	25.4%	78
Healthcare Social Workers	620	840	220	35.5%	92
Home Health and Personal Care Aides	8,830	12,590	3,760	42.6%	1,676
Licensed Practical and Licensed Vocational Nurses	3,290	3,860	570	17.3%	327
Magnetic Resonance Imaging Technologists	110	130	20	18.2%	12
Medical and Health Services Managers	790	1,110	320	40.5%	102
Medical Assistants	970	1,230	260	26.8%	156
Medical Secretaries	580	690	110	19.0%	81
Medical Transcriptionists	70	70	0	0.0%	10
Mental Health and Substance Abuse Social Workers	430	550	120	27.9%	52
Nurse Anesthetists	80	100	20	25.0%	2
Nurse Practitioners	740	1,140	400	54.1%	90
Nursing Assistants	3,620	4,220	600	16.6%	530
Occupational Therapists	560	680	120	21.4%	42
Orderlies	120	140	20	16.7%	22
Pharmacists	730	820	90	12.3%	39
Pharmacy Aides	130	150	20	15.4%	22
Pharmacy Technicians	710	880	170	23.9%	67
Phlebotomists	220	260	40	18.2%	34
Physical Therapist Assistants	230	340	110	47.8%	41
Physical Therapists	810	1,020	210	25.9%	61
Physician Assistants	590	820	230	39.0%	63
Psychiatric Aides	200	230	30	15.0%	23
Radiologic Technologists	660	780	120	18.2%	62
Recreational Therapists	100	120	20	20.0%	12
Registered Nurses (RNs)	9,380	10,860	1,480	15.8%	678
Respiratory Therapists	350	440	90	25.7%	29
Speech-Language Pathologists	670	900	230	34.3%	73
Surgical Technologists	240	270	30	12.5%	23

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the occupation. Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

C. Finger Lakes

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Finger Lakes region has a higher percentage of its population 65 years of age or older than the state as a whole.
- The rates of total deaths and deaths due to all cancers are higher in the Finger Lakes region than the state rate.

Health Care Employment

- Overall, the number of jobs in health care settings in the Finger Lakes region declined between 2018 and 2022.
- The number of jobs in hospitals in the Finger Lakes region increased between 2018 and 2022, while the number of jobs in ambulatory care, in nursing homes, and in home health care all declined during the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Finger Lakes region.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Personal care aides, certified nurse aides/assistants, and home health aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Finger Lakes region also indicated that occupational therapists and speech-language pathologists are the most difficult to recruit. Homemakers and personal care aides are also among the most difficult to retain.

Health Care Production and Projected Workforce Need

- The number of LPN graduations increased by nearly 50% in the Finger Lakes region between 2018 and 2022.
- The number of LPNs and physician assistants substantially increased between 2019 and 2023 in the Finger Lakes region.
- There are over 3,500 projected average annual openings in the Finger Lakes region for home health and personal care aides.

1. Population and Health Care Indicators

Table 76. Selected Population Characteristics for the Finger Lakes, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	1,219,052	N/A	6.1%
Population under 100% FPL	147,199	12.5%	13.6%
Population under 200% FPL	327,658	27.8%	28.3%
Population aged birth to 17 years	246,878	20.3%	20.6%
Population aged 65 and older	227,310	18.6%	17.0%
Population female aged 15 to 44	229,176	18.8%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	299	0.7%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	9,974	8.5%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	3,567	3.1%	3.9%
Black/African American, non-Hispanic	118,028	9.7%	13.8%
Hispanic/Latino	92,250	7.6%	19.5%
Asian/Pacific Islander, non-Hispanic	32,749	2.7%	8.8%
American Indian/Native Alaskan, non-Hispanic	1,353	0.1%	0.2%
Two or more/other races	39,999	3.3%	3.1%
Population with less than a high school education ^b	77,505	9.1%	12.4%
Population with a high school diploma or equivalent ^b	226,347	26.5%	24.9%
Population with an associate degree ^b	107,093	12.5%	8.8%
Population with a bachelor's degree ^b	167,322	19.6%	21.6%
Population with a master's degree or higher ^b	133,647	15.6%	17.2%
Home ownership ^c	342,595	68.1%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 77. Selected Health Indicators for the Finger Lakes

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	36,102	998.6	516,974	881.7
Deaths due to heart disease, per 100,000	7,096	196.3	135,955	231.9
Deaths due to all cancers, per 100,000	7,682	212.6	101,440	173.1
Deaths due to diabetes, per 100,000	900	24.9	14,414	24.6
Total births, per 1,000 females aged 15 to 44	36,450	53.7	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,345	11.5	19,095	10.9
Low-birthweight births, as a percent of total births	2,255	6.4	40,411	6.4
Late/no prenatal care, as a percent of total births	1,448	4.2	34,266	5.3
Infant deaths, per 1,000 live births	251	6.9	2,764	4.2
Total hospitalizations, per 10,000	401,791	1,111.4	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	2,016	5.6	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	328	3.7	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	487	2.9	11,691	7.6
Pediatric asthma hospitalization, per 10,000	837	11.1	19,462	15.9
Diabetes hospitalizations, per 10,000	7,759	21.5	124,485	21.2
CLRD hospitalizations, per 10,000	9,083	25.1	140,504	24.0
Heart disease hospitalizations, per 10,000	38,365	106.1	585,521	99.9
Total ED visits, per 10,000	1,373,534	3,799.2	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 78. The Number of Jobs in Health Care in the Finger Lakes, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	33,911	34,532	33,594	34,329	34,465	554	1.6%
Ambulatory care (excluding home health)	16,350	16,256	15,163	15,251	15,843	-507	-3.1%
Nursing home and residential care facilities	13,948	13,730	12,916	12,014	11,878	-2,070	-14.8%
Home health care	5,089	5,254	4,934	4,590	4,407	-682	-13.4%
Total	69,298	69,722	66,607	66,094	66,593	-2,705	-3.9%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 79. Number of Jobs and Median Salary for Selected Health Care Occupations in the Finger Lakes, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	50	\$85,513
Cardiovascular Technologists and Technicians	200	\$65,229
Clinical Laboratory Technologists and Technicians	950	\$70,510
Dental Assistants	1,090	\$48,805
Dental Hygienists	1,060	\$79,134
Diagnostic Medical Sonographers	380	\$83,749
Dietitians and Nutritionists	320	\$65,749
Emergency Medical Technicians	1,010	\$38,426
Healthcare Social Workers	1,970	\$44,934
Home Health & Personal Care Aides	16,790	\$33,696
Licensed Practical and Licensed Vocational Nurses	3,000	\$51,964
Magnetic Resonance Imaging Technologists	190	\$85,507
Medical Assistants	1,190	\$38,515
Medical Secretaries and Administrative Assistants	2,240	\$39,620
Medical Transcriptionists	70	\$40,154
Medical and Health Services Managers	1,330	\$131,233
Mental Health and Substance Abuse Social Workers	540	\$65,949
Nuclear Medicine Technologists	60	\$88,378
Nurse Anesthetists	100	\$213,478
Nurse Midwives	N/A	\$122,471
Nurse Practitioners	1,090	\$126,862
Nursing Assistants	5,580	\$38,829
Occupational Therapists	690	\$84,289
Occupational Therapy Assistants	110	\$59,931
Orderlies	270	\$39,954
Paramedics	520	\$53,893
Pharmacists	1090	\$133,008
Pharmacy Aides	460	\$33,387
Pharmacy Technicians	1,240	\$37,426
Phlebotomists	380	\$39,495
Physical Therapist Assistants	250	\$56,663
Physical Therapists	940	\$84,062
Physician Assistants	880	\$130,181
Psychiatric Aides	N/A	\$51,172
Radiation Therapists	70	N/A
Radiologic Technologists and Technicians	800	\$68,538
Recreational Therapists	80	\$63,076
Registered Nurses	11,800	\$85,170
Respiratory Therapists	410	\$83,385
Speech-Language Pathologists	870	\$76,799
Surgical Technologists	370	\$56,699

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 80. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 81. Reasons for Recruitment Difficulties at Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 82. Reasons for Retention Difficulties Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 83. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Finger Lakes Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	94.0%	87.9%
CNA Trainees/Temporary Nurse Aides	68.9%	85.0%
Dietitians/Nutritionists	65.6%	21.3%
Home Health Aides	93.5%	84.6%
Infection Preventionist Practitioners	69.6%	27.9%
Licensed Clinical Social Workers (LCSWs)	45.0%	28.8%
Licensed Master Social Workers (LMSWs)	70.2%	30.5%
Licensed Practical Nurse (LPNs)	94.9%	78.9%
MDS Coordinators	67.7%	26.3%
Nurse Directors/Managers	87.8%	46.2%
Nurse Educators	66.7%	36.0%
Occupational Therapists	70.5%	25.9%
Occupational Therapy Assistants	67.2%	26.9%
Paid Feeding Assistants	38.5%	33.3%
Personal Care Aides	94.6%	84.4%
Physical Therapists	73.8%	30.2%
Physical Therapy Assistants	66.1%	24.5%
Registered Nurses (RNs) Newly Licensed	92.2%	78.4%
Registered Nurses (RNs) Experienced	96.8%	76.0%
Residential Care Aide (ACF/ALR)	82.9%	85.4%
Respiratory Therapists	82.4%	62.1%
Speech-Language Pathologists	70.6%	37.5%

Table 84. Reasons for Recruitment Difficulties at Finger Lakes Nursing Homes Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	33.3%	100.0%	11.1%	22.2%
CNA Trainees/ Temporary Nurse Aides	20.0%	100.0%	0.0%	0.0%
Dietitians/Nutritionists	33.3%	100.0%	0.0%	0.0%
Home Health Aides	0.0%	100.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	100.0%	33.3%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	9.1%	90.9%	9.1%	36.4%
MDS Coordinators	0.0%	100.0%	14.3%	14.3%
Nurse Directors/Managers	20.0%	80.0%	40.0%	20.0%
Nurse Educators	0.0%	100.0%	0.0%	0.0%
Occupational Therapists	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	100.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	100.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	100.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	100.0%	25.0%	12.5%
Registered Nurses (RNs) Experienced	10.0%	90.0%	20.0%	20.0%
Residential Care Aide (ACF/ALR)	100.0%	100.0%	0.0%	0.0%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%

Table 85. Reasons for Recruitment Difficulties at Finger Lakes Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	11.1%	22.2%	77.8%	55.6%
CNA Trainees/ Temporary Nurse Aides	20.0%	20.0%	100.0%	20.0%
Dietitians/Nutritionists	0.0%	0.0%	66.7%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	18.2%	18.2%	72.7%	36.4%
MDS Coordinators	0.0%	0.0%	57.1%	0.0%
Nurse Directors/Managers	0.0%	20.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	100.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	100.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	75.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	10.0%	60.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	25.0%	75.0%	25.0%
Respiratory Therapists	0.0%	14.3%	85.7%	0.0%
Speech-Language Pathologists	0.0%	0.0%	100.0%	0.0%

Table 86. Reasons for Retention Difficulties at Finger Lakes Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	44.4%	22.2%	88.9%	11.1%
CNA Trainees/ Temporary Nurse Aides	42.9%	0.0%	100.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	100.0%	0.0%
Home Health Aides	0.0%	0.0%	100.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	22.2%	0.0%	88.9%	11.1%
MDS Coordinators	28.6%	0.0%	57.1%	0.0%
Nurse Directors/Managers	25.0%	50.0%	25.0%	0.0%
Nurse Educators	0.0%	33.3%	33.3%	0.0%
Occupational Therapists	0.0%	0.0%	100.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	100.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	12.5%	62.5%	0.0%
Registered Nurses (RNs) Experienced	0.0%	12.5%	62.5%	0.0%
Residential Care Aide (ACF/ALR)	20.0%	20.0%	40.0%	0.0%
Respiratory Therapists	0.0%	0.0%	66.7%	0.0%
Speech-Language Pathologists	0.0%	0.0%	100.0%	0.0%

Table 87. Reasons for Retention Difficulties at Insert Region Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	11.1%	11.1%	0.0%	33.3%
CNA Trainees/ Temporary Nurse Aides	0.0%	14.3%	0.0%	28.6%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	11.1%	11.1%	11.1%	22.2%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	50.0%	0.0%	25.0%	0.0%
Nurse Educators	66.7%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	25.0%	0.0%	12.5%	0.0%
Registered Nurses (RNs) Experienced	25.0%	0.0%	12.5%	0.0%
Residential Care Aide (ACF/ALR)	20.0%	40.0%	20.0%	40.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 88. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Finger Lakes Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	16.7%	13.6%
Home Health Aides	55.6%	64.7%
Homemakers	55.6%	37.5%
Intake Coordinator /Schedulers	21.7%	13.6%
Licensed Clinical Social Workers (LCSWs)	50.0%	14.3%
Licensed Master Social Workers (LMSWs)	42.9%	12.5%
Licensed Practical Nurse (LPNs)	66.7%	26.7%
Occupational Therapists	75.0%	25.0%
Occupational Therapy Assistants	33.3%	0.0%
Personal Care Aides	61.5%	65.4%
Physical Therapists	50.0%	25.0%
Physical Therapy Assistants	60.0%	0.0%
Registered Nurses (RNs)	85.7%	38.1%
Respiratory Therapists	-	-
Speech-Language Pathologists	75.0%	25.0%

Table 89. Reasons for Recruitment Difficulties at Finger Lakes Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	66.7%	100.0%	0.0%	0.0%
Home Health Aides	20.0%	10.0%	10.0%	30.0%
Homemakers	40.0%	20.0%	20.0%	60.0%
Intake Coordinator	60.0%	60.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	66.7%	66.7%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	66.7%	66.7%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	80.0%	30.0%	0.0%	10.0%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Personal Care Aides	68.8%	43.8%	31.3%	68.8%
Physical Therapists	100.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	66.7%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	94.4%	22.2%	0.0%	16.7%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 90. Reasons for Recruitment Difficulties at Finger Lakes Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	0.0%	66.7%	33.3%
Home Health Aides	20.0%	10.0%	0.0%
Homemakers	40.0%	40.0%	0.0%
Intake Coordinator	0.0%	80.0%	40.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	100.0%
Licensed Practical Nurse (LPNs)	20.0%	80.0%	60.0%
Occupational Therapists	0.0%	33.3%	33.3%
Occupational Therapy Assistants	0.0%	100.0%	100.0%
Personal Care Aides	62.5%	68.8%	12.5%
Physical Therapists	0.0%	50.0%	50.0%
Physical Therapy Assistants	0.0%	33.3%	33.3%
Registered Nurses (RNs)	22.2%	77.8%	61.1%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%

Table 91. Reasons for Retention Difficulties at Finger Lakes Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	66.7%	33.3%	66.7%	0.0%	33.3%
Home Health Aides	9.1%	18.2%	18.2%	9.1%	18.2%
Homemakers	33.3%	66.7%	66.7%	33.3%	66.7%
Intake Coordinator	66.7%	33.3%	33.3%	0.0%	66.7%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	50.0%	25.0%	0.0%	0.0%
Occupational Therapists	100.0%	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	76.5%	82.4%	41.2%	5.9%	88.2%
Physical Therapists	100.0%	0.0%	100.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	87.5%	37.5%	87.5%	12.5%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	100.0%	0.0%	0.0%

Table 92. Reasons for Retention Difficulties at Finger Lakes Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	18.2%	18.2%	9.1%	18.2%	18.2%
Homemakers	66.7%	66.7%	33.3%	66.7%	66.7%
Intake Coordinator	66.7%	33.3%	0.0%	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	25.0%	25.0%	0.0%	0.0%	0.0%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%	100.0%
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	52.9%	52.9%	41.2%	58.8%	52.9%
Physical Therapists	0.0%	0.0%	0.0%	0.0%	100.0%
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	25.0%	12.5%	0.0%	0.0%	12.5%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%	100.0%

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 93. The Number of Graduations for Selected Health Care Occupations in the Finger Lakes, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	64	67	69	75	84	20	31.3%
Clinical Laboratory Technicians	12	9	7	9	8	-4	-33.3%
Clinical Laboratory Technologists	12	20	29	23	23	11	91.7%
Clinical Nutritionists	68	66	78	72	66	-2	-2.9%
Creative Arts Therapists ^b	35	18	34	29	24	-11	-31.4%
Dental Assistants	67	66	62	54	57	-10	-14.9%
Dental Hygienists	29	26	28	29	36	7	24.1%
Electrocardiograph Technologists and Technicians	12	10	12	22	18	6	50.0%
EMTs and Paramedics	47	31	37	18	25	-22	-46.8%
Health Care Administrators	74	82	89	78	143	69	93.2%
License Practical Nurses (LPNs)	269	213	277	379	401	132	49.1%
Marriage and Family Therapists	9	14	9	10	10	1	11.1%
Medical Assistants	68	46	35	28	18	-50	-73.5%
Mental Health Counselors	63	46	54	51	53	-10	-15.9%
Nursing and Patient Care Aides and Assistants	10	8	0	0	62	52	520.0%
Occupational Therapists	92	89	90	99	116	24	26.1%
Occupational Therapy Assistants	7	19	13	11	12	5	71.4%
Pharmacists	80	82	79	76	78	-2	-2.5%
Phlebotomists	48	31	30	112	62	14	29.2%
Physical Therapists	55	47	53	54	48	-7	-12.7%
Physical Therapy Assistants	18	25	29	22	19	1	5.6%
Physician Assistants	58	68	72	14	132	74	127.6%
Radiation Therapists	25	33	28	25	1	-24	-96.0%
Recreational Therapists and Technologists	7	8	2	0	0	-7	-100.0%
Registered Nurses (RNs) ^c	874	879	901	783	884	10	1.1%
Registered Nurses with Advanced Education ^d	70	155	121	180	194	124	177.1%
Respiratory Therapy Assistants	24	19	19	16	17	-7	-29.2%
Social Workers ^e	355	450	430	380	396	41	11.5%
Substance Abuse/Addiction Counseling	32	40	35	47	38	6	18.8%
Surgical Technology/Technologist	18	24	28	16	15	-3	-16.7%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 94. Number of Licensed Individuals in Selected Health Care Professions in the Finger Lakes, 2019-2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	107	114	122	121	126	19	17.8%
Clinical Laboratory Technologists	814	824	830	815	831	17	2.1%
Dental Assistants	292	308	312	315	307	15	5.1%
Dental Hygienists	1,084	1,065	1,068	1,071	1,046	-38	-3.5%
Dietitians/Nutritionists	286	284	319	303	294	8	2.8%
Licensed Practical Nurses (LPNs)	6,242	6,443	6,482	6,491	6,610	368	5.9%
Nurse Practitioners ^a	1,871	2,072	2,238	2,322	2,547	676	36.1%
Occupational Therapists	827	852	877	906	940	113	13.7%
Occupational Therapy Assistants	195	204	210	220	211	16	8.2%
Pharmacists	1,289	1,336	1,394	1,439	1,441	152	11.8%
Physical Therapists	1,286	1,347	1,421	1,477	1,489	203	15.8%
Physical Therapist Assistants	389	393	401	408	397	8	2.1%
Physician Assistants	997	1,065	1,128	1,186	1,261	264	26.5%
Registered Nurses (RNs)	18,565	18,932	19,563	19,702	20,033	1,468	7.9%
Respiratory Therapists	384	401	400	407	417	33	8.6%
Social Workers ^b	2,569	2,670	2,760	2,846	2,997	428	16.7%
Speech-Language Pathologists	1,164	1,168	1,176	1,186	1,201	37	3.2%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 95. Employment Projections for Selected Health Care Occupations for the Finger Lakes, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Audiologists	70	90	20	28.6%	2
Cardiovascular Technologists and Technicians	220	250	30	13.6%	23
Clinical Laboratory Technologists and Technicians	1,910	2,240	330	17.3%	163
Dental Assistants	1,250	1,490	240	19.2%	184
Dental Hygienists	1,200	1,420	220	18.3%	102
Diagnostic Medical Sonographers	420	530	110	26.2%	41
Dietetic Technicians	100	110	10	10.0%	1
Dietitians and Nutritionists	300	350	50	16.7%	25
Emergency Medical Technicians and Paramedics	1,410	1,750	340	24.1%	134
Healthcare Social Workers	1,340	1,650	310	23.1%	161
Home Health and Personal Care Aides	19,270	26,880	7,610	39.5%	3,551
Licensed Practical and Licensed Vocational Nurses	4,220	5,000	780	18.5%	428
Magnetic Resonance Imaging Technologists	110	130	20	18.2%	12
Medical and Health Services Managers	1,180	1,670	490	41.5%	159
Medical Assistants	860	1,080	220	25.6%	132
Medical Secretaries	890	1,040	150	16.9%	115
Medical Transcriptionists	140	140	0	0.0%	20
Mental Health and Substance Abuse Social Workers	610	760	150	24.6%	75
Nuclear Medicine Technologists	70	80	10	14.3%	1
Nurse Anesthetists	150	180	30	20.0%	13
Nurse Practitioners	1,420	2,130	710	50.0%	171
Nursing Assistants	5,860	6,840	980	16.7%	868
Occupational Therapists	780	960	180	23.1%	68
Occupational Therapy Assistants	120	180	60	50.0%	26
Orderlies	340	390	50	14.7%	45
Pharmacists	1,200	1,380	180	15.0%	68
Pharmacy Aides	290	350	60	20.7%	56
Pharmacy Technicians	1,240	1,520	280	22.6%	128
Phlebotomists	760	1,010	250	32.9%	125
Physical Therapist Assistants	310	450	140	45.2%	64
Physical Therapists	1,120	1,420	300	26.8%	90
Physician Assistants	1,070	1,500	430	40.2%	113
Psychiatric Aides	130	150	20	15.4%	22
Radiation Therapists	160	190	30	18.8%	13
Radiologic Technologists	880	1,010	130	14.8%	83
Recreational Therapists	100	120	20	20.0%	12
Registered Nurses (RNs)	13,040	15,210	2,170	16.6%	957
Respiratory Therapists	440	580	140	31.8%	34
Speech-Language Pathologists	880	1,210	330	37.5%	93
Surgical Technologists	320	370	50	15.6%	35

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

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 – 2030.

D. Hudson Valley

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Hudson Valley region has less poverty and has a higher percent of its population with a bachelor's degree or master's degree or higher, than the state as a whole.

Health Care Employment

- Overall, the number of jobs in health care settings in the Hudson Valley region remained stable between 2018 and 2022.
- The number of jobs in home health care in the Hudson Valley region increased between 2018 and 2022. In contrast, the number of jobs in hospitals and in nursing homes declined during the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Hudson Valley region.
- Hospitals in the Hudson Valley region also reported that respiratory therapists, clinical laboratory technologists, surgical technicians are also among the most difficult to recruit and retain.
- Certified nurse aides/assistants, home health aides, and personal care aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Hudson Valley region also indicated that home health aides, personal care aides, occupational therapists, physical therapists, and speech-language pathologists are the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- The number of RN graduations increased in the Hudson Valley region between 2018 and 2022. In contrast, the number of LPN graduations decreased during the same time period. The number of social worker graduations also decreased between 2018 and 2022.
- There are more than 7,100 projected average annual openings in the Hudson Valley region for home health and personal care aides, over 1,600 projected average annual openings for RNs, and more than 1,500 projected average annual openings for nursing assistants.

1. Population and Health Care Indicators

Table 96. Selected Population Characteristics for the Hudson Valley, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	2,391,754	N/A	12.0%
Population under 100% FPL	251,897	10.8%	13.6%
Population under 200% FPL	530,814	22.8%	28.3%
Population aged birth to 17 years	535,923	22.4%	20.6%
Population aged 65 and older	408,482	17.1%	17.0%
Population female aged 15 to 44	439,997	18.4%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	340	0.4%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	16,961	8.0%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	11,181	4.7%	3.9%
Black/African American, non-Hispanic	260,771	10.9%	13.8%
Hispanic/Latino	500,443	20.9%	19.5%
Asian/Pacific Islander, non-Hispanic	110,062	4.6%	8.8%
American Indian/Native Alaskan, non-Hispanic	2,594	0.1%	0.2%
Two or more/other races	70,707	3.0%	3.1%
Population with less than a high school education ^b	166,010	10.2%	12.4%
Population with a high school diploma or equivalent ^b	370,429	22.7%	24.9%
Population with an associate degree ^b	135,711	8.3%	8.8%
Population with a bachelor's degree ^b	368,974	22.6%	21.6%
Population with a master's degree or higher ^b	335,896	20.6%	17.2%
Home ownership ^c	569,320	66.5%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 97. Selected Health Indicators for the Hudson Valley

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	59,731	856.9	516,974	881.7
Deaths due to heart disease, per 100,000	14,732	211.3	135,955	231.9
Deaths due to all cancers, per 100,000	11,933	171.2	101,440	173.1
Deaths due to diabetes, per 100,000	1,345	19.3	14,414	24.6
Total births, per 1,000 females aged 15 to 44	79,716	62.7	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,923	8.3	19,095	10.9
Low-birthweight births, as a percent of total births	4,211	5.5	40,411	6.4
Late/no prenatal care, as a percent of total births	3,376	4.3	34,266	5.3
Infant deaths, per 1,000 live births	286	3.6	2,764	4.2
Total hospitalizations, per 10,000	741,025	1,063.1	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	4,391	6.3	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	734	4.4	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	1,084	5.6	11,691	7.6
Pediatric asthma hospitalization, per 10,000	1,758	11.2	19,462	15.9
Diabetes hospitalizations, per 10,000	11,317	16.2	124,485	21.2
CLRD hospitalizations, per 10,000	14,709	21.1	140,504	24.0
Heart disease hospitalizations, per 10,000	62,9477	90.3	585,521	99.9
Total ED visits, per 10,000	2,287,384	3,281.4	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 98. The Number of Jobs in Health Care in the Hudson Valley, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	42,156	42,400	41,898	40,720	40,504	-1,652	-3.9%
Ambulatory care (excluding home health)	47,357	47,262	43,721	46,710	48,003	646	1.4%
Nursing home and residential care facilities	20,405	20,665	19,363	17,961	17,359	-3,046	-14.9%
Home health care	11,804	13,095	15,135	15,323	14,884	3,080	26.1%
Total	121,722	123,422	120,117	120,714	120,750	-972	-0.8%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 99. Number of Jobs and Median Salary for Selected Health Care Occupations in the Hudson Valley, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	120	\$65,083
Cardiovascular Technologists and Technicians	290	\$85,448
Clinical Laboratory Technologists and Technicians	1,280	\$85,367
Dental Assistants	2,300	\$49,545
Dental Hygienists	1,680	\$100,607
Diagnostic Medical Sonographers	770	\$99,234
Dietitians and Nutritionists	560	\$82,214
Emergency Medical Technicians	1,490	\$39,666
Healthcare Social Workers	2,380	\$60,079
Home Health & Personal Care Aides	37,320	\$37,029
Licensed Practical and Licensed Vocational Nurses	4,390	\$64,419
Magnetic Resonance Imaging Technologists	300	\$104,473
Medical Assistants	4,150	\$46,433
Medical Secretaries and Administrative Assistants	4,680	\$46,298
Medical Transcriptionists	1,170	\$31,771
Medical and Health Services Managers	2,640	\$138,886
Mental Health and Substance Abuse Social Workers	1,390	\$79,756
Nuclear Medicine Technologists	110	\$108,915
Nurse Practitioners	1,690	\$166,591
Nursing Assistants	8,420	\$46,727
Occupational Therapists	1,090	\$100,650
Occupational Therapy Assistants	350	\$70,711
Orderlies	210	\$43,669
Paramedics	760	\$61,455
Pharmacists	2,020	\$139,407
Pharmacy Aides	250	\$38,633
Pharmacy Technicians	2,330	\$38,468
Phlebotomists	840	\$48,145
Physical Therapist Aides	490	\$35,746
Physical Therapist Assistants	480	\$68,289
Physical Therapists	1,960	\$106,754
Physician Assistants	1,180	\$140,533
Psychiatric Technicians	280	\$44,489
Radiation Therapists	N/A	\$136,986
Radiologic Technologists and Technicians	1,440	\$86,897
Registered Nurses	18,410	\$106,218
Respiratory Therapists	750	\$100,495
Speech-Language Pathologists	1,910	\$110,967
Surgical Technologists	500	\$69,737

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 100. Percent of Respondents Who Indicated Recruitment or Retention Difficulties at Hudson Valley Hospitals

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	41.7%	55.6%
Clinical Laboratory Technicians	60.0%	50.0%
Clinical Laboratory Technologists	91.7%	80.0%
Dietitians/Nutritionists	30.8%	36.4%
Licensed Clinical Social Workers (LCSWs)	72.7%	70.0%
Licensed Master's Social Workers (LMSWs)	77.8%	85.7%
Licensed Mental Health Counselors (LMHCs)	42.9%	80.0%
Licensed Practical Nurses (LPNs)	75.0%	44.4%
Nurse Practitioners (Behavioral Health)	88.9%	88.9%
Nurse Practitioners (All other)	45.5%	77.8%
Pharmacists	61.5%	42.9%
Physician Assistants	80.0%	50.0%
Psychiatrists	88.9%	88.9%
Respiratory Therapists	92.3%	90.9%
Registered Nurses	84.6%	90.9%
Surgical Technicians	91.7%	90.9%

Table 101. Reasons for Recruitment Difficulties at Hudson Valley Hospitals

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	20.0%	100.0%	40.0%	0.0%	0.0%
Clinical Laboratory Technicians	50.0%	100.0%	0.0%	16.7%	50.0%
Clinical Laboratory Technologists	27.3%	90.9%	0.0%	36.4%	63.6%
Dietitians/Nutritionists	25.0%	25.0%	25.0%	0.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	87.5%	0.0%	0.0%	0.0%
Licensed Master's Social Workers (LMSWs)	28.6%	71.4%	0.0%	0.0%	28.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	33.3%	0.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	11.1%	55.6%	11.1%	0.0%	22.2%
Nurse Practitioners (Behavioral Health)	0.0%	87.5%	0.0%	37.5%	0.0%
Nurse Practitioners (All other)	0.0%	80.0%	0.0%	0.0%	0.0%
Pharmacists	12.5%	62.5%	0.0%	12.5%	12.5%
Physician Assistants	0.0%	87.5%	0.0%	0.0%	0.0%
Psychiatrists	0.0%	87.5%	0.0%	0.0%	0.0%
Respiratory Therapists	25.0%	66.7%	16.7%	33.3%	50.0%
Registered Nurses (RNs)	27.3%	72.7%	0.0%	9.1%	18.2%
Surgical Technicians	9.1%	72.7%	0.0%	36.4%	36.4%

Table 102. Reasons for Retention Difficulties at Hudson Valley Hospitals

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	100.0%	20.0%	80.0%	0.0%
Clinical Laboratory Technicians	0.0%	0.0%	100.0%	0.0%
Clinical Laboratory Technologists	25.0%	12.5%	87.5%	50.0%
Dietitians/Nutritionists	50.0%	25.0%	75.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	28.6%	14.3%	85.7%	0.0%
Licensed Master's Social Workers (LMSWs)	33.3%	16.7%	100.0%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	25.0%	25.0%	0.0%
Licensed Practical Nurses (LPNs)	50.0%	25.0%	75.0%	0.0%
Nurse Practitioners (Behavioral Health)	0.0%	12.5%	37.5%	0.0%
Nurse Practitioners (All other)	0.0%	14.3%	85.7%	0.0%
Pharmacists	0.0%	33.3%	33.3%	33.3%
Physician Assistants	0.0%	0.0%	75.0%	0.0%
Psychiatrists	0.0%	0.0%	75.0%	12.5%
Respiratory Therapists	0.0%	10.0%	90.0%	40.0%
Registered Nurses (RNs)	30.0%	20.0%	50.0%	50.0%
Surgical Technicians	20.0%	10.0%	90.0%	0.0%

b. Nursing Homes and Adult Care Facilities

Table 103. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hudson Valley Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	81.8%
CNA Trainees/Temporary Nurse Aides	100.0%	83.3%
Dietitians/Nutritionists	75.0%	0.0%
Home Health Aides	100.0%	71.4%
Infection Preventionist Practitioners	87.5%	33.3%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%
Licensed Master Social Workers (LMSWs)	70.0%	16.7%
Licensed Practical Nurse (LPNs)	100.0%	60.0%
MDS Coordinators	81.8%	33.3%
Nurse Directors/Managers	92.9%	25.0%
Nurse Educators	80.0%	55.6%
Occupational Therapists	63.6%	16.7%
Occupational Therapy Assistants	70.0%	20.0%
Paid Feeding Assistants	100.0%	-
Personal Care Aides	100.0%	100.0%
Physical Therapists	72.7%	16.7%
Physical Therapy Assistants	63.6%	16.7%
Registered Nurses (RNs) Newly Licensed	100.0%	80.0%
Registered Nurses (RNs) Experienced	100.0%	72.2%
Residential Care Aide (ACF/ALR)	50.0%	50.0%
Respiratory Therapists	71.4%	0.0%
Speech-Language Pathologists	60.0%	20.0%

Table 104. Reasons for Recruitment Difficulties at Hudson Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	81.8%	100.0%	0.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	100.0%	100.0%	0.0%	0.0%
Dietitians/Nutritionists	11.1%	77.8%	0.0%	22.2%
Home Health Aides	58.3%	100.0%	8.3%	8.3%
Infection Preventionist Practitioners	71.4%	100.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	14.3%	85.7%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	50.0%	100.0%	0.0%	21.4%
MDS Coordinators	11.1%	100.0%	0.0%	11.1%
Nurse Directors/Managers	7.7%	100.0%	7.7%	0.0%
Nurse Educators	12.5%	100.0%	0.0%	0.0%
Occupational Therapists	0.0%	28.6%	0.0%	14.3%
Occupational Therapy Assistants	0.0%	28.6%	0.0%	14.3%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	40.0%	30.0%	10.0%	10.0%
Physical Therapists	0.0%	37.5%	0.0%	0.0%
Physical Therapy Assistants	0.0%	28.6%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	20.0%	100.0%	0.0%	10.0%
Registered Nurses (RNs) Experienced	29.4%	94.1%	0.0%	11.8%
Residential Care Aide (ACF/ALR)	100.0%	100.0%	0.0%	0.0%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	16.7%	83.3%	0.0%	0.0%

Table 105. Reasons for Recruitment Difficulties at Hudson Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	45.5%	63.6%	18.2%	45.5%
CNA Trainees/ Temporary Nurse Aides	83.3%	0.0%	0.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	11.1%	11.1%
Home Health Aides	16.7%	41.7%	33.3%	25.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	7.1%	21.4%	0.0%
MDS Coordinators	0.0%	0.0%	11.1%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	10.0%	30.0%	10.0%	30.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	30.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	5.9%	23.5%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	0.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 106. Reasons for Retention Difficulties at Hudson Valley Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	22.2%	0.0%	22.2%	66.7%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	100.0%	0.0%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	60.0%	40.0%	100.0%	20.0%
Infection Preventionist Practitioners	0.0%	0.0%	100.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	33.3%	50.0%	83.3%	33.3%
MDS Coordinators	0.0%	0.0%	50.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	20.0%	20.0%	60.0%	0.0%
Physical Therapists	0.0%	0.0%	100.0%	100.0%
Physical Therapy Assistants	0.0%	0.0%	100.0%	100.0%
Registered Nurses (RNs) Newly Licensed	12.5%	12.5%	25.0%	0.0%
Registered Nurses (RNs) Experienced	7.7%	7.7%	38.5%	53.9%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	100.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 107. Reasons for Retention Difficulties at Hudson Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	22.2%	22.2%	66.7%	22.2%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	100.0%	0.0%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	60.0%	20.0%	0.0%	60.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	16.7%	33.3%	0.0%	16.7%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	50.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	20.0%	20.0%	20.0%	40.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	12.5%	62.5%	0.0%
Registered Nurses (RNs) Experienced	7.7%	15.4%	53.9%	7.7%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 108. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hudson Valley Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	22.2%	13.0%
Home Health Aides	62.1%	40.7%
Homemakers	41.7%	37.5%
Intake Coordinator /Schedulers	33.3%	10.7%
Licensed Clinical Social Workers (LCSWs)	30.0%	20.0%
Licensed Master Social Workers (LMSWs)	28.6%	14.3%
Licensed Practical Nurse (LPNs)	55.6%	33.3%
Occupational Therapists	70.0%	20.0%
Occupational Therapy Assistants	0.0%	50.0%
Personal Care Aides	57.7%	45.8%
Physical Therapists	70.0%	30.0%
Physical Therapy Assistants	0.0%	25.0%
Registered Nurses (RNs)	80.0%	42.3%
Respiratory Therapists	0.0%	-
Speech-Language Pathologists	70.0%	30.0%

Table 109. Reasons for Recruitment Difficulties at Hudson Valley Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	66.7%	50.0%	0.0%	0.0%
Home Health Aides	16.7%	11.1%	5.6%	11.1%
Homemakers	60.0%	0.0%	0.0%	40.0%
Intake Coordinator	50.0%	60.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	80.0%	20.0%	0.0%	0.0%
Occupational Therapists	100.0%	14.3%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	86.7%	20.0%	13.3%	40.0%
Physical Therapists	10.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs)	87.5%	8.3%	0.0%	8.3%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	14.3%	0.0%	0.0%

Table 110. Reasons for Recruitment Difficulties at Hudson Valley Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	33.3%	83.3%	0.0%
Home Health Aides	11.1%	11.1%	5.6%
Homemakers	40.0%	40.0%	20.0%
Intake Coordinator	20.0%	60.0%	10.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	33.3%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	50.0%
Licensed Practical Nurse (LPNs)	60.0%	80.0%	40.0%
Occupational Therapists	42.9%	57.1%	28.6%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	60.0%	66.7%	33.3%
Physical Therapists	42.9%	57.1%	28.6%
Physical Therapy Assistants	-	-	-
Registered Nurses (RNs)	33.3%	79.2%	25.0%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	42.9%	57.1%	14.3%

Table 111. Reasons for Retention Difficulties at Hudson Valley Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	33.3%	33.3%	0.0%	66.7%
Home Health Aides	18.2%	18.2%	9.1%	9.1%	18.2%
Homemakers	66.7%	66.7%	33.3%	33.3%	66.7%
Intake Coordinator	100.0%	33.3%	33.3%	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	66.7%	100.0%	33.3%	0.0%
Occupational Therapists	100.0%	50.0%	50.0%	0.0%	50.0%
Occupational Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Personal Care Aides	81.8%	63.6%	45.5%	27.3%	72.7%
Physical Therapists	66.7%	66.7%	66.7%	0.0%	33.3%
Physical Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Registered Nurses (RNs)	72.7%	63.6%	72.7%	36.4%	18.2%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	66.7%	33.3%	66.7%	0.0%	33.3%

Table 112. Reasons for Retention Difficulties at Hudson Valley Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	33.3%	33.3%	33.3%	33.3%	0.0%
Home Health Aides	18.2%	18.2%	18.2%	9.1%	9.1%
Homemakers	66.7%	66.7%	66.7%	33.3%	33.3%
Intake Coordinator	66.7%	33.3%	0.0%	33.3%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	66.7%	33.3%	33.3%	0.0%	0.0%
Occupational Therapists	50.0%	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	54.6%	4.5%	63.6%	36.4%	54.6%
Physical Therapists	66.7%	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	63.6%	36.4%	9.1%	0.0%	18.2%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	33.3%	0.0%	33.3%	0.0%	0.0%

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 113. The Number of Graduations for Selected Health Care Occupations in the Hudson Valley, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	265	288	288	246	258	-7	-2.6%
Clinical Laboratory Technicians	26	15	20	15	29	3	11.5%
Clinical Laboratory Technologists	25	34	34	35	31	6	24.0%
Creative Arts Therapists ^b	35	44	39	38	24	-11	-31.4%
Dental Assistants	53	61	43	88	98	45	84.9%
Dental Hygienists	17	17	16	20	0	-17	-100.0%
EMTs and Paramedics	50	55	23	46	33	-17	-34.0%
Health Care Administrators	161	134	121	111	119	-42	-26.1%
License Practical Nurses (LPNs)	259	250	245	210	129	-130	-50.2%
Marriage and Family Therapists	41	38	31	26	23	-18	-43.9%
Medical Assistants	180	112	74	82	110	-70	-38.9%
Mental Health Counselors	140	138	75	89	72	-68	-48.6%
Occupational Therapists	83	134	97	105	102	19	22.9%
Occupational Therapy Assistants	87	70	81	37	67	-20	-23.0%
Phlebotomists	24	20	22	22	46	22	91.7%
Physical Therapists	172	179	175	159	155	-17	-9.9%
Physical Therapy Assistants	20	16	16	15	16	-4	-20.0%
Physician Assistants	62	95	112	103	113	51	82.3%
Radiation Therapists and Technologists	49	51	61	65	38	-11	-22.4%
Recreational Therapists	8	13	6	5	3	-5	-62.5%
Registered Nurses (RNs) ^c	1,158	1,011	919	1,144	1,305	147	12.7%
Registered Nurses with Advanced Education ^d	81	98	83	119	148	67	82.7%
Respiratory Therapists	12	13	33	24	33	21	175.0%
Social Workers ^e	151	150	150	131	73	-78	-51.7%
Substance Abuse/Addiction Counseling	27	38	17	16	21	-6	-22.2%
Surgical Technology/Technologist	18	17	16	0	19	1	5.6%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 114. Number of Licensed Individuals in Selected Health Care Professions in the Hudson Valley, 2019-2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	235	237	244	245	245	10	4.3%
Clinical Laboratory Technologists	1,257	1,269	1,240	1,217	1,211	-46	-3.7%
Dental Assistants	137	136	135	131	123	-14	-10.2%
Dental Hygienists	1,263	1,284	1,271	1,281	1,281	18	1.4%
Dietitians/Nutritionists	820	800	844	845	840	20	2.4%
Licensed Practical Nurses (LPNs)	7,606	7,681	7,493	7,431	7,240	-366	-4.8%
Nurse Practitioners ^a	3,084	3,317	3,589	3,719	4,137	1,053	34.1%
Occupational Therapists	1,743	1,828	1,889	1,933	2,024	281	16.1%
Occupational Therapy Assistants	913	952	970	992	1,000	87	9.5%
Pharmacists	2,166	2,148	2,191	2,208	2,153	-13	-0.6%
Physical Therapists	2,749	2,821	2,914	2,995	3,022	273	9.9%
Physical Therapist Assistants	597	608	620	630	625	28	4.7%
Physician Assistants	1,305	1,416	1,508	1,580	1,706	401	30.7%
Registered Nurses (RNs)	34,669	35,119	36,398	36,885	37,459	2,790	8.0%
Respiratory Therapists	744	769	746	756	760	16	2.2%
Social Workers ^b	7,670	7,907	8,287	8,540	8,903	1,233	16.1%
Speech-Language Pathologists	2,654	2,757	2,817	2,866	2,961	307	11.6%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 115. Employment Projections for Selected Health Care Occupations for the Hudson Valley, 2020-2030

Occupational Title	2020	2023	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	430	490	60	14.0%	36
Clinical Laboratory Technologists and Technicians	1,550	1,820	270	17.4%	127
Dental Assistants	2,020	2,380	360	17.8%	286
Dental Hygienists	1,790	2,110	320	17.9%	152
Diagnostic Medical Sonographers	550	710	160	29.1%	66
Dietetic Technicians	120	150	30	25.0%	13
Dietitians and Nutritionists	680	860	180	26.5%	78
Emergency Medical Technicians and Paramedics	2,250	2,830	580	25.8%	228
Healthcare Social Workers	1,920	2,400	480	25.0%	248
Home Health and Personal Care Aides	38,340	53,880	15,540	40.5%	7,114
Licensed Practical and Licensed Vocational Nurses	6,740	8,250	1,510	22.4%	711
Magnetic Resonance Imaging Technologists	220	260	40	18.2%	24
Medical and Health Services Managers	3,410	4,890	1,480	43.4%	458
Medical Assistants	2,900	3,720	820	28.3%	472
Medical Secretaries	610	760	150	24.6%	95
Medical Transcriptionists	1,350	1,750	400	29.6%	250
Mental Health and Substance Abuse Social Workers	1,530	1,850	320	20.9%	192
Nuclear Medicine Technologists	110	120	10	9.1%	11
Nurse Practitioners	1,530	2,510	980	64.1%	198
Nursing Assistants	9,920	11,890	1,970	19.9%	1,517
Occupational Therapists	1,770	2,240	470	26.6%	157
Occupational Therapy Assistants	840	1,220	380	45.2%	168
Orderlies	200	230	30	15.0%	23
Pharmacists	2,060	2,330	270	13.1%	107
Pharmacy Aides	210	220	10	4.8%	31
Pharmacy Technicians	1,560	1,950	390	25.0%	169
Phlebotomists	1,040	1,360	320	30.8%	172
Physical Therapist Assistants	890	1,300	410	46.1%	171
Physical Therapists	2,700	3,440	740	27.4%	194
Physician Assistants	1,310	1,850	540	41.2%	144
Psychiatric Aides	1,080	1,220	140	13.0%	154
Radiation Therapists	150	170	20	13.3%	12
Radiologic Technologists	1,540	1,780	240	15.6%	144
Recreational Therapists	210	240	30	14.3%	23
Registered Nurses (RNs)	21,500	25,580	4,080	19.0%	1,628
Respiratory Therapists	730	970	240	32.9%	64
Speech-Language Pathologists	1,790	2,510	720	40.2%	202
Surgical Technologists	790	920	130	16.5%	73

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

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

E. Long Island

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Long Island region has significantly less poverty than the state as a whole.
- The rates of heart disease deaths and of heart disease hospitalizations are higher in the Long Island region than in the state as a whole.

Health Care Employment

- Overall, the number of jobs in health care settings in the Long Island region increased between 2018 and 2022.
- The number of jobs in hospitals, ambulatory care, and home health care in the Long Island region increased between 2018 and 2022. In contrast, the number of jobs in nursing homes declined during the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Long Island region.
- Hospitals in the Long Island region also reported that clinical laboratory technologists, clinical laboratory technicians, behavioral health nurse practitioners, physician assistants, psychiatrists, and respiratory therapists are also among the most difficult to recruit and retain.
- Certified nurse aides/assistants, nurse directors/managers, and personal care aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Long Island region also indicated that home health aides, homemakers, and personal care aides are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- The number of both RNs and social worker graduations increased in the Long Island region between 2018 and 2021.
- There are over 9,200 projected average annual openings in the Long Island region for home health and personal care aides, nearly 2,300 projected average annual openings for RNs, and over 2,200 projected average annual openings for nursing assistants.

1. Population and Health Care Indicators

Table 116. Selected Population Characteristics for Long Island, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	2,913,646	N/A	14.6%
Population under 100% FPL	171,072	6.0%	13.6%
Population under 200% FPL	412,234	14.4%	28.3%
Population aged birth to 17 years	614,390	21.1%	20.6%
Population aged 65 and older	513,857	17.6%	17.0%
Population female aged 15 to 44	525,935	18.1%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	608	0.7%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	18,985	7.3%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	12,764	4.4%	3.9%
Black/African American, non-Hispanic	261,464	9.0%	13.8%
Hispanic/Latino	557,055	19.1%	19.5%
Asian/Pacific Islander, non-Hispanic	219,795	7.5%	8.8%
American Indian/Native Alaskan, non-Hispanic	3,450	0.1%	0.2%
Two or more/other races	70,275	2.4%	3.1%
Population with less than a high school education ^b	181,181	8.9%	12.4%
Population with a high school diploma or equivalent ^b	478,970	23.5%	24.9%
Population with an associate degree ^b	177,060	8.7%	8.8%
Population with a bachelor's degree ^b	479,887	23.6%	21.6%
Population with a master's degree or higher ^b	404,318	19.8%	17.2%
Home ownership ^c	789,790	81.8%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 117. Selected Health Indicators for Long Island

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	77,045	904.4	516,974	881.7
Deaths due to heart disease, per 100,000	22,033	258.6	135,955	231.9
Deaths due to all cancers, per 100,000	15,028	176.5	101,440	173.1
Deaths due to diabetes, per 100,000	1,545	18.1	14,414	24.6
Total births, per 1,000 females aged 15 to 44	86,335	56.3	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,959	7.4	19,095	10.9
Low-birthweight births, as a percent of total births	5,168	6.2	40,411	6.4
Late/no prenatal care, as a percent of total births	2,745	3.3	34,266	5.3
Infant deaths, per 1,000 live births	271	3.1	2,764	4.2
Total hospitalizations, per 10,000	1,015,409	1,191.9	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	5,134	6.0	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	792	3.9	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	1,310	5.3	11,691	7.6
Pediatric asthma hospitalization, per 10,000	1,840	10.1	19,462	15.9
Diabetes hospitalizations, per 10,000	15,179	17.8	124,485	21.2
CLRD hospitalizations, per 10,000	17,649	20.7	140,504	24.0
Heart disease hospitalizations, per 10,000	103,462	121.4	585,521	99.9
Total ED visits, per 10,000	2,674,396	3,139.3	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 118. The Number of Jobs in Health Care on Long Island, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between	
						Number	Percent
Hospitals	73,929	76,005	76,195	77,308	76,301	2,372	3.2%
Ambulatory care (excluding home health)	66,852	68,700	63,302	68,361	71,788	4,936	7.4%
Nursing home and residential care facilities	24,490	25,282	23,492	22,227	22,089	-2,401	-9.8%
Home health care	21,211	24,060	23,112	23,908	24,976	3,765	17.8%
Total	186,482	194,047	186,101	191,804	195,154	8,672	4.7%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 119. Number of Jobs and Median Salary for Selected Health Care Occupations on Long Island, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	180	\$65,083
Cardiovascular Technologists and Technicians	620	\$82,533
Clinical Laboratory Technologists and Technicians	3,420	\$87,283
Dental Assistants	4,050	\$48,344
Dental Hygienists	2,710	\$100,607
Diagnostic Medical Sonographers	1,070	\$99,927
Dietitians and Nutritionists	820	\$84,732
Emergency Medical Technicians	1,480	\$45,746
Healthcare Social Workers	2,690	\$63,209
Home Health & Personal Care Aides	40,790	\$36,282
Licensed Practical and Licensed Vocational Nurses	4,940	\$65,014
Magnetic Resonance Imaging Technologists	470	\$105,908
Medical Assistants	7,880	\$46,921
Medical Secretaries and Administrative Assistants	7,460	\$47,740
Medical Transcriptionists	570	\$43,481
Medical and Health Services Managers	3,790	\$161,617
Mental Health and Substance Abuse Social Workers	1,680	\$81,411
Nuclear Medicine Technologists	150	\$108,971
Nurse Practitioners	3,040	\$164,547
Nursing Assistants	13,780	\$50,073
Occupational Therapists	1,380	\$105,489
Occupational Therapy Assistants	350	\$72,075
Orderlies	910	\$49,286
Paramedics	810	\$67,945
Pharmacists	3,040	\$142,157
Pharmacy Aides	280	\$37,067
Pharmacy Technicians	3,410	\$40,305
Phlebotomists	1,820	\$53,790
Physical Therapist Aides	1,060	\$35,746
Physical Therapist Assistants	790	\$69,529
Physical Therapists	3,120	\$106,859
Physician Assistants	3,000	\$147,900
Radiation Therapists	240	\$138,561
Radiologic Technologists and Technicians	2,450	\$87,166
Recreational Therapists	220	\$64,684
Registered Nurses (RNs)	31,230	\$110,696
Respiratory Therapists	1,240	\$104,392
Speech-Language Pathologists	2,410	\$114,476
Surgical Technologists	1,050	\$73,780

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 120. Percent of Respondents Who Indicated Recruitment or Retention Difficulties at Long Island Hospitals

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	20.0%	92.3%
Clinical Laboratory Technicians	100.0%	100.0%
Clinical Laboratory Technologists	100.0%	100.0%
Dietitians/Nutritionists	21.4%	100.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%
Licensed Master's Social Workers (LMSWs)	100.0%	100.0%
Licensed Mental Health Counselors (LMHCs)	100.0%	0.0%
Licensed Practical Nurses (LPNs)	93.3%	92.3%
Nurse Practitioners (Behavioral Health)	100.0%	100.0%
Nurse Practitioners (All other)	93.3%	100.0%
Pharmacists	100.0%	100.0%
Physician Assistants	100.0%	100.0%
Psychiatrists	100.0%	100.0%
Respiratory Therapists	100.0%	100.0%
Registered Nurses (RNs)	100.0%	100.0%
Surgical Technicians	100.0%	100.0%

Table 121. Reasons for Recruitment Difficulties at Long Island Hospitals

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	0.0%	100.0%	0.0%	0.0%	66.7%
Clinical Laboratory Technicians	73.3%	100.0%	0.0%	0.0%	80.0%
Clinical Laboratory Technologists	80.0%	100.0%	0.0%	0.0%	80.0%
Dietitians/Nutritionists	0.0%	100.0%	0.0%	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	92.9%	0.0%	0.0%	0.0%
Licensed Master's Social Workers (LMSWs)	78.6%	21.4%	0.0%	0.0%	78.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	7.7%	0.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	0.0%	21.4%	0.0%	0.0%	92.9%
Nurse Practitioners (Behavioral Health)	0.0%	100.0%	0.0%	0.0%	7.1%
Nurse Practitioners (All other)	0.0%	100.0%	0.0%	0.0%	14.3%
Pharmacists	0.0%	26.7%	0.0%	0.0%	6.7%
Physician Assistants	0.0%	100.0%	0.0%	0.0%	13.3%
Psychiatrists	0.0%	100.0%	0.0%	0.0%	0.0%
Respiratory Therapists	73.3%	100.0%	73.3%	0.0%	80.0%
Registered Nurses (RNs)	73.3%	26.7%	0.0%	0.0%	6.7%
Surgical Technicians	0.0%	26.7%	0.0%	0.0%	86.7%

Table 122. Reasons for Retention Difficulties at Long Island Hospitals

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	91.7%	0.0%	100.0%	0.0%
Clinical Laboratory Technicians	0.0%	0.0%	100.0%	0.0%
Clinical Laboratory Technologists	73.3%	6.7%	100.0%	6.7%
Dietitians/Nutritionists	91.7%	0.0%	100.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	100.0%	0.0%
Licensed Master's Social Workers (LMSWs)	100.0%	0.0%	100.0%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	91.7%	0.0%	100.0%	0.0%
Nurse Practitioners (Behavioral Health)	0.0%	0.0%	100.0%	0.0%
Nurse Practitioners (All other)	0.0%	0.0%	100.0%	0.0%
Pharmacists	0.0%	33.3%	100.0%	0.0%
Physician Assistants	0.0%	0.0%	100.0%	0.0%
Psychiatrists	0.0%	0.0%	100.0%	0.0%
Respiratory Therapists	0.0%	6.7%	100.0%	80.0%
Registered Nurses (RNs)	73.3%	6.7%	100.0%	80.0%
Surgical Technicians	78.6%	0.0%	100.0%	0.0%

b. Nursing Homes and Adult Care Facilities

Table 123. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Long Island Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	66.7%
CNA Trainees/Temporary Nurse Aides	-	-
Dietitians/Nutritionists	0.0%	0.0%
Home Health Aides	94.1%	100.0%
Infection Preventionist Practitioners	66.7%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	94.7%
MDS Coordinators	100.0%	0.0%
Nurse Directors/Managers	100.0%	66.7%
Nurse Educators	100.0%	100.0%
Occupational Therapists	100.0%	33.3%
Occupational Therapy Assistants	100.0%	33.3%
Paid Feeding Assistants	-	-
Personal Care Aides	100.0%	94.1%
Physical Therapists	100.0%	50.0%
Physical Therapy Assistants	100.0%	50.0%
Registered Nurses (RNs) Newly Licensed	100.0%	66.7%
Registered Nurses (RNs) Experienced	100.0%	94.7%
Residential Care Aide (ACF/ALR)	100.0%	100.0%
Respiratory Therapists	-	-
Speech-Language Pathologists	100.0%	0.0%

Table 124. Reasons for Recruitment Difficulties at Long Island Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	66.7%	100.0%	0.0%	33.3%
CNA Trainees/ Temporary Nurse Aides	-	-	-	-
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	100.0%	100.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	50.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	90.0%	95.0%	5.0%	85.0%
MDS Coordinators	0.0%	100.0%	0.0%	0.0%
Nurse Directors/Managers	50.0%	50.0%	0.0%	0.0%
Nurse Educators	50.0%	50.0%	0.0%	0.0%
Occupational Therapists	0.0%	66.7%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	66.7%	0.0%	0.0%
Paid Feeding Assistants				
Personal Care Aides	100.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	66.7%	0.0%	0.0%
Physical Therapy Assistants	0.0%	66.7%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	33.3%	100.0%	33.3%	33.3%
Registered Nurses (RNs) Experienced	89.5%	100.0%	5.3%	5.3%
Residential Care Aide (ACF/ALR)	100.0%	100.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%

Table 125. Reasons for Recruitment Difficulties at Long Island Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	0.0%	33.3%	33.3%	33.3%
CNA Trainees/ Temporary Nurse Aides	-	-	-	-
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	5.0%	5.0%	5.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	50.0%
Nurse Educators	0.0%	0.0%	0.0%	50.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants				
Personal Care Aides	0.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	33.3%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	5.3%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 126. Reasons for Retention Difficulties at Long Island Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	50.0%	0.0%	50.0%	50.0%
CNA Trainees/ Temporary Nurse Aides	-	-	-	-
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	0.0%	100.0%	0.0%
Infection Preventionist Practitioners	-	-	-	-
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	94.4%	100.0%	0.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	50.0%	50.0%	50.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	100.0%	100.0%	0.0%
Occupational Therapy Assistants	0.0%	100.0%	100.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	100.0%	0.0%
Physical Therapists	0.0%	100.0%	100.0%	0.0%
Physical Therapy Assistants	0.0%	100.0%	100.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	50.0%	50.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	5.6%	94.4%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	100.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	-	-	-	-

Table 127. Reasons for Retention Difficulties at Long Island Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	50.0%	50.0%	0.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	-	-	-	-
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	-	-	-	-
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	0.0%	11.1%	0.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	0.0%	50.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	100.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	-	-	-	-

c. Home Health Care

Table 128. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Long Island Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	17.9%	9.1%
Home Health Aides	61.3%	42.3%
Homemakers	53.9%	40.0%
Intake Coordinator /Schedulers	24.2%	10.3%
Licensed Clinical Social Workers (LCSWs)	36.4%	18.2%
Licensed Master Social Workers (LMSWs)	37.5%	28.6%
Licensed Practical Nurse (LPNs)	50.0%	20.0%
Occupational Therapists	50.0%	28.6%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	57.1%	42.3%
Physical Therapists	37.5%	25.0%
Physical Therapy Assistants	0.0%	0.0%
Registered Nurses (RNs)	75.8%	37.9%
Respiratory Therapists	0.0%	0.0%
Speech-Language Pathologists	42.9%	33.3%

Table 129. Reasons for Recruitment Difficulties at Long Island Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	40.0%	60.0%	0.0%	0.0%
Home Health Aides	21.1%	15.8%	5.3%	15.8%
Homemakers	57.1%	14.3%	0.0%	57.1%
Intake Coordinator	50.0%	50.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	83.3%	16.7%	0.0%	0.0%
Occupational Therapists	100.0%	25.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	68.8%	37.5%	6.3%	43.8%
Physical Therapists	100.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs)	92.0%	16.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 130. Reasons for Recruitment Difficulties at Long Island Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	40.0%	60.0%	0.0%
Home Health Aides	15.8%	15.8%	10.5%
Homemakers	28.6%	42.9%	28.6%
Intake Coordinator	0.0%	50.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	75.0%	25.0%
Licensed Master Social Workers (LMSWs)	0.0%	66.7%	33.3%
Licensed Practical Nurse (LPNs)	33.3%	50.0%	50.0%
Occupational Therapists	25.0%	25.0%	25.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	75.0%	68.8%	37.5%
Physical Therapists	33.3%	33.3%	33.3%
Physical Therapy Assistants	-	-	-
Registered Nurses (RNs)	24.0%	72.0%	44.0%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	33.3%	33.3%	33.3%

Table 131. Reasons for Retention Difficulties at Long Island Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	50.0%
Home Health Aides	27.3%	18.2%	9.1%	9.1%	18.2%
Homemakers	75.0%	50.0%	25.0%	25.0%	50.0%
Intake Coordinator	66.7%	0.0%	33.3%	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%	50.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%	50.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	50.0%	50.0%	100.0%	50.0%	0.0%
Occupational Therapists	50.0%	0.0%	50.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	90.9%	63.6%	36.4%	27.3%	63.6%
Physical Therapists	100.0%	50.0%	50.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	81.8%	36.4%	54.6%	27.3%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	50.0%	0.0%	50.0%	0.0%	0.0%

Table 132. Reasons for Retention Difficulties at Long Island Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	50.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	18.2%	27.3%	18.2%	18.2%	9.1%
Homemakers	50.0%	75.0%	50.0%	50.0%	25.0%
Intake Coordinator	66.7%	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	50.0%	50.0%	0.0%	0.0%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	72.7%	63.6%	81.8%	54.6%	45.5%
Physical Therapists	100.0%	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	63.6%	36.4%	9.1%	0.0%	18.2%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%	0.0%

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 133. The Number of Graduations for Selected Health Care Occupations on Long Island, 2018–2022

Occupational Program	School Year					Change Between	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	322	350	373	365	349	27	8.4%
Cardiovascular Technologists and Technicians	8	6	6	8	13	5	62.5%
Clinical Laboratory Technicians	24	18	19	9	10	-14	-58.3%
Clinical Laboratory Technologists	83	93	79	65	76	-7	-8.4%
Clinical Nutritionists	76	57	52	46	58	-18	-23.7%
Creative Arts Therapists ^b	83	86	66	52	68	-15	-18.1%
Dental Assistants	0	0	0	2	17	17	N/A
Dental Hygienists	126	45	49	55	44	-82	-65.1%
Dietitians	20	20	20	20	20	0	0.0%
EMTs and Paramedics	8	9	8	6	8	0	0.0%
Health Care Administrators	250	319	293	236	221	-29	-11.6%
License Practical Nurses (LPNs)	419	402	403	493	412	-7	-1.7%
Marriage and Family Therapists	13	22	18	17	25	12	92.3%
Medical Assistants	683	587	496	311	416	-267	-39.1%
Mental Health Counselors	75	134	144	153	134	59	78.7%
Nuclear Medical Technologists	6	15	15	14	15	9	150.0%
Nurse Midwives	9	12	11	11	2	-7	-77.8%
Nursing and Patient Care Aides and Assistants	48	54	109	200	204	156	325.0%
Occupational Therapists	102	145	174	183	212	110	107.8%
Occupational Therapy Assistants	26	26	28	2	35	9	34.6%
Pharmacists	0	199	187	187	193	193	N/A
Pharmacy Technicians/Assistants	18	31	25	44	98	80	444.4%
Physical Therapists	116	166	156	104	215	99	85.3%
Physical Therapy Assistants	54	51	42	21	84	30	55.6%
Physician Assistants	161	213	198	245	245	84	52.2%
Radiation Therapists and Technologists	56	61	61	62	83	27	48.2%
Recreational Therapists	22	20	13	0	0	-22	-100.0%
Registered Nurses (RNs) ^c	1,235	1,372	1,514	1,512	1,585	350	28.3%
Registered Nurses with Advanced Education ^d	321	428	508	497	478	157	48.9%
Respiratory Therapists	55	69	70	64	65	10	18.2%
Social Workers ^e	656	770	813	748	730	74	11.3%
Substance Abuse/Addiction Counseling	18	26	16	15	25	7	38.9%
Surgical Technology/Technologist	46	40	43	38	31	-15	-32.6%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 134. Number of Licensed Individuals in Selected Health Care Professions on Long Island, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	272	279	278	280	270	-2	-0.7%
Clinical Laboratory Technologists	2,361	2,465	2,476	2,413	2,468	107	4.5%
Dental Assistants	77	80	82	86	82	5	6.5%
Dental Hygienists	1,954	1,983	2,009	2,032	1,999	45	2.3%
Dietitians/Nutritionists	1,160	1,193	1,232	1,248	1,244	84	7.2%
Licensed Practical Nurses (LPNs)	8,604	8,936	8,843	8,758	8,795	191	2.2%
Nurse Practitioners ^a	4,496	5,027	5,435	5,758	6,440	1,944	43.2%
Occupational Therapists	2,604	2,751	2,878	2,962	3,135	531	20.4%
Occupational Therapy Assistants	491	509	522	527	536	45	9.2%
Pharmacists	4,385	4,509	4,690	4,794	4,837	452	10.3%
Physical Therapists	4,121	4,279	4,513	4,651	4,756	635	15.4%
Physical Therapist Assistants	1,095	1,131	1,177	1,194	1,195	100	9.1%
Physician Assistants	3,383	3,698	3,914	4,072	4,384	1,001	29.6%
Registered Nurses (RNs)	46,157	48,153	50,085	51,132	52,590	6,433	13.9%
Respiratory Therapists	1,125	1,211	1,199	1,223	1,266	141	12.5%
Social Workers ^b	9,732	10,105	10,495	10,750	11,075	1,343	13.8%
Speech-Language Pathologists	4,498	4,736	4,869	4,984	5,159	661	14.7%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 135. Employment Projections for Selected Health Care Occupations on Long Island, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	730	850	120	16.4%	62
Clinical Laboratory Technologists and Technicians	3,930	4,590	660	16.8%	336
Dental Assistants	3,660	4,350	690	18.9%	529
Dental Hygienists	2,270	2,690	420	18.5%	192
Diagnostic Medical Sonographers	1,380	1,780	400	29.0%	150
Dietetic Technicians	200	230	30	15.0%	23
Dietitians and Nutritionists	750	890	140	18.7%	74
Emergency Medical Technicians and Paramedics	3,980	4,750	770	19.3%	357
Healthcare Social Workers	2,090	2,610	520	24.9%	272
Home Health and Personal Care Aides	50,310	70,210	19,900	39.6%	9,260
Licensed Practical and Licensed Vocational Nurses	5,850	6,940	1,090	18.6%	599
Magnetic Resonance Imaging Technologists	420	480	60	14.3%	36
Medical and Health Services Managers	4,570	6,530	1,960	42.9%	616
Medical Assistants	6,040	7,640	1,600	26.5%	950
Medical Secretaries	1,590	1,870	280	17.6%	218
Mental Health and Substance Abuse Social Workers	1,460	1,800	340	23.3%	184
Nuclear Medicine Technologists	200	220	20	10.0%	22
Nurse Practitioners	2,600	4,140	1,540	59.2%	334
Nursing Assistants	15,010	17,460	2,450	16.3%	2,205
Occupational Therapists	1,430	1,750	320	22.4%	112
Occupational Therapy Assistants	290	420	130	44.8%	63
Orderlies	900	1,020	120	13.3%	122
Pharmacists	2,600	3,010	410	15.8%	141
Pharmacy Technicians	2,820	3,570	750	26.6%	305
Phlebotomists	1,690	2,260	570	33.7%	287
Physical Therapist Assistants	1,120	1,590	470	42.0%	207
Physical Therapists	3,530	4,520	990	28.0%	259
Physician Assistants	3,320	4,730	1,410	42.5%	361
Psychiatric Aides	970	1,100	130	13.4%	143
Radiation Therapists	250	280	30	12.0%	23
Radiologic Technologists	2,660	3,080	420	15.8%	242
Recreational Therapists	270	320	50	18.5%	25
Registered Nurses (RNs)	31,310	36,520	5,210	16.6%	2,281
Respiratory Therapists	1,250	1,620	370	29.6%	107
Speech-Language Pathologists	3,090	4,250	1,160	37.5%	336
Surgical Technologists	1,090	1,270	180	16.5%	98

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the occupation.
Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

F. Mohawk Valley

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Mohawk Valley region has higher levels of poverty and a higher percent of the population 65 years of age or older than the state as a whole.
- The rates of deaths due to heart disease and hospitalizations due to heart disease are higher in the Mohawk Valley than in the state as a whole. Additionally, the rate of deaths due to diabetes and hospitalizations due to diabetes are higher in the Mohawk Valley region than throughout New York State.

Health Care Employment

- Overall, the number of jobs in health care settings in the Mohawk Valley region declined between 2018 and 2022.
- The number of jobs in ambulatory care in the Mohawk Valley region increased between 2018 and 2022. In contrast, the number of jobs in hospitals, in nursing homes, and in home health care all declined during the same time period.

Employer Demand Surveys

- RNs are among the most difficult to recruit and retain in all health care settings throughout the Mohawk Valley region.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, LPNs, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Certified nurse aides/assistants, home health aides, and personal care aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Mohawk Valley region also indicated that home health aides are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- The number of RN graduations increased in the Mohawk Valley region between 2018 and 2022. In contrast, the number of LPN graduations decreased during the same time period.
- There are more than 2,000 projected average annual openings in the Mohawk Valley region for home health and personal care aides.

1. Population and Health Care Indicators

Table 136. Selected Population Characteristics for the Mohawk Valley, 2018–2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	483,900	N/A	2.4%
Population under 100% FPL	63,651	13.7%	13.6%
Population under 200% FPL	146,616	31.6%	28.3%
Population aged birth to 17 years	97,951	20.2%	20.6%
Population aged 65 and older	96,758	20.0%	17.0%
Population female aged 15 to 44	86,450	17.9%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	133	0.8%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	4,764	11.0%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	1,681	3.9%	3.9%
Black/African American, non-Hispanic	17,359	3.6%	13.8%
Hispanic/Latino	29,778	6.2%	19.5%
Asian/Pacific Islander, non-Hispanic	12,402	2.6%	8.8%
American Indian/Native Alaskan, non-Hispanic	572	0.1%	0.2%
Two or more/other races	14,334	3.0%	3.1%
Population with less than a high school education ^b	34,992	10.4%	12.4%
Population with a high school diploma or equivalent ^b	109,281	32.5%	24.9%
Population with an associate degree ^b	45,418	13.5%	8.8%
Population with a bachelor's degree ^b	48,742	14.5%	21.6%
Population with a master's degree or higher ^b	37,441	11.1%	17.2%
Home ownership ^c	136,212	70.5%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 137. Selected Health Indicators for the Mohawk Valley

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	16,845	1,156.9	516,974	881.7
Deaths due to heart disease, per 100,000	3,888	267.0	135,955	231.9
Deaths due to all cancers, per 100,000	3,389	233.0	101,440	173.1
Deaths due to diabetes, per 100,000	524	36.0	14,414	24.6
Total births, per 1,000 females aged 15 to 44	14,688	57.0	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	758	15.9	19,095	10.9
Low-birthweight births, as a percent of total births	832	5.9	40,411	6.4
Late/no prenatal care, as a percent of total births	915	6.3	34,266	5.3
Infant deaths, per 1,000 live births	94	6.4	2,764	4.2
Total hospitalizations, per 10,000	167,457	1,150.1	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	443	3.0	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	111	3.3	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	86	2.2	11,691	7.6
Pediatric asthma hospitalization, per 10,000	154	5.2	19,462	15.9
Diabetes hospitalizations, per 10,000	3,425	23.5	124,485	21.2
CLRD hospitalizations, per 10,000	4,095	28.1	140,504	24.0
Heart disease hospitalizations, per 10,000	17,662	121.3	585,521	99.9
Total ED visits, per 10,000	685,733	4,709.5	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 138. The Number of Jobs in Health Care in the Mohawk Valley, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	11,838	11,785	10,678	9,632	8,986	-2,852	-24.1%
Ambulatory care (excluding home health)	6,967	6,929	7,003	7,576	7,500	533	7.7%
Nursing home and residential care facilities	6,418	6,278	5,911	5,224	5,021	-1,397	-21.8%
Home health care	1,761	1,535	1,418	1,370	1,344	-417	-23.7%
Total	26,984	26,527	25,010	23,802	22,851	-4,133	-15.3%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 139. Number of Jobs and Median Salary for Selected Health Care Occupations in the Mohawk Valley, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	N/A	\$97,839
Cardiovascular Technologists and Technicians	70	\$66,109
Clinical Laboratory Technologists and Technicians	240	\$69,215
Dental Assistants	370	\$39,784
Dental Hygienists	270	\$80,907
Diagnostic Medical Sonographers	130	\$83,101
Dietitians and Nutritionists	120	\$69,063
Emergency Medical Technicians	220	\$32,891
Healthcare Social Workers	340	\$49,982
Home Health & Personal Care Aides	8,910	\$33,987
Licensed Practical and Licensed Vocational Nurses	1,520	\$50,749
Magnetic Resonance Imaging Technologists	50	\$86,779
Medical Assistants	520	\$39,122
Medical Secretaries and Administrative Assistants	980	\$38,348
Medical Transcriptionists	100	\$30,049
Medical and Health Services Managers	420	\$111,298
Mental Health and Substance Abuse Social Workers	280	\$78,902
Nuclear Medicine Technologists	N/A	\$87,299
Nurse Practitioners	350	\$112,071
Nursing Assistants	2,020	\$36,410
Occupational Therapists	250	\$83,137
Occupational Therapy Assistants	70	\$53,929
Orderlies	N/A	\$36,272
Paramedics	150	\$50,085
Pharmacists	450	\$128,475
Pharmacy Aides	60	\$34,766
Pharmacy Technicians	570	\$38,015
Phlebotomists	120	\$39,757
Physical Therapist Aides	N/A	\$35,397
Physical Therapist Assistants	120	\$52,531
Physical Therapists	340	\$86,938
Physician Assistants	260	\$122,839
Psychiatric Aides	N/A	\$62,115
Radiologic Technologists and Technicians	330	\$68,236
Recreational Therapists	N/A	\$61,195
Registered Nurses	3,900	\$83,365
Respiratory Therapists	150	\$76,308
Speech-Language Pathologists	260	\$80,406
Surgical Technologists	90	\$60,688

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 140. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 141. Reasons for Recruitment Difficulties at Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 142. Reasons for Retention Difficulties Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 143. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Mohawk Valley Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	83.3%
CNA Trainees/Temporary Nurse Aides	80.0%	80.0%
Dietitians/Nutritionists	60.0%	0.0%
Home Health Aides	100.0%	100.0%
Infection Preventionist Practitioners	100.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	66.7%	33.3%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%
Licensed Practical Nurse (LPNs)	85.7%	80.0%
MDS Coordinators	80.0%	0.0%
Nurse Directors/Managers	100.0%	50.0%
Nurse Educators	100.0%	0.0%
Occupational Therapists	85.7%	16.7%
Occupational Therapy Assistants	83.3%	16.7%
Paid Feeding Assistants	-	-
Personal Care Aides	100.0%	100.0%
Physical Therapists	100.0%	40.0%
Physical Therapy Assistants	100.0%	40.0%
Registered Nurses (RNs) Newly Licensed	100.0%	0.0%
Registered Nurses (RNs) Experienced	100.0%	42.9%
Residential Care Aide (ACF/ALR)	-	-
Respiratory Therapists	100.0%	100.0%
Speech-Language Pathologists	100.0%	50.0%

Table 144. Reasons for Recruitment Difficulties at Mohawk Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	71.4%	85.7%	14.3%	14.3%
CNA Trainees/ Temporary Nurse Aides	75.0%	75.0%	25.0%	25.0%
Dietitians/Nutritionists	0.0%	66.7%	0.0%	0.0%
Home Health Aides	100.0%	100.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	50.0%	50.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	50.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	100.0%	0.0%
Licensed Practical Nurse (LPNs)	66.7%	83.3%	16.7%	50.0%
MDS Coordinators	0.0%	75.0%	0.0%	50.0%
Nurse Directors/Managers	28.6%	71.4%	0.0%	28.6%
Nurse Educators	0.0%	100.0%	0.0%	50.0%
Occupational Therapists	0.0%	83.3%	0.0%	33.3%
Occupational Therapy Assistants	40.0%	60.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	83.3%	0.0%	33.3%
Physical Therapy Assistants	20.0%	60.0%	0.0%	20.0%
Registered Nurses (RNs) Newly Licensed	33.3%	66.7%	0.0%	0.0%
Registered Nurses (RNs) Experienced	28.6%	71.4%	14.3%	14.3%
Residential Care Aide (ACF/ALR)	-	-	-	-
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	20.0%	60.0%	0.0%	0.0%

Table 145. Reasons for Recruitment Difficulties at Mohawk Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	57.1%	28.6%	42.9%	42.9%
CNA Trainees/ Temporary Nurse Aides	75.0%	50.0%	75.0%	75.0%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	50.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	16.7%	33.3%	66.7%	16.7%
MDS Coordinators	0.0%	0.0%	50.0%	25.0%
Nurse Directors/Managers	0.0%	0.0%	28.6%	14.3%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	16.7%	16.7%	0.0%	0.0%
Occupational Therapy Assistants	20.0%	20.0%	20.0%	20.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	16.7%	0.0%	16.7%
Physical Therapy Assistants	20.0%	20.0%	20.0%	20.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	14.3%	28.6%	14.3%
Residential Care Aide (ACF/ALR)	-	-	-	-
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	20.0%

Table 146. Reasons for Retention Difficulties at Mohawk Valley Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	40.0%	40.0%	80.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	75.0%	25.0%	25.0%	0.0%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	0.0%	100.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	50.0%	25.0%	75.0%	25.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	33.3%	33.3%	66.7%	33.3%
Nurse Educators	-	-	-	-
Occupational Therapists	0.0%	0.0%	100.0%	100.0%
Occupational Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	100.0%	0.0%
Physical Therapists	100.0%	0.0%	50.0%	0.0%
Physical Therapy Assistants	50.0%	0.0%	50.0%	50.0%
Registered Nurses (RNs) Newly Licensed				
Registered Nurses (RNs) Experienced	66.7%	0.0%	33.3%	33.3%
Residential Care Aide (ACF/ALR)	-	-	-	-
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	50.0%	0.0%	0.0%	0.0%

Table 147. Reasons for Retention Difficulties at Mohawk Valley Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	0.0%	40.0%	20.0%	60.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	25.0%	0.0%	50.0%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	100.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	25.0%	50.0%	25.0%	25.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	33.3%	66.7%	33.3%
Nurse Educators	-	-	-	-
Occupational Therapists	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	100.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	0.0%	0.0%	0.0%
Physical Therapists	50.0%	50.0%	0.0%	0.0%
Physical Therapy Assistants	50.0%	50.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed				
Registered Nurses (RNs) Experienced	0.0%	66.7%	33.3%	0.0%
Residential Care Aide (ACF/ALR)	-	-	-	-
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	50.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 148. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Mohawk Valley Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	14.3%	6.3%
Home Health Aides	64.7%	47.1%
Homemakers	75.0%	71.4%
Intake Coordinator /Schedulers	31.6%	15.8%
Licensed Clinical Social Workers (LCSWs)	40.0%	0.0%
Licensed Master Social Workers (LMSWs)	40.0%	0.0%
Licensed Practical Nurse (LPNs)	66.7%	46.2%
Occupational Therapists	40.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	47.6%	45.5%
Physical Therapists	40.0%	0.0%
Physical Therapy Assistants	25.0%	0.0%
Registered Nurses (RNs)	80.0%	52.6%
Respiratory Therapists	0.0%	-
Speech-Language Pathologists	60.0%	0.0%

Table 149. Reasons for Recruitment Difficulties at Mohawk Valley Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	50.0%	100.0%	0.0%	0.0%
Home Health Aides	36.4%	9.1%	0.0%	9.1%
Homemakers	50.0%	33.3%	0.0%	33.3%
Intake Coordinator	83.3%	33.3%	0.0%	16.7%
Licensed Clinical Social Workers (LCSWs)	100.0%	50.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	50.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	87.5%	12.5%	0.0%	12.5%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	70.0%	50.0%	10.0%	10.0%
Physical Therapists	100.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	87.5%	12.5%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 150. Reasons for Recruitment Difficulties at Mohawk Valley Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	50.0%	100.0%	0.0%
Home Health Aides	9.1%	36.4%	27.3%
Homemakers	33.3%	66.7%	50.0%
Intake Coordinator	16.7%	83.3%	16.7%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	50.0%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	50.0%
Licensed Practical Nurse (LPNs)	25.0%	75.0%	37.5%
Occupational Therapists	50.0%	50.0%	0.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	30.0%	90.0%	40.0%
Physical Therapists	50.0%	50.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%
Registered Nurses (RNs)	37.5%	87.5%	50.0%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	33.3%	0.0%

Table 151. Reasons for Retention Difficulties at Mohawk Valley Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	100.0%
Home Health Aides	37.5%	37.5%	12.5%	12.5%	37.5%
Homemakers	60.0%	60.0%	20.0%	20.0%	60.0%
Intake Coordinator	66.7%	66.7%	33.3%	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	83.3%	66.7%	50.0%	33.3%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	90.0%	80.0%	20.0%	20.0%	80.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	90.0%	60.0%	50.0%	20.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

Table 152. Reasons for Retention Difficulties at Mohawk Valley Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	12.5%	12.5%	25.0%	37.5%	12.5%
Homemakers	20.0%	20.0%	40.0%	60.0%	20.0%
Intake Coordinator	33.3%	33.3%	0.0%	33.3%	66.7%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	33.3%	16.7%	33.3%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	40.0%	20.0%	60.0%	50.0%	50.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	40.0%	10.0%	30.0%	10.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 153. The Number of Graduations for Selected Health Care Occupations in the Mohawk Valley, 2018–2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Clinical Nutritionists	16	18	12	10	17	1	6.3%
Dietitians	46	41	31	27	29	-17	-37.0%
EMTs and Paramedics	29	21	20	16	25	-4	-13.8%
Health Care Administrators	70	104	103	97	94	24	34.3%
License Practical Nurses (LPNs)	115	100	92	118	98	-17	-14.8%
Medical Assistants	13	2	0	0	0	-13	-100.0%
Occupational Therapists	59	59	53	61	32	-27	-45.8%
Physical Therapists	299	312	248	191	151	-148	-49.5%
Physical Therapy Assistants	20	15	21	16	18	-2	-10.0%
Radiation Therapists and Technologists	35	36	33	28	33	-2	-5.7%
Recreational Therapists	7	16	21	12	11	4	57.1%
Registered Nurses (RNs) ^a	365	331	374	339	318	47	12.9%
Registered Nurses with Advanced Education ^b	42	51	68	51	82	40	95.2%
Respiratory Therapists	18	15	14	15	12	-6	-33.3%
Social Workers ^c	8	4	8	3	4	-4	-50.0%
Substance Abuse/Addiction Counseling	21	10	16	18	18	-3	-14.3%
Surgical Technology/Technologist	13	16	10	7	9	-4	-30.8%

^a Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^b Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^c Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 154. Number of Licensed Individuals in Selected Health Care Professions in the Mohawk Valley, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	52	52	52	48	49	-3	-5.8%
Clinical Laboratory Technologists	297	289	285	281	278	-19	-6.4%
Dental Assistants	42	43	45	45	49	7	16.7%
Dental Hygienists	292	297	290	288	271	-21	-7.2%
Dietitians/Nutritionists	106	106	107	108	105	-1	-0.9%
Licensed Practical Nurses (LPNs)	3,236	3,243	3,122	3,109	3,056	-180	-5.6%
Nurse Practitioners ^a	563	595	617	653	728	165	29.3%
Occupational Therapists	388	405	422	433	440	52	13.4%
Occupational Therapy Assistants	123	121	125	126	122	-1	-0.8%
Pharmacists	491	481	490	492	469	-22	-4.5%
Physical Therapists	443	452	471	487	495	52	11.7%
Physical Therapist Assistants	241	243	253	260	242	1	0.4%
Physician Assistants	245	251	271	283	281	36	14.7%
Registered Nurses (RNs)	7,213	7,236	7,456	7,522	7,559	346	4.8%
Respiratory Therapists	245	247	252	251	257	12	4.9%
Social Workers ^b	724	762	777	796	837	113	15.6%
Speech-Language Pathologists	237	259	256	257	262	25	10.5%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 155. Employment Projections for Selected Health Care Occupations for the Mohawk Valley, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	110	130	20	18.2%	12
Clinical Laboratory Technologists and Technicians	340	390	50	14.7%	25
Dental Assistants	350	410	60	17.1%	56
Dental Hygienists	280	330	50	17.9%	25
Diagnostic Medical Sonographers	160	210	50	31.3%	25
Dietitians and Nutritionists	100	110	10	10.0%	1
Emergency Medical Technicians and Paramedics	430	550	120	27.9%	42
Healthcare Social Workers	460	570	110	23.9%	51
Home Health and Personal Care Aides	11,040	15,370	4,330	39.2%	2,033
Licensed Practical and Licensed Vocational Nurses	2,090	2,410	320	15.3%	202
Magnetic Resonance Imaging Technologists	60	70	10	16.7%	1
Medical and Health Services Managers	500	710	210	42.0%	71
Medical Assistants	420	540	120	28.6%	72
Medical Transcriptionists	90	90	0	0.0%	20
Mental Health and Substance Abuse Social Workers	270	320	50	18.5%	35
Nurse Practitioners	360	620	260	72.2%	56
Nursing Assistants	2,690	3,060	370	13.8%	377
Occupational Therapists	220	260	40	18.2%	24
Pharmacists	650	720	70	10.8%	27
Pharmacy Technicians	490	610	120	24.5%	52
Phlebotomists	80	90	10	12.5%	11
Physical Therapist Assistants	140	200	60	42.9%	26
Physical Therapists	320	400	80	25.0%	28
Physician Assistants	350	500	150	42.9%	45
Psychiatric Aides	500	570	70	14.0%	67
Radiologic Technologists	360	420	60	16.7%	36
Registered Nurses (RNs)	4,370	5,090	720	16.5%	322
Respiratory Therapists	170	220	50	29.4%	15
Speech-Language Pathologists	190	260	70	36.8%	27
Surgical Technologists	90	110	20	22.2%	2

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

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

G. 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).



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- New York City has higher levels of poverty than the state as a whole.
- There are higher rates of asthma and of diabetes hospitalizations in New York City compared to the state as a whole.

Health Care Employment

- Overall, the number of jobs in health care settings in New York City increased between 2018 and 2022.
- The number of jobs in hospitals, ambulatory care, and home health care in New York City increased between 2018 and 2022. In contrast, the number of jobs in nursing homes declined during the same time period.

Employer Demand Surveys

- Hospitals in New York City reported that clinical laboratory technologists, psychiatrists, respiratory therapists, and surgical technicians are among the most difficult to recruit and retain.
- Certified nurse aides/assistants, LPNs, nurse directors/managers, and RNs are being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in New York City indicated that RNs, occupational therapists, home health aides, speech-language pathologists, and LPNs are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- The number of both LPN and social worker graduations increased in New York City between 2018 and 2022.
- There are nearly 62,000 projected average annual openings in New York City for home health and personal care aides, over 5,700 projected average annual openings for RNs, almost 5,200 projected average annual openings for nursing assistants, and more than 2,000 projected average annual openings for medical assistants.

1. Population and Health Care Indicators

Table 156. Selected Population Characteristics for New York City, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	8,622,467	N/A	43.1%
Population under 100% FPL	1,459,608	17.2%	13.6%
Population under 200% FPL	2,891,265	34.1%	28.3%
Population aged birth to 17 years	1,772,560	20.6%	20.6%
Population aged 65 and older	1,335,639	15.5%	17.0%
Population female aged 15 to 44	1,864,885	21.6%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	1,947	0.8%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	60,273	5.8%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	37,465	4.0%	3.9%
Black/African American, non-Hispanic	1,810,769	21.0%	13.8%
Hispanic/Latino	2,503,005	29.0%	19.5%
Asian/Pacific Islander, non-Hispanic	1,241,611	14.4%	8.8%
American Indian/Native Alaskan, non-Hispanic	15,422	0.2%	0.2%
Two or more/other races	266,432	3.1%	3.1%
Population with less than a high school education ^b	1,021,797	16.7%	12.4%
Population with a high school diploma or equivalent ^b	1,430,444	23.3%	24.9%
Population with an associate degree ^b	395,246	6.5%	8.8%
Population with a bachelor's degree ^b	1,423,801	23.2%	21.6%
Population with a master's degree or higher ^b	1,039,873	17.0%	17.2%
Home ownership ^c	1,081,125	32.9%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 157. Selected Health Indicators for New York City

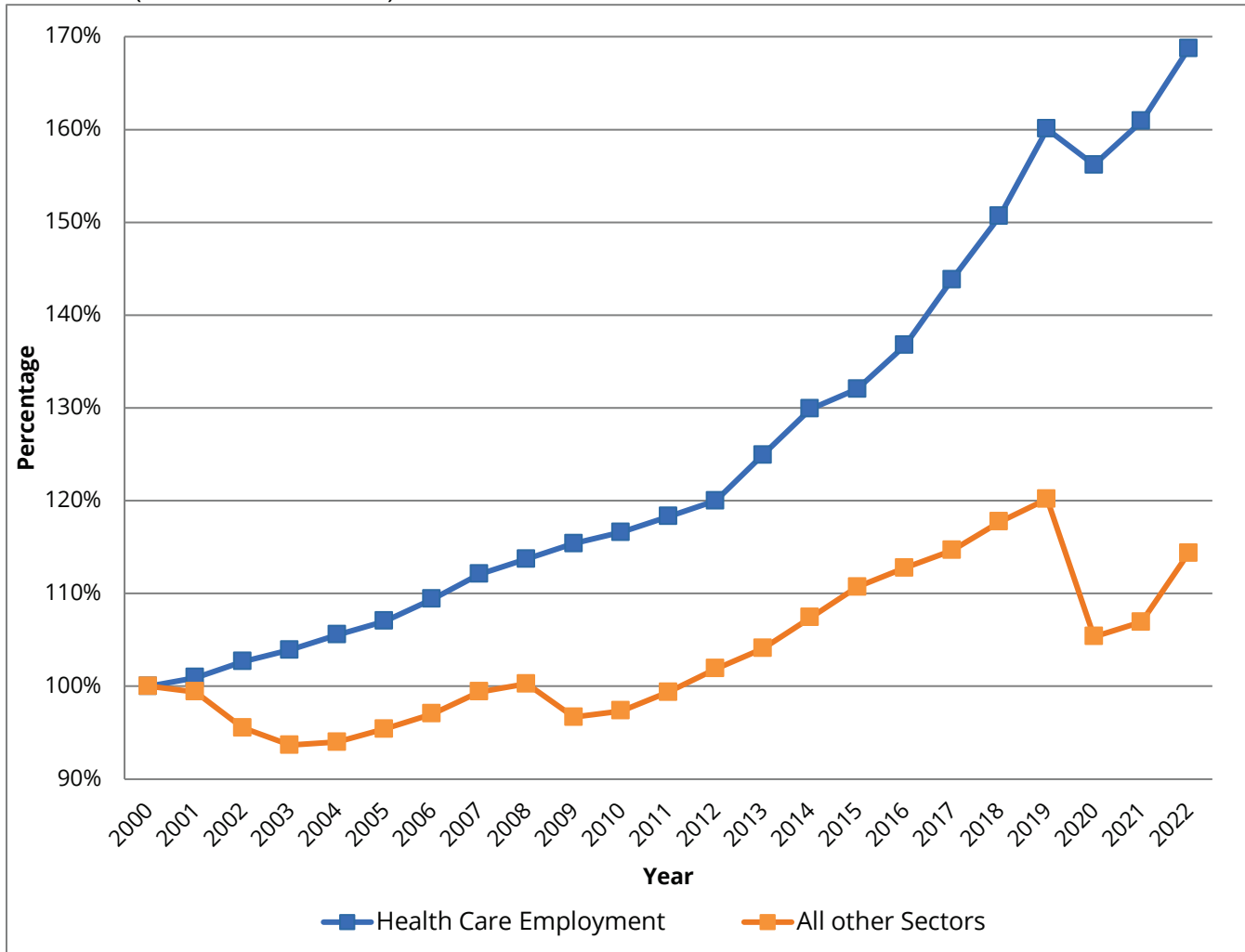
Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	191,432	760.0	516,974	881.7
Deaths due to heart disease, per 100,000	57,060	226.5	135,955	231.9
Deaths due to all cancers, per 100,000	35,785	142.1	101,440	173.1
Deaths due to diabetes, per 100,000	6,085	24.2	14,414	24.6
Total births, per 1,000 females aged 15 to 44	306,972	55.3	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	7,573	11.5	19,095	10.9
Low-birthweight births, as a percent of total births	20,324	6.8	40,411	6.4
Late/no prenatal care, as a percent of total births	19,882	6.5	34,266	5.3
Infant deaths, per 1,000 live births	1,132	3.7	2,764	4.2
Total hospitalizations, per 10,000	2,870,327	1,139.5	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	31,093	12.3	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	4,088	5.2	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	7,557	12.3	11,691	7.6
Pediatric asthma hospitalization, per 10,000	12,702	24.3	19,462	15.9
Diabetes hospitalizations, per 10,000	61,483	24.4	124,485	21.2
CLRD hospitalizations, per 10,000	64,523	25.6	140,504	24.0
Heart disease hospitalizations, per 10,000	231,838	92.0	585,521	99.9
Total ED visits, per 10,000	10,685,156	4,241.9	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Figure 9. Growth of Employment in New York City, Health Care Sector and All Other Employment Sectors, 2000-2022 (Standardized to 2000)



Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

Table 158. The Number of Jobs in Health Care in New York City, by Setting, 2018-2022

Setting	2018	2019	2020	2021	2022	Change Between	
						Number	Percent
Hospitals	205,108	208,304	211,577	210,874	212,097	6,989	3.4%
Ambulatory care (excluding home health)	129,152	134,312	122,008	132,943	142,178	13,026	10.1%
Nursing home and residential care facilities	49,834	49,134	45,785	43,542	42,301	-7,533	-15.1%
Home health care	178,335	205,851	203,713	213,270	233,309	54,974	30.8%
Total	562,429	597,601	583,083	600,629	629,885	67,456	12.0%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 159. Number of Jobs and Median Salary for Selected Health Care Occupations in New York City, 2023

Occupational Title	Number of Jobs	Median Salary
Cardiovascular Technologists and Technicians	1,360	\$69,141
Clinical Laboratory Technologists and Technicians	7,680	\$85,315
Dental Assistants	7,070	\$50,092
Dental Hygienists	4,600	\$100,607
Diagnostic Medical Sonographers	2,450	\$100,114
Dietitians and Nutritionists	2,150	\$81,006
Emergency Medical Technicians	5,830	\$51,026
Healthcare Social Workers	13,140	\$60,882
Home Health & Personal Care Aides	351,270	\$35,740
Licensed Practical and Licensed Vocational Nurses	12,410	\$65,378
Magnetic Resonance Imaging Technologists	1,210	\$104,959
Medical Assistants	15,410	\$46,921
Medical Secretaries and Administrative Assistants	16,800	\$48,557
Medical Transcriptionists	1,650	\$38,738
Medical and Health Services Managers	12,440	\$163,943
Mental Health and Substance Abuse Social Workers	6,070	\$81,549
Nuclear Medicine Technologists	320	\$105,003
Nurse Practitioners	7,500	\$148,330
Nursing Assistants	33,280	\$49,615
Occupational Therapists	2,830	\$104,845
Occupational Therapy Assistants	720	\$74,931
Orderlies	1,790	\$48,453
Paramedics	2,220	\$68,967
Pharmacists	8,790	\$139,331
Pharmacy Aides	740	\$41,935
Pharmacy Technicians	10,010	\$38,468
Phlebotomists	2,380	\$49,272
Physical Therapist Aides	1,250	\$35,613
Physical Therapist Assistants	1,250	\$68,179
Physical Therapists	5,180	\$106,614
Physician Assistants	6,550	\$140,194
Psychiatric Aides	N/A	\$49,847
Psychiatric Technicians	1,030	\$53,695
Radiation Therapists	450	\$137,755
Radiologic Technologists and Technicians	5,030	\$86,353
Recreational Therapists	690	\$65,250
Registered Nurses	79,350	\$108,976
Respiratory Therapists	2,660	\$103,640
Speech-Language Pathologists	5,380	\$114,477
Surgical Technologists	2,390	\$66,976

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 160. Percent of Respondents Who Indicated Recruitment or Retention Difficulties at New York City Hospitals

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	63.0%	70.4%
Clinical Laboratory Technicians	74.1%	100.0%
Clinical Laboratory Technologists	100.0%	100.0%
Dietitians/Nutritionists	40.7%	70.4%
Licensed Clinical Social Workers (LCSWs)	96.2%	96.2%
Licensed Master's Social Workers (LMSWs)	96.3%	96.2%
Licensed Mental Health Counselors (LMHCs)	72.0%	100.0%
Licensed Practical Nurses (LPNs)	88.9%	70.4%
Nurse Practitioners (Behavioral Health)	96.2%	100.0%
Nurse Practitioners (All other)	66.7%	96.3%
Pharmacists	74.1%	60.0%
Physician Assistants	96.3%	74.1%
Psychiatrists	100.0%	100.0%
Respiratory Therapists	100.0%	96.2%
Registered Nurses	92.6%	100.0%
Surgical Technicians	100.0%	100.0%

Table 161. Reasons for Recruitment Difficulties at New York City Hospitals

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	0.0%	37.5%	0.0%	0.0%	68.8%
Clinical Laboratory Technicians	33.3%	47.6%	0.0%	0.0%	90.5%
Clinical Laboratory Technologists	26.9%	57.7%	0.0%	19.2%	92.3%
Dietitians/Nutritionists	0.0%	8.3%	0.0%	0.0%	91.7%
Licensed Clinical Social Workers (LCSWs)	0.0%	54.2%	0.0%	0.0%	41.7%
Licensed Master's Social Workers (LMSWs)	28.0%	28.0%	4.0%	0.0%	72.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	5.3%	0.0%	0.0%	52.6%
Licensed Practical Nurses (LPNs)	0.0%	26.1%	0.0%	0.0%	78.3%
Nurse Practitioners (Behavioral Health)	0.0%	54.2%	0.0%	20.8%	41.7%
Nurse Practitioners (All other)	0.0%	42.1%	0.0%	0.0%	52.6%
Pharmacists	0.0%	5.0%	0.0%	0.0%	60.0%
Physician Assistants	0.0%	56.0%	0.0%	0.0%	44.0%
Psychiatrists	0.0%	52.0%	0.0%	0.0%	40.0%
Respiratory Therapists	26.9%	38.5%	26.9%	19.2%	96.2%
Registered Nurses (RNs)	29.2%	25.0%	0.0%	0.0%	41.7%
Surgical Technicians	0.0%	32.0%	0.0%	20.0%	76.0%

Table 162. Reasons for Retention Difficulties at New York City Hospitals

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	35.0	50.0	95.0	0.0
Clinical Laboratory Technicians	0.0	61.1	94.4	0.0
Clinical Laboratory Technologists	29.2	41.7	95.8	20.8
Dietitians/Nutritionists	35.0	50.0	95.0	0.0
Licensed Clinical Social Workers (LCSWs)	29.2	41.7	95.8	0.0
Licensed Master's Social Workers (LMSWs)	29.2	41.7	95.8	0.0
Licensed Mental Health Counselors (LMHCs)	0.0	58.8	64.7	0.0
Licensed Practical Nurses (LPNs)	40.0	55.0	100.0	0.0
Nurse Practitioners (Behavioral Health)	0.0	40.0	76.0	0.0
Nurse Practitioners (All other)	0.0	41.7	95.8	0.0
Pharmacists	0.0	83.3	91.7	8.3
Physician Assistants	5.0	55.0	95.0	0.0
Psychiatrists	0.0	40.0	96.0	4.0
Respiratory Therapists	0.0	41.7	100.0	29.2
Registered Nurses (RNs)	30.8	46.2	80.8	26.9
Surgical Technicians	29.2	41.7	100.0	0.0

b. Nursing Homes and Adult Care Facilities

Table 163. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at New York City Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	90.9%
CNA Trainees/Temporary Nurse Aides	28.6%	100.0%
Dietitians/Nutritionists	83.3%	58.3%
Home Health Aides	80.0%	75.0%
Infection Preventionist Practitioners	100.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	80.0%	72.7%
Licensed Master Social Workers (LMSWs)	83.3%	75.0%
Licensed Practical Nurse (LPNs)	100.0%	92.9%
MDS Coordinators	70.0%	0.0%
Nurse Directors/Managers	100.0%	41.7%
Nurse Educators	77.8%	12.5%
Occupational Therapists	81.8%	20.0%
Occupational Therapy Assistants	90.0%	22.2%
Paid Feeding Assistants	0.0%	-
Personal Care Aides	100.0%	100.0%
Physical Therapists	81.8%	20.0%
Physical Therapy Assistants	90.0%	22.2%
Registered Nurses (RNs) Newly Licensed	100.0%	90.9%
Registered Nurses (RNs) Experienced	100.0%	92.3%
Residential Care Aide (ACF/ALR)	100.0%	100.0%
Respiratory Therapists	100.0%	80.0%
Speech-Language Pathologists	80.0%	40.0%

Table 164. Reasons for Recruitment Difficulties at New York City Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	36.4%	100.0%	0.0%	54.6%
CNA Trainees/ Temporary Nurse Aides	50.0%	100.0%	0.0%	0.0%
Dietitians/Nutritionists	10.0%	90.0%	0.0%	60.0%
Home Health Aides	100.0%	100.0%	0.0%	0.0%
Infection Preventionist Practitioners	25.0%	75.0%	0.0%	12.5%
Licensed Clinical Social Workers (LCSWs)	37.5%	75.0%	0.0%	25.0%
Licensed Master Social Workers (LMSWs)	30.0%	70.0%	0.0%	30.0%
Licensed Practical Nurse (LPNs)	42.9%	92.9%	0.0%	64.3%
MDS Coordinators	14.3%	100.0%	0.0%	0.0%
Nurse Directors/Managers	38.5%	92.3%	0.0%	15.4%
Nurse Educators	28.6%	100.0%	0.0%	14.3%
Occupational Therapists	22.2%	100.0%	0.0%	55.6%
Occupational Therapy Assistants	22.2%	100.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	100.0%	0.0%	0.0%
Physical Therapists	22.2%	100.0%	0.0%	55.6%
Physical Therapy Assistants	22.2%	100.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	40.0%	100.0%	0.0%	70.0%
Registered Nurses (RNs) Experienced	41.7%	100.0%	8.3%	58.3%
Residential Care Aide (ACF/ALR)	50.0%	50.0%	0.0%	50.0%
Respiratory Therapists	20.0%	90.0%	0.0%	50.0%
Speech-Language Pathologists	25.0%	87.5%	0.0%	62.5%

Table 165. Reasons for Recruitment Difficulties at New York City Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	18.2%	27.3%	18.2%	63.6%
CNA Trainees/ Temporary Nurse Aides	50.0%	50.0%	50.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	30.0%	0.0%
Home Health Aides	0.0%	25.0%	0.0%	25.0%
Infection Preventionist Practitioners	0.0%	0.0%	12.5%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	12.5%	25.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	10.0%	20.0%	10.0%
Licensed Practical Nurse (LPNs)	0.0%	21.4%	28.6%	21.4%
MDS Coordinators	0.0%	14.3%	0.0%	0.0%
Nurse Directors/Managers	0.0%	7.7%	30.8%	7.7%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	22.2%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	22.2%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	22.2%	0.0%
Physical Therapy Assistants	0.0%	0.0%	22.2%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	30.0%	20.0%	80.0%
Registered Nurses (RNs) Experienced	0.0%	25.0%	16.7%	66.7%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	50.0%	0.0%
Respiratory Therapists	0.0%	10.0%	20.0%	10.0%
Speech-Language Pathologists	0.0%	12.5%	12.5%	0.0%

Table 166. Reasons for Retention Difficulties at New York City Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	10.0%	10.0%	80.0%	30.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	50.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	100.0%	0.0%
Home Health Aides	0.0%	33.3%	66.7%	0.0%
Infection Preventionist Practitioners	-	-	-	-
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	25.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	33.3%	0.0%
Licensed Practical Nurse (LPNs)	15.4%	23.1%	84.6%	7.7%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	0.0%	100.0%	0.0%
Nurse Educators	100.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	50.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	50.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	100.0%	0.0%
Physical Therapists	0.0%	0.0%	50.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	50.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	10.0%	100.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	16.7%	91.7%	16.7%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	100.0%	0.0%
Respiratory Therapists	0.0%	12.5%	87.5%	0.0%
Speech-Language Pathologists	0.0%	0.0%	50.0%	0.0%

Table 167. Reasons for Retention Difficulties at New York City Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	20.0%	20.0%	10.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	0.0%	0.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	14.3%
Home Health Aides	0.0%	33.3%	0.0%	33.3%
Infection Preventionist Practitioners	-	-	-	-
Licensed Clinical Social Workers (LCSWs)	25.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	22.2%	11.1%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	23.1%	15.4%	15.4%	7.7%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	60.0%	0.0%	20.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	50.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	0.0%	0.0%
Physical Therapists	50.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	50.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	20.0%	10.0%	10.0%	0.0%
Registered Nurses (RNs) Experienced	25.0%	16.7%	25.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	0.0%	0.0%	50.0%
Respiratory Therapists	12.5%	0.0%	0.0%	0.0%
Speech-Language Pathologists	50.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 168. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at New York City Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	18.9%	2.9%
Home Health Aides	62.8%	38.5%
Homemakers	46.7%	33.3%
Intake Coordinator /Schedulers	21.4%	7.5%
Licensed Clinical Social Workers (LCSWs)	23.1%	16.7%
Licensed Master Social Workers (LMSWs)	42.9%	28.6%
Licensed Practical Nurse (LPNs)	61.5%	15.4%
Occupational Therapists	66.7%	33.3%
Occupational Therapy Assistants	0.0%	33.3%
Personal Care Aides	54.1%	35.3%
Physical Therapists	60.0%	30.0%
Physical Therapy Assistants	0.0%	25.0%
Registered Nurses (RNs)	74.4%	32.5%
Respiratory Therapists	0.0%	0.0%
Speech-Language Pathologists	62.5%	62.5%

Table 169. Reasons for Recruitment Difficulties at New York City Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	71.4%	28.6%	0.0%	0.0%
Home Health Aides	18.5%	11.1%	3.7%	11.1%
Homemakers	71.4%	14.3%	0.0%	57.1%
Intake Coordinator	44.4%	55.6%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	87.5%	12.5%	0.0%	0.0%
Occupational Therapists	100.0%	16.7%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	80.0%	25.0%	5.0%	40.0%
Physical Therapists	83.3%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs)	90.6%	18.8%	0.0%	6.3%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	20.0%	0.0%	0.0%

Table 170. Reasons for Recruitment Difficulties at New York City Home HealthCare Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	28.6%	57.1%	14.3%
Home Health Aides	14.8%	14.8%	7.4%
Homemakers	42.9%	57.1%	28.6%
Intake Coordinator	11.1%	44.4%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	66.7%	33.3%
Licensed Master Social Workers (LMSWs)	0.0%	66.7%	33.3%
Licensed Practical Nurse (LPNs)	37.5%	75.0%	62.5%
Occupational Therapists	33.3%	33.3%	33.3%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	75.0%	65.0%	40.0%
Physical Therapists	33.3%	33.3%	33.3%
Physical Therapy Assistants	-	-	-
Registered Nurses (RNs)	25.0%	78.1%	40.6%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	60.0%	40.0%	20.0%

Table 171. Reasons for Retention Difficulties at New York City Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	26.7%	20.0%	6.7%	6.7%	13.3%
Homemakers	100.0%	75.0%	25.0%	25.0%	50.0%
Intake Coordinator	66.7%	33.3%	66.7%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%	50.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%	50.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	50.0%	50.0%	100.0%	50.0%	0.0%
Occupational Therapists	66.7%	33.3%	66.7%	0.0%	33.3%
Occupational Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Personal Care Aides	91.7%	66.7%	33.3%	25.0%	58.3%
Physical Therapists	66.7%	66.7%	66.7%	0.0%	33.3%
Physical Therapy Assistants	0.0%	100.0%	100.0%	0.0%	100.0%
Registered Nurses (RNs)	69.2%	53.9%	61.5%	30.8%	15.4%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	33.3%	33.3%	66.7%	0.0%	33.3%

Table 172. Reasons for Retention Difficulties at New York City Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	100.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	20.0%	20.0%	20.0%	20.0%	6.7%
Homemakers	75.0%	75.0%	75.0%	75.0%	25.0%
Intake Coordinator	66.7%	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	50.0%	50.0%	0.0%	0.0%
Occupational Therapists	66.7%	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Personal Care Aides	75.0%	58.3%	83.3%	66.7%	41.7%
Physical Therapists	66.7%	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	61.5%	38.5%	7.7%	0.0%	15.4%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	66.7%	0.0%	33.3%	0.0%	0.0%

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 173. The Number of Graduations for Selected Health Care Occupations in New York City, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	877	797	883	1,011	1,009	132	15.1%
Clinical Laboratory Technicians	32	26	24	26	44	12	37.5%
Clinical Laboratory Technologists	113	88	102	85	99	-14	-12.4%
Creative Arts Therapists ^b	68	84	64	75	80	12	17.6%
Dental Assistants	186	154	148	91	139	-47	-25.3%
Dental Hygienists	182	177	212	215	276	94	51.6%
Dietitians	285	279	267	275	289	4	1.4%
Electrocardiograph Technologists and Technicians	143	115	131	52	0	-143	-100.0%
EMTs and Paramedics	64	86	46	61	63	-1	-1.6%
Health Care Administrators	1,004	1,052	1,004	1,109	1,148	144	14.3%
License Practical Nurses (LPNs)	243	334	287	347	433	190	78.2%
Marriage and Family Therapists	28	0	9	22	17	-11	-39.3%
Medical Assistants	2,420	2,175	2,067	1,659	2,072	-348	-14.4%
Mental Health Counselors	357	359	411	353	381	24	6.7%
Nurse Anesthetist	13	10	0	0	0	-13	-100.0%
Nurse Midwives	21	26	21	15	24	3	14.3%
Nursing and Patient Care Aides and Assistants	393	360	365	200	374	-19	-4.8%
Occupational Therapists	288	227	257	249	262	-26	-9.0%
Occupational Therapy Assistants	68	35	46	35	35	-33	-48.5%
Opticians, Dispensing	31	28	50	34	17	-14	-45.2%
Optometrists	89	90	96	99	90	1	1.1%
Pharmacists	546	298	328	325	278	-268	-49.1%
Pharmacy Technicians/Assistants	187	152	154	16	17	-170	-90.9%
Phlebotomists	340	321	361	52	0	-340	-100.0%
Physical Therapists	327	298	306	265	333	6	1.8%
Physical Therapy Assistants	64	44	56	47	54	-10	-15.6%
Physician Assistants	665	610	608	602	680	15	2.3%
Radiation Therapists	239	227	231	225	258	19	7.9%
Radiologic Technologists and Therapists	120	135	151	204	122	2	1.7%
Registered Nurses (RNs) ^c	2,777	3,365	4,008	3,869	3,890	1,113	40.1%
Registered Nurses with Advanced Education ^d	654	588	608	804	748	94	14.4%
Respiratory Therapists	28	0	0	43	25	-3	-10.7%
Respiratory Therapy Assistants	43	50	50	24	29	-14	-32.6%
Social Workers ^e	2,980	3,109	3,112	3,664	3,612	632	21.2%
Substance Abuse/Addiction Counseling	31	20	12	23	22	-9	-29.0%
Surgical Technology/Technologist	146	104	138	94	91	-55	-37.7%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 174. Number of Licensed Individuals in Selected Health Care Professions in New York City, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	421	424	420	423	414	-7	-1.7%
Clinical Laboratory Technologists	4,104	4,121	3,997	3,886	3,898	-206	-5.0%
Dental Assistants	101	133	149	148	159	58	57.4%
Dental Hygienists	2,378	2,440	2,490	2,554	2,556	178	7.5%
Dietitians/Nutritionists	1,837	1,879	1,911	1,929	1,894	57	3.1%
Licensed Practical Nurses (LPNs)	14,213	14,086	13,950	13,421	12,847	-1,366	-9.6%
Nurse Practitioners ^a	7,007	7,519	8,098	8,470	9,167	2,160	30.8%
Occupational Therapists	4,017	4,199	4,238	4,313	4,441	424	10.6%
Occupational Therapy Assistants	1,066	1,085	1,087	1,084	1,034	-32	-3.0%
Pharmacists	7,603	7,685	7,841	7,979	7,439	-164	-2.2%
Physical Therapists	5,859	5,948	6,020	6,085	6,183	324	5.5%
Physical Therapist Assistants	1,513	1,529	1,539	1,525	1,521	8	0.5%
Physician Assistants	4,554	4,738	4,823	4,989	5,180	626	13.7%
Registered Nurses (RNs)	70,942	72,103	73,956	75,128	75,874	4,932	7.0%
Respiratory Therapists	1,674	1,685	1,645	1,673	1,637	-37	-2.2%
Social Workers ^b	22,461	23,055	23,528	23,906	24,439	1,978	8.8%
Speech-Language Pathologists	5,558	5,757	5,872	5,944	6,136	578	10.4%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 175. Employment Projections for Selected Health Care Occupations for New York City, 2020–2030

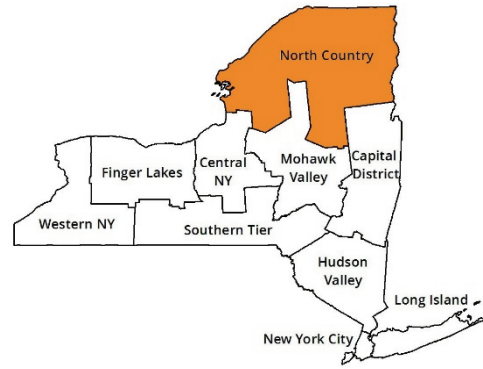
Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	1,380	1,580	200	14.5%	120
Clinical Laboratory Technologists and Technicians	8,080	9,430	1,350	16.7%	695
Dental Assistants	7,030	8,450	1,420	20.2%	1,032
Dental Hygienists	2,560	3,030	470	18.4%	217
Diagnostic Medical Sonographers	2,960	3,850	890	30.1%	329
Dietetic Technicians	320	380	60	18.8%	36
Dietitians and Nutritionists	2,050	2,460	410	20.0%	191
Emergency Medical Technicians and Paramedics	8,660	10,150	1,490	17.2%	759
Healthcare Social Workers	10,950	13,970	3,020	27.6%	1,442
Home Health and Personal Care Aides	338,960	469,530	130,570	38.5%	61,827
Licensed Practical and Licensed Vocational Nurses	14,460	17,130	2,670	18.5%	1,457
Magnetic Resonance Imaging Technologists	1,060	1,230	170	16.0%	97
Medical and Health Services Managers	13,110	18,600	5,490	41.9%	1,759
Medical Assistants	12,750	16,250	3,500	27.5%	2,030
Medical Secretaries	4,710	5,530	820	17.4%	632
Medical Transcriptionists	560	570	10	1.8%	81
Mental Health and Substance Abuse Social Workers	5,820	7,330	1,510	25.9%	751
Nuclear Medicine Technologists	330	380	50	15.2%	35
Nurse Anesthetists	720	860	140	19.4%	54
Nurse Practitioners	6,800	10,430	3,630	53.4%	813
Nursing Assistants	35,260	41,130	5,870	16.6%	5,197
Occupational Therapists	4,920	6,140	1,220	24.8%	422
Occupational Therapy Assistants	820	1,170	350	42.7%	155
Pharmacists	9,460	10,870	1,410	14.9%	531
Pharmacy Aides	680	680	0	0.0%	90
Pharmacy Technicians	8,750	11,280	2,530	28.9%	953
Phlebotomists	1,540	1,910	370	24.0%	237
Physical Therapist Assistants	1,970	2,850	880	44.7%	368
Physical Therapists	7,060	9,080	2,020	28.6%	532
Physician Assistants	6,460	8,940	2,480	38.4%	668
Psychiatric Technicians	1,160	1,400	240	20.7%	124
Radiation Therapists	600	690	90	15.0%	39
Radiologic Technologists	4,640	5,450	810	17.5%	441
Recreational Therapists	620	740	120	19.4%	62
Registered Nurses (RNs)	78,360	91,430	13,070	16.7%	5,717
Respiratory Therapists	2,530	3,310	780	30.8%	208
Speech-Language Pathologists	4,770	6,860	2,090	43.8%	559
Surgical Technologists	2,420	2,790	370	15.3%	217

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

Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2018–2028.

H. North Country

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The North Country region has higher levels of poverty and a slightly higher percent of the population 65 years of age or older than the state as a whole.
- The rates of total deaths, deaths due to all cancers, and deaths due to diabetes are higher in the North Country region than throughout New York State.

Health Care Employment

- Overall, the number of jobs in health care settings in the North Country region declined between 2018 and 2022.
- The number of jobs declined in all health care settings between 2018 and 2022.

Employer Demand Surveys

- All health care settings reported recruitment and retention difficulties of RNs.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, LPNs, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Licensed clinical social workers, licensed master social workers, and respiratory therapists are being reported by nursing homes and by adult care facilities as among the most difficult to recruit. Licensed clinical social workers and, licensed master social workers are also being reported as among the most difficult to retain.
- Home health care agencies in the North Country region also indicated that homemakers, LPNs, occupational therapists, and physical therapists as among the most difficult to recruit. Home health aides, homemakers, and personal care aides are among the most difficult to retain.

Health Care Production and Projected Workforce Need

- The number of RN graduations increased in the North Country region between 2018 and 2022. In contrast, the number of LPN graduations decreased during the same time period.
- There are almost 1,000 projected average annual openings for home health and personal care aides in the North Country region.

1. Population and Health Care Indicators

Table 176. Selected Population Characteristics for North Country, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	422,507	N/A	2.1%
Population under 100% FPL	55,959	14.2%	13.6%
Population under 200% FPL	129,912	33.0%	28.3%
Population aged birth to 17 years	86,294	20.4%	20.6%
Population aged 65 and older	75,360	17.8%	17.0%
Population female aged 15 to 44	75,638	17.9%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	113	0.8%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	3,872	10.0%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	1,551	4.3%	3.9%
Black/African American, non-Hispanic	14,113	3.3%	13.8%
Hispanic/Latino	17,272	4.1%	19.5%
Asian/Pacific Islander, non-Hispanic	4,987	1.2%	8.8%
American Indian/Native Alaskan, non-Hispanic	4,340	1.0%	0.2%
Two or more/other races	11,288	2.7%	3.1%
Population with less than a high school education ^b	30,017	10.5%	12.4%
Population with a high school diploma or equivalent ^b	98,164	34.2%	24.9%
Population with an associate degree ^b	36,064	12.6%	8.8%
Population with a bachelor's degree ^b	40,035	14.0%	21.6%
Population with a master's degree or higher ^b	31,593	11.0%	17.2%
Home ownership	112,823	67.5%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 177. Selected Health Indicators for the North Country

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	12,214	969.2	516,974	881.7
Deaths due to heart disease, per 100,000	2,770	219.8	135,955	231.9
Deaths due to all cancers, per 100,000	2,652	210.8	101,440	173.1
Deaths due to diabetes, per 100,000	451	35.8	14,414	24.6
Total births, per 1,000 females aged 15 to 44	13,841	61.7	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	653	16.4	19,095	10.9
Low-birthweight births, as a percent of total births	764	5.8	40,411	6.4
Late/no prenatal care, as a percent of total births	771	5.6	34,266	5.3
Infant deaths, per 1,000 live births	81	5.9	2,764	4.2
Total hospitalizations, per 10,000	130,450	1,035.2	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	351	2.8	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	96	3.0	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	74	2.3	11,691	7.6
Pediatric asthma hospitalization, per 10,000	100	3.9	19,462	15.9
Diabetes hospitalizations, per 10,000	2,470	19.6	124,485	21.2
CLRD hospitalizations, per 10,000	3,472	27.6	140,504	24.0
Heart disease hospitalizations, per 10,000	12,991	103.1	585,521	99.9
Total ED visits, per 10,000	620,785	4,926.1	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 178. The Number of Jobs in Health Care in the North Country, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	9,710	9,796	9,369	9,125	8,197	-1,513	-15.6%
Ambulatory care (excluding home health)	5,703	5,917	5,642	5,930	5,678	-25	-0.4%
Nursing home and residential care facilities	2,887	2,813	2,675	2,324	2,022	-865	-30.0%
Home health care	726	718	702	677	648	-78	-10.7%
Total	19,026	19,244	18,388	18,056	16,545	-2,481	-13.0%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages

3. Employment by Occupations

Table 179. Number of Jobs and Median Salary for Selected Health Care Occupations in the North Country, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	20	\$104,109
Cardiovascular Technologists and Technicians	N/A	\$52,309
Clinical Laboratory Technologists and Technicians	N/A	\$68,378
Dental Assistants	280	\$41,524
Dental Hygienists	190	\$80,490
Diagnostic Medical Sonographers	80	\$84,035
Dietitians and Nutritionists	140	\$53,807
Emergency Medical Technicians	330	\$36,681
Healthcare Social Workers	440	\$47,682
Home Health & Personal Care Aides	4,670	\$33,696
Licensed Practical and Licensed Vocational Nurses	1,080	\$50,056
Magnetic Resonance Imaging Technologists	40	\$82,077
Medical Assistants	410	\$38,819
Medical Secretaries and Administrative Assistants	510	\$38,495
Medical Transcriptionists	N/A	\$41,185
Medical and Health Services Managers	340	\$105,853
Mental Health and Substance Abuse Social Workers	290	\$62,189
Nuclear Medicine Technologists	N/A	N/A
Nurse Practitioners	290	\$127,955
Nursing Assistants	930	\$36,478
Occupational Therapists	170	\$81,388
Occupational Therapy Assistants	30	\$57,701
Orderlies	N/A	N/A
Paramedics	190	\$48,910
Pharmacists	360	\$134,006
Pharmacy Aides	60	\$31,614
Pharmacy Technicians	530	\$36,662
Phlebotomists	90	\$37,521
Physical Therapist Aides	20	\$32,989
Physical Therapist Assistants	100	\$55,672
Physical Therapists	260	\$86,354
Physician Assistants	270	\$134,707
Radiation Therapists	N/A	\$91,850
Radiologic Technologists and Technicians	230	\$68,097
Recreational Therapists	N/A	\$57,198
Registered Nurses	2,870	\$82,216
Respiratory Therapists	60	\$80,144
Speech-Language Pathologists	230	\$76,059
Surgical Technologists	70	\$53,479

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 180. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 181. Reasons for Recruitment Difficulties at Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 182. Reasons for Retention Difficulties Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 183. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	66.7%	83.3%
CNA Trainees/Temporary Nurse Aides	83.3%	66.7%
Dietitians/Nutritionists	60.0%	20.0%
Home Health Aides	50.0%	0.0%
Infection Preventionist Practitioners	0.0%	33.3%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	100.0%	100.0%
Licensed Practical Nurse (LPNs)	85.7%	75.0%
MDS Coordinators	33.3%	0.0%
Nurse Directors/Managers	83.3%	50.0%
Nurse Educators	33.3%	33.3%
Occupational Therapists	50.0%	0.0%
Occupational Therapy Assistants	-	-
Paid Feeding Assistants	-	-
Personal Care Aides	66.7%	33.3%
Physical Therapists	50.0%	0.0%
Physical Therapy Assistants	-	-
Registered Nurses (RNs) Newly Licensed	50.0%	0.0%
Registered Nurses (RNs) Experienced	83.3%	16.7%
Residential Care Aide (ACF/ALR)	75.0%	50.0%
Respiratory Therapists	100.0%	0.0%
Speech-Language Pathologists	50.0%	0.0%

Table 184. Reasons for Recruitment Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	50.0%	100.0%	0.0%	75.0%
CNA Trainees/ Temporary Nurse Aides	60.0%	100.0%	0.0%	60.0%
Dietitians/Nutritionists	0.0%	33.3%	0.0%	0.0%
Home Health Aides	0.0%	100.0%	0.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	66.7%
Licensed Practical Nurse (LPNs)	33.3%	100.0%	0.0%	33.3%
MDS Coordinators	0.0%	100.0%	0.0%	0.0%
Nurse Directors/Managers	40.0%	100.0%	0.0%	40.0%
Nurse Educators	0.0%	100.0%	0.0%	0.0%
Occupational Therapists	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	100.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	100.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	40.0%	100.0%	0.0%	40.0%
Residential Care Aide (ACF/ALR)	33.3%	66.7%	33.3%	0.0%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%

Table 185. Reasons for Recruitment Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	25.0%	50.0%	25.0%	50.0%
CNA Trainees/ Temporary Nurse Aides	20.0%	40.0%	20.0%	40.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	33.3%	16.7%	33.3%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	20.0%	20.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	50.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-!	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	33.3%	66.7%	33.3%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 186. Related Reasons for Retention Difficulties at North Country Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	80.0%	60.0%	80.0%	40.0%
CNA Trainees/ Temporary Nurse Aides	75.0%	25.0%	100.0%	0.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	100.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	100.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	33.3%	100.0%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	33.3%	33.3%	100.0%	0.0%
Nurse Educators	100.0%	100.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	0.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	100.0%	100.0%	100.0%	0.0%
Residential Care Aide (ACF/ALR)	50.0%	50.0%	50.0%	50.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 187. Reasons for Retention Difficulties at Capital District and North Country Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	60.0%	40.0%	0.0%	60.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	50.0%	0.0%	75.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	66.7%	66.7%	0.0%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	100.0%	0.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	-	-	-	-
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	100.0%	0.0%	0.0%	50.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 188. Percent of Respondents Who Indicated Recruitment and/or Retention. Difficulties at North Country Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	7.7%	7.7%
Home Health Aides	60.0%	56.3%
Homemakers	80.0%	100.0%
Intake Coordinator /Schedulers	27.8%	5.6%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	0.0%
Licensed Practical Nurse (LPNs)	72.7%	36.4%
Occupational Therapists	71.4%	0.0%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	57.1%	66.7%
Physical Therapists	77.8%	0.0%
Physical Therapy Assistants	60.0%	0.0%
Registered Nurses (RNs)	88.9%	50.0%
Respiratory Therapists	-	-
Speech-Language Pathologists	66.7%	0.0%

Table 189. Reasons for Recruitment Difficulties at North Country Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	0.0%	100.0%	0.0%	0.0%
Home Health Aides	22.2%	0.0%	0.0%	0.0%
Homemakers	50.0%	0.0%	0.0%	25.0%
Intake Coordinator	60.0%	40.0%	20.0%	20.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	100.0%	50.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	0.0%	0.0%	12.5%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	87.5%	25.0%	12.5%	25.0%
Physical Therapists	100.0%	14.3%	0.0%	0.0%
Physical Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	93.8%	12.5%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 190. Reasons for Recruitment Difficulties at North Country Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	0.0%	100.0%	0.0%
Home Health Aides	0.0%	11.1%	0.0%
Homemakers	25.0%	25.0%	0.0%
Intake Coordinator	0.0%	60.0%	20.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	50.0%	100.0%
Licensed Practical Nurse (LPNs)	0.0%	50.0%	25.0%
Occupational Therapists	20.0%	40.0%	0.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	25.0%	100.0%	25.0%
Physical Therapists	14.3%	42.9%	0.0%
Physical Therapy Assistants	0.0%	33.3%	0.0%
Registered Nurses (RNs)	18.8%	87.5%	37.5%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	25.0%	0.0%

Table 191. Reasons for Retention Difficulties at North Country Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	100.0%
Home Health Aides	11.1%	11.1%	0.0%	11.1%	11.1%
Homemakers	25.0%	25.0%	0.0%	25.0%	25.0%
Intake Coordinator	100.0%	0.0%	0.0%	0.0%	100.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	75.0%	50.0%	25.0%	25.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	90.0%	80.0%	30.0%	20.0%	60.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	100.0%	62.5%	50.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

Table 192. Reasons for Retention Difficulties at North Country Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	11.1%	11.1%	0.0%
Homemakers	0.0%	0.0%	25.0%	25.0%	0.0%
Intake Coordinator	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	0.0%	25.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	40.0%	20.0%	50.0%	30.0%	50.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	37.5%	0.0%	12.5%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 193. The Number of Graduations for Selected Health Care Occupations in the North Country, 2018-2022

Occupational Program	School Year					Change Between	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	57	40	47	44	48	-9	-15.8%
Clinical Laboratory Technologists	11	5	9	8	6	-5	-45.5%
Clinical Nutritionists	15	23	23	15	21	6	40.0%
Dental Hygienists	22	27	25	3	0	-22	-100.0%
EMTs and Paramedics	7	2	6	0	0	-7	-100.0%
Health Care Administrators	82	82	92	109	122	40	48.8%
License Practical Nurses (LPNs)	170	192	146	147	120	-50	-29.4%
Mental Health Counselors	28	26	28	19	13	-15	-53.6%
Occupational Therapists	0	18	17	17	17	17	N/A
Physical Therapists	24	22	20	20	25	1	4.2%
Physical Therapy Assistants	17	22	11	9	17	0	0.0%
Physician Assistants	19	25	28	29	30	11	57.9%
Radiation Therapists and Technologists	18	10	8	12	24	6	33.3%
Radiologic Technologists	11	8	13	6	10	-1	-9.1%
Registered Nurses (RNs) ^b	331	407	355	345	297	-34	-10.3%
Social Workers ^c	32	37	30	30	29	-3	-9.4%
Substance Abuse/Addiction Counseling	6	13	8	24	24	18	300.0%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^c Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 194. Number of Licensed Individuals in Selected Health Care Professions in the North Country, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	57	57	55	52	53	-4	-7.0%
Clinical Laboratory Technologists	228	226	226	221	226	-2	-0.9%
Dental Assistants	55	57	58	57	53	-2	-3.6%
Dental Hygienists	237	240	234	233	238	1	0.4%
Dietitians/Nutritionists	79	79	82	83	81	2	2.5%
Licensed Practical Nurses (LPNs)	2,502	2,517	2,514	2,371	2,352	-150	-6.0%
Nurse Practitioners ^a	341	363	378	386	442	101	29.6%
Occupational Therapists	194	205	213	215	218	24	12.4%
Occupational Therapy Assistants	78	84	82	83	77	-1	-1.3%
Pharmacists	376	379	380	386	387	11	2.9%
Physical Therapists	363	377	395	398	392	29	8.0%
Physical Therapist Assistants	170	171	176	177	166	-4	-2.4%
Physician Assistants	286	295	303	319	310	24	8.4%
Registered Nurses (RNs)	5,502	5,570	5,725	5,765	5,868	366	6.7%
Respiratory Therapists	83	83	85	86	80	-3	-3.6%
Social Workers ^b	474	516	546	561	615	141	29.7%
Speech-Language Pathologists	279	281	279	285	288	9	3.2%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 195. Employment Projections for Selected Health Care Occupations for the North Country, 2020-2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	90	110	20	22.2%	2
Clinical Laboratory Technologists and Technicians	390	450	60	15.4%	36
Dental Assistants	270	320	50	18.5%	35
Dental Hygienists	230	260	30	13.0%	23
Diagnostic Medical Sonographers	90	110	20	22.2%	2
Dietetic Technicians	60	70	10	16.7%	1
Dietitians and Nutritionists	70	80	10	14.3%	1
Emergency Medical Technicians and Paramedics	600	770	170	28.3%	57
Healthcare Social Workers	260	330	70	26.9%	37
Home Health and Personal Care Aides	5,390	7,360	1,970	36.5%	967
Licensed Practical and Licensed Vocational Nurses	1,340	1,540	200	14.9%	130
Magnetic Resonance Imaging Technologists	40	50	10	25.0%	1
Medical and Health Services Managers	400	550	150	37.5%	45
Medical Assistants	130	160	30	23.1%	23
Medical Secretaries	90	100	10	11.1%	21
Medical Transcriptionists	30	30	0	0.0%	0
Mental Health and Substance Abuse Social Workers	230	270	40	17.4%	34
Nurse Practitioners	360	580	220	61.1%	52
Nursing Assistants	1,630	1,850	220	13.5%	232
Occupational Therapists	210	250	40	19.0%	24
Occupational Therapy Assistants	50	60	10	20.0%	1
Pharmacists	400	450	50	12.5%	25
Pharmacy Technicians	390	490	100	25.6%	40
Phlebotomists	170	200	30	17.6%	23
Physical Therapist Assistants	140	180	40	28.6%	24
Physical Therapists	320	380	60	18.8%	26
Physician Assistants	250	350	100	40.0%	30
Radiologic Technologists	300	350	50	16.7%	25
Registered Nurses (RNs)	3,880	4,460	580	14.9%	278
Respiratory Therapists	100	130	30	30.0%	3
Speech-Language Pathologists	200	270	70	35.0%	27
Surgical Technologists	100	120	20	20.0%	12

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the occupation. Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2018-2028.

I. Southern Tier

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Southern Tier region has higher levels of poverty as well as a higher percent of the population 65 years of age or older than the state as a whole.
- The rates of total deaths, deaths due to heart disease, deaths due to all cancers, and deaths due to diabetes were higher in the Southern Tier region than throughout New York State.

Health Care Employment

- Overall, the number of jobs in health care settings in the Southern Tier region declined between 2018 and 2022.
- The number of jobs in ambulatory care in the Southern Tier region increased between 2018 and 2022. In contrast, the number of jobs in hospitals, in nursing homes, and in home health care all declined during the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Southern Tier region.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, LPNs, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Certified nurse aides/assistants, home health aides, and personal care aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Southern Tier region also indicated that speech-language pathologists are the most difficult to recruit and home health aides and personal care aides the most difficult to retain.

Health Care Production and Projected Workforce Need

- The number of LPN and social worker graduations increased in the Southern Tier region between 2018 and 2022. The number of RN graduations remained about the same during the same time period.
- There are more than 1,200 projected average annual openings in the Southern Tier region for home health and personal care aides.

1. Population and Health Care Indicators

Table 196. Selected Population Characteristics for the Southern Tier, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	636,020	N/A	3.2%
Population under 100% FPL	94,400	15.6%	13.6%
Population under 200% FPL	200,603	33.2%	28.3%
Population aged birth to 17 years	120,500	18.9%	20.6%
Population aged 65 and older	125,611	19.7%	17.0%
Population female aged 15 to 44	120,656	19.0%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	303	1.3%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	4,686	7.6%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	1,500	2.7%	3.9%
Black/African American, non-Hispanic	20,524	3.2%	13.8%
Hispanic/Latino	23,934	3.8%	19.5%
Asian/Pacific Islander, non-Hispanic	23,695	3.7%	8.8%
American Indian/Native Alaskan, non-Hispanic	616	0.1%	0.2%
Two or more/other races	21,500	3.4%	3.1%
Population with less than a high school education ^b	37,401	8.6%	12.4%
Population with a high school diploma or equivalent ^b	136,543	31.5%	24.9%
Population with an associate degree ^b	54,000	12.5%	8.8%
Population with a bachelor's degree ^b	67,121	15.5%	21.6%
Population with a master's degree or higher ^b	65,729	15.2%	17.2%
Home ownership ^c	179,562	67.8%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 197. Selected Health Indicators for the Southern Tier

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	21,061	1,109.1	516,974	881.7
Deaths due to heart disease, per 100,000	4,927	259.5	135,955	231.9
Deaths due to all cancers, per 100,000	4,153	330.2	101,440	173.1
Deaths due to diabetes, per 100,000	593	31.2	14,414	24.6
Total births, per 1,000 females aged 15 to 44	17,600	48.9	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	834	12.2	19,095	10.9
Low-birthweight births, as a percent of total births	978	5.8	40,411	6.4
Late/no prenatal care, as a percent of total births	863	5.8	34,266	5.3
Infant deaths, per 1,000 live births	100	5.7	2,764	4.2
Total hospitalizations, per 10,000	187,739	988.6	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	633	3.3	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	123	2.9	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	163	3.2	11,691	7.6
Pediatric asthma hospitalization, per 10,000	223	6.3	19,462	15.9
Diabetes hospitalizations, per 10,000	3,367	17.7	124,485	21.2
CLRD hospitalizations, per 10,000	4,282	22.5	140,504	24.0
Heart disease hospitalizations, per 10,000	18,761	98.8	585,521	99.9
Total ED visits, per 10,000	771,196	4,061.1	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 198. The Number of Jobs in Health Care in the Southern Tier, by Setting, 2018–2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	13,535	13,681	13,198	12,978	12,645	-890	-6.6%
Ambulatory care (excluding home health)	7,796	7,857	7,495	7,824	8,223	427	5.5%
Nursing home and residential care facilities	6,738	6,584	6,126	5,524	5,366	-1,372	-20.4%
Home health care	1,079	961	948	893	806	-273	-25.3%
Total	29,148	29,083	27,767	27,219	27,040	-2,108	-7.2%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 199. Number of Jobs and Median Salary for Selected Health Care Occupations in the Southern Tier, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	N/A	\$93,523
Cardiovascular Technologists and Technicians	N/A	\$73,606
Clinical Laboratory Technologists and Technicians	N/A	\$68,216
Dental Assistants	500	\$40,740
Dental Hygienists	390	\$78,061
Diagnostic Medical Sonographers	180	\$79,023
Dietitians and Nutritionists	150	\$68,551
Emergency Medical Technicians	300	\$36,915
Healthcare Social Workers	580	\$48,484
Home Health & Personal Care Aides	5,310	\$33,696
Licensed Practical and Licensed Vocational Nurses	1,510	\$51,223
Magnetic Resonance Imaging Technologists	N/A	\$84,106
Medical Assistants	680	\$38,084
Medical Secretaries and Administrative Assistants	900	\$37,841
Medical Transcriptionists	80	\$44,222
Medical and Health Services Managers	480	\$113,554
Mental Health and Substance Abuse Social Workers	280	\$73,356
Nuclear Medicine Technologists	N/A	\$90,046
Nurse Practitioners	510	\$125,230
Nursing Assistants	2,820	\$33,858
Occupational Therapists	280	\$84,915
Occupational Therapy Assistants	60	\$61,618
Orderlies	N/A	\$31,036
Paramedics	210	\$49,505
Pharmacists	480	\$134,243
Pharmacy Aides	130	\$33,025
Pharmacy Technicians	680	\$37,211
Phlebotomists	110	\$37,348
Physical Therapist Aides	60	\$32,610
Physical Therapist Assistants	160	\$55,198
Physical Therapists	410	\$85,283
Physician Assistants	270	\$126,240
Psychiatric Technicians	N/A	N/A
Radiation Therapists	N/A	\$84,579
Radiologic Technologists and Technicians	350	\$66,547
Recreational Therapists	N/A	N/A
Registered Nurses	5,040	\$82,415
Respiratory Therapists	N/A	\$77,802
Speech-Language Pathologists	300	\$76,407
Surgical Technologists	N/A	\$53,482

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES)

4. Employer Demand Surveys

a. Hospitals

Table 200. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 201. Reasons for Recruitment Difficulties at Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 202. Reasons for Retention Difficulties Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 203. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Southern Tier Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	100.0%	100.0%
CNA Trainees/Temporary Nurse Aides	100.0%	50.0%
Dietitians/Nutritionists	25.0%	25.0%
Home Health Aides	100.0%	66.7%
Infection Preventionist Practitioners	33.3%	33.3%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%
Licensed Practical Nurse (LPNs)	83.3%	83.3%
MDS Coordinators	0.0%	25.0%
Nurse Directors/Managers	60.0%	20.0%
Nurse Educators	25.0%	25.0%
Occupational Therapists	33.3%	33.3%
Occupational Therapy Assistants	25.0%	25.0%
Paid Feeding Assistants	-	-
Personal Care Aides	100.0%	75.0%
Physical Therapists	50.0%	25.0%
Physical Therapy Assistants	25.0%	25.0%
Registered Nurses (RNs) Newly Licensed	100.0%	100.0%
Registered Nurses (RNs) Experienced	100.0%	60.0%
Residential Care Aide (ACF/ALR)	75.0%	75.0%
Respiratory Therapists	33.3%	0.0%
Speech-Language Pathologists	66.7%	66.7%

Table 204. Reasons for Recruitment Difficulties at Southern Tier Nursing Homes and Adult Care Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	50.0%	75.0%	0.0%	25.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	100.0%	0.0%	50.0%
Dietitians/Nutritionists	0.0%	100.0%	0.0%	0.0%
Home Health Aides	66.7%	100.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	100.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	40.0%	80.0%	0.0%	20.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	100.0%	0.0%	0.0%
Nurse Educators	0.0%	100.0%	0.0%	0.0%
Occupational Therapists	0.0%	100.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	100.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	100.0%	75.0%	0.0%	25.0%
Physical Therapists	0.0%	100.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	100.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	100.0%	0.0%	0.0%	100.0%
Registered Nurses (RNs) Experienced	40.0%	80.0%	0.0%	20.0%
Residential Care Aide (ACF/ALR)	100.0%	66.7%	0.0%	66.7%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%

Table 205. Reasons for Recruitment Difficulties at Southern Tier Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	50.0%	50.0%	75.0%	75.0%
CNA Trainees/ Temporary Nurse Aides	50.0%	50.0%	100.0%	50.0%
Dietitians/Nutritionists	0.0%	0.0%	0.0%	0.0%
Home Health Aides	33.3%	0.0%	0.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	100.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	20.0%	20.0%	40.0%
MDS Coordinators	-	-	-	-
Nurse Directors/Managers	0.0%	0.0%	0.0%	33.3%
Nurse Educators	0.0%	0.0%	0.0%	100.0%
Occupational Therapists	0.0%	0.0%	0.0%	100.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	100.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	25.0%	0.0%	50.0%	0.0%
Physical Therapists	0.0%	0.0%	0.0%	50.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	100.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	20.0%	20.0%
Residential Care Aide (ACF/ALR)	0.0%	33.3%	66.7%	33.3%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	100.0%

Table 206. Reasons for Retention Difficulties at Southern Tier Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	25.0%	0.0%	100.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	100.0%	0.0%
Dietitians/Nutritionists	100.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	50.0%	0.0%
Infection Preventionist Practitioners	0.0%	100.0%	100.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	20.0%	20.0%	80.0%	0.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	100.0%	0.0%
Nurse Educators	0.0%	0.0%	100.0%	0.0%
Occupational Therapists	0.0%	0.0%	100.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	66.7%	0.0%
Physical Therapists	0.0%	0.0%	100.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	100.0%	0.0%
Registered Nurses (RNs) Experienced	33.3%	0.0%	66.7%	33.3%
Residential Care Aide (ACF/ALR)	33.3%	0.0%	66.7%	33.3%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	50.0%	0.0%	50.0%	0.0%

Table 207. Reasons for Retention Difficulties at Southern Tier Nursing Homes and Adult Care Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	0.0%	50.0%	25.0%	50.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	0.0%	0.0%
Dietitians/Nutritionists	0.0%	100.0%	0.0%	0.0%
Home Health Aides	50.0%	0.0%	50.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-
Licensed Practical Nurse (LPNs)	40.0%	20.0%	20.0%	20.0%
MDS Coordinators	0.0%	0.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	0.0%	0.0%	0.0%	33.3%
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	33.3%	0.0%	33.3%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	0.0%	50.0%	0.0%	0.0%

c. Home Health Care

Table 208. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Southern Tier Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	7.1%	5.9%
Home Health Aides	43.8%	46.7%
Homemakers	37.5%	16.7%
Intake Coordinator /Schedulers	17.4%	4.6%
Licensed Clinical Social Workers (LCSWs)	50.0%	0.0%
Licensed Master Social Workers (LMSWs)	33.3%	0.0%
Licensed Practical Nurse (LPNs)	60.0%	30.0%
Occupational Therapists	50.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%
Personal Care Aides	42.9%	47.6%
Physical Therapists	50.0%	0.0%
Physical Therapy Assistants	16.7%	0.0%
Registered Nurses (RNs)	76.5%	33.3%
Respiratory Therapists	-	-
Speech-Language Pathologists	80.0%	0.0%

Table 209. Reasons for Recruitment Difficulties at Southern Tier Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	0.0%	100.0%	0.0%	0.0%
Home Health Aides	14.3%	0.0%	0.0%	14.3%
Homemakers	33.3%	0.0%	0.0%	33.3%
Intake Coordinator	50.0%	50.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	50.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	100.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	0.0%	0.0%	0.0%
Occupational Therapists	100.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	66.7%	33.3%	11.1%	55.6%
Physical Therapists	100.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	100.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	100.0%	7.7%	0.0%	0.0%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	100.0%	0.0%	0.0%	0.0%

Table 210. Reasons for Recruitment Difficulties at Southern Tier Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	0.0%	100.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%
Intake Coordinator	0.0%	75.0%	25.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	50.0%
Licensed Master Social Workers (LMSWs)	0.0%	100.0%	100.0%
Licensed Practical Nurse (LPNs)	0.0%	83.3%	33.3%
Occupational Therapists	33.3%	33.3%	0.0%
Occupational Therapy Assistants	-	-	-
Personal Care Aides	33.3%	77.8%	0.0%
Physical Therapists	33.3%	33.3%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%
Registered Nurses (RNs)	23.1%	84.6%	46.2%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	0.0%	25.0%	0.0%

Table 211. Reasons for Retention Difficulties at Southern Tier Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	100.0%	0.0%	0.0%	0.0%	100.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%	0.0%	0.0%
Intake Coordinator	100.0%	0.0%	0.0%	0.0%	100.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	100.0%	33.3%	33.3%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	100.0%	70.0%	30.0%	0.0%	70.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	83.3%	33.3%	83.3%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

Table 212. Reasons for Retention Difficulties at Southern Tier Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	0.0%	0.0%	0.0%	0.0%	0.0%
Homemakers	0.0%	0.0%	0.0%	0.0%	0.0%
Intake Coordinator	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-	-
Licensed Master Social Workers (LMSWs)	-	-	-	-	-
Licensed Practical Nurse (LPNs)	0.0%	33.3%	0.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	50.0%	30.0%	40.0%	40.0%	30.0%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	33.3%	16.7%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	-	-	-	-	-

5. Health Care Workforce Production and Projected Need

a. Graduations

Table 213. The Number of Graduations for Selected Health Care Occupations in the Southern Tier, 2018-2022

Occupational Program	School Year					Change Between and 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	63	54	50	33	46	-17	-27.0%
Clinical Laboratory Technicians	20	18	24	13	35	15	75.0%
Clinical Laboratory Technologists	0	1	1	4	2	2	N/A
Dental Hygienists	28	33	28	29	30	2	7.1%
EMTs and Paramedics	3	40	10	10	11	8	266.7%
Health Care Administrators	36	42	51	49	82	46	127.8%
License Practical Nurses (LPNs)	92	125	148	90	134	42	45.7%
Medical Assistants	77	49	45	21	14	-63	-81.8%
Occupational Therapists	95	103	100	97	108	13	13.7%
Phlebotomists	27	23	18	20	10	-17	-63.0%
Physical Therapists	170	167	169	180	150	-20	-11.8%
Physical Therapy Assistants	24	19	19	1	28	4	16.7%
Radiation Therapists	26	28	30	26	27	1	3.8%
Recreational Therapists	5	8	5	10	7	2	40.0%
Registered Nurses (RNs) ^b	491	384	414	420	346	-145	-29.5%
Registered Nurses with Advanced Education ^c	50	49	55	53	66	16	32.0%
Social Workers ^d	68	73	64	84	103	35	51.5%
Substance Abuse/Addiction Counseling	20	33	41	47	50	30	150.0%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^c Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^d Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 214. Number of Licensed Individuals in Selected Health Care Professions in the Southern Tier, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	96	98	100	105	109	13	13.5%
Clinical Laboratory Technologists	284	286	281	275	276	-8	-2.8%
Dental Assistants	99	100	98	96	96	-3	-3.0%
Dental Hygienists	495	483	471	474	453	-42	-8.5%
Dietitians/Nutritionists	155	158	161	163	156	1	0.6%
Licensed Practical Nurses (LPNs)	2,913	2,956	2,865	2,879	2,830	-83	-2.8%
Nurse Practitioners ^a	808	853	903	948	1,001	193	23.9%
Occupational Therapists	374	398	411	421	433	59	15.8%
Occupational Therapy Assistants	53	52	56	55	48	-5	-9.4%
Pharmacists	522	515	530	534	514	-8	-1.5%
Physical Therapists	571	571	600	615	617	46	8.1%
Physical Therapist Assistants	279	282	293	304	303	24	8.6%
Physician Assistants	309	338	357	372	364	55	17.8%
Registered Nurses (RNs)	8,188	8,229	8,436	8,499	8,407	219	2.7%
Respiratory Therapists	149	151	132	136	132	-17	-11.4%
Social Workers ^b	1,475	1,495	1,559	1,607	1,702	227	15.4%
Speech-Language Pathologists	373	379	393	394	398	25	6.7%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 215. Employment Projections for Selected Health Care Occupations for the Southern Tier, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	100	110	10	10.0%	1
Clinical Laboratory Technologists and Technicians	820	940	120	14.6%	62
Dental Assistants	360	430	70	19.4%	57
Dental Hygienists	410	490	80	19.5%	38
Diagnostic Medical Sonographers	150	190	40	26.7%	24
Dietitians and Nutritionists	190	230	40	21.1%	24
Emergency Medical Technicians and Paramedics	590	730	140	23.7%	54
Healthcare Social Workers	480	600	120	25.0%	62
Home Health and Personal Care Aides	6,500	9,250	2,750	42.3%	1,225
Licensed Practical and Licensed Vocational Nurses	1,970	2,260	290	14.7%	189
Magnetic Resonance Imaging Technologists	60	70	10	16.7%	1
Medical and Health Services Managers	550	770	220	40.0%	72
Medical Assistants	670	830	160	23.9%	106
Medical Secretaries	260	310	50	19.2%	35
Mental Health and Substance Abuse Social Workers	440	590	150	34.1%	55
Nurse Practitioners	600	910	310	51.7%	71
Nursing Assistants	3,110	3,570	460	14.8%	446
Occupational Therapists	390	490	100	25.6%	30
Orderlies	50	60	10	20.0%	1
Pharmacists	480	540	60	12.5%	26
Pharmacy Technicians	550	670	120	21.8%	62
Phlebotomists	170	200	30	17.6%	23
Physical Therapist Assistants	220	320	100	45.5%	40
Physical Therapists	460	580	120	26.1%	32
Physician Assistants	350	460	110	31.4%	41
Psychiatric Aides	250	280	30	12.0%	43
Radiologic Technologists	490	570	80	16.3%	38
Recreational Therapists	60	70	10	16.7%	1
Registered Nurses (RNs)	5,960	6,920	960	16.1%	426
Respiratory Therapists	160	210	50	31.3%	15
Speech-Language Pathologists	330	460	130	39.4%	33
Surgical Technologists	170	190	20	11.8%	22

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the occupation. Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

J. Western New York

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



REGIONAL HIGHLIGHTS

Population and Health Care Indicators

- The Western New York region has higher levels of poverty and a higher percent of the population 65 years of age or older than the state as a whole.
- The rates of total deaths, deaths due to heart disease, deaths due to all cancers, and deaths due to diabetes are higher in the Western New York region than throughout New York State.

Health Care Employment

- Overall, the number of jobs in health care settings in the Western New York region declined between 2018 and 2022.
- The number of jobs in ambulatory care in the Western New York region increased between 2018 and 2022. In contrast, the number of jobs in hospitals, in nursing homes, and in home health care all declined during the same time period.

Employer Demand Surveys

- RNs and LPNs are among the most difficult to recruit and retain in all health care settings throughout the Western New York region.
- Hospitals in upstate New York (excluding the Hudson Valley) also reported that psychiatrists, clinical laboratory technologists, respiratory therapists, clinical laboratory technicians, and surgical technicians are the most difficult to recruit.
- Certified nurse aides/assistants and home health aides are also being reported by nursing homes and by adult care facilities as among the most difficult to recruit and retain.
- Home health care agencies in the Western New York region also indicated that home health aides and personal care aides are among the most difficult to recruit and retain.

Health Care Production and Projected Workforce Need

- The number of RN graduations increased in the Western New York region between 2018 and 2022. In contrast, the number of LPN graduations declined during the same period.
- There are more than 3,300 projected average annual openings in the Western New York region for home health and personal care aides, over 1,100 projected average annual openings for RNs, and nearly 900 projected average annual openings for nursing assistants.

1. Population and Health Care Indicators

Table 216. Selected Population Characteristics for Western New York, 2018-2022

Population Characteristics	Regional		Percent of State's Population
	Number	Percent of Region's Population	
Total population	1,415,124	N/A	7.1%
Population under 100% FPL	196,434	14.3%	13.6%
Population under 200% FPL	418,842	30.4%	28.3%
Population aged birth to 17 years	285,407	20.2%	20.6%
Population aged 65 and older	268,595	19.0%	17.0%
Population female aged 15 to 44	265,197	18.7%	19.8%
Women aged 15 to 19 who had a birth in past 12 months ^a	223	0.5%	0.7%
Women aged 20 to 34 who had a birth in past 12 months ^a	10,821	7.8%	6.9%
Women aged 35 to 50 who had a birth in past 12 months ^a	3,782	2.9%	3.9%
Black/African American, non-Hispanic	137,507	9.7%	13.8%
Hispanic/Latino	77,300	5.5%	19.5%
Asian/Pacific Islander, non-Hispanic	45,585	3.2%	8.8%
American Indian/Native Alaskan, non-Hispanic	6,793	0.5%	0.2%
Two or more/other races	44,672	3.2%	3.1%
Population with less than a high school education ^b	82,634	8.3%	12.4%
Population with a high school diploma or equivalent ^b	285,272	28.6%	24.9%
Population with an associate degree ^b	125,063	12.6%	8.8%
Population with a bachelor's degree ^b	181,538	18.2%	21.6%
Population with a master's degree or higher ^b	143,760	14.4%	17.2%
Home ownership ^c	403,225	67.3%	54.3%

^a Percent of births from women in that age group compared to total number of women in the age group.

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

^c Percent of occupied housing units that are owner occupied.

FPL, federal poverty level; N/A, not applicable; mos., months.

Source: US Census, American Community Survey, 5-Year Estimates, 2018-2022.

Table 217. Selected Health Indicators for Western New York

Health Indicator	Region		Statewide	
	Number	Rate	Number	Rate
Total deaths, per 100,000	47,191	1,139.2	516,974	881.7
Deaths due to heart disease, per 100,000	10,895	263.0	135,955	231.9
Deaths due to all cancers, per 100,000	9,403	227.1	101,440	173.1
Deaths due to diabetes, per 100,000	1,432	34.6	14,414	24.6
Total births, per 1,000 females aged 15 to 44	42,888	55.6	653,288	55.8
Teen births, per 1,000 females aged 15 to 19	1,947	14.9	19,095	10.9
Low-birthweight births, as a percent of total births	2,658	6.5	40,411	6.4
Late/no prenatal care, as a percent of total births	1,930	4.8	34,266	5.3
Infant deaths, per 1,000 live births	258	6.0	2,764	4.2
Total hospitalizations, per 10,000	441,205	1,065.1	6,553,582	1,117.7
Total asthma hospitalizations, per 10,000	1,845	4.5	48,298	8.2
Rate of asthma hospitalizations, aged 25-44 per 10,000	300	2.9	7,095	4.5
Rate of asthma hospitalizations, aged 45-64 per 10,000	395	3.5	11,691	7.6
Pediatric asthma hospitalization, per 10,000	861	10.2	19,462	15.9
Diabetes hospitalizations, per 10,000	8,489	20.5	124,485	21.2
CLRD hospitalizations, per 10,000	9,803	23.7	140,504	24.0
Heart disease hospitalizations, per 10,000	44,081	106.4	585,521	99.9
Total ED visits, per 10,000	1,647,814	3,977.9	22,682,283	3,868.6

CLRD, chronic lower respiratory disease; ED, emergency department.

Source: New York State Community Health Indicator Reports.

2. Health Care Sector Employment

Table 218. The Number of Jobs in Health Care in Western New York, by Setting, 2018-2022

Setting	2018	2019	2020	2021	2022	Change Between 2018 and 2022	
						Number	Percent
Hospitals	27,829	27,796	26,843	25,900	25,441	-2,388	-8.6%
Ambulatory care (excluding home health)	26,051	26,776	25,538	27,116	27,965	1,914	7.3%
Nursing home and residential care facilities	15,482	15,389	14,110	12,574	12,096	-3,386	-21.9%
Home health care	6,014	6,081	5,743	5,552	5,032	-982	-16.3%
Total	75,376	76,042	72,234	71,142	70,534	-4,842	-6.4%

Source: NYS Department of Labor, Quarterly Census of Employment and Wages.

3. Employment by Occupations

Table 219. Number of Jobs and Median Salary for Selected Health Care Occupations in Western New York, 2023

Occupational Title	Number of Jobs	Median Salary
Audiologists	140	\$88,600
Cardiovascular Technologists and Technicians	230	\$82,404
Clinical Laboratory Technologists and Technicians	880	\$70,848
Dental Assistants	1,280	\$43,481
Dental Hygienists	1,050	\$67,116
Diagnostic Medical Sonographers	330	\$81,288
Dietitians and Nutritionists	360	\$68,799
Emergency Medical Technicians	530	\$36,877
Healthcare Social Workers	1,380	\$51,235
Home Health & Personal Care Aides	16,450	\$33,696
Licensed Practical and Licensed Vocational Nurses	3,890	\$51,675
Magnetic Resonance Imaging Technologists	150	\$84,526
Medical Assistants	2,430	\$39,308
Medical Secretaries and Administrative Assistants	3,050	\$40,813
Medical Transcriptionists	180	\$42,475
Medical and Health Services Managers	1,270	\$123,982
Mental Health and Substance Abuse Social Workers	640	\$65,480
Nuclear Medicine Technologists	70	\$88,702
Nurse Anesthetists	140	\$214,330
Nurse Practitioners	1,280	\$127,532
Nursing Assistants	5,760	\$37,313
Occupational Therapists	900	\$78,648
Occupational Therapy Assistants	290	\$51,032
Orderlies	140	\$36,421
Paramedics	320	\$51,036
Pharmacists	1,580	\$130,770
Pharmacy Aides	260	\$33,584
Pharmacy Technicians	1,970	\$36,944
Phlebotomists	540	\$39,766
Physical Therapist Aides	100	\$33,389
Physical Therapist Assistants	380	\$52,121
Physical Therapists	1,290	\$84,261
Physician Assistants	790	\$112,085
Radiologic Technologists and Technicians	1,060	\$68,910
Recreational Therapists	50	\$67,228
Registered Nurses	14,460	\$84,947
Respiratory Therapists	480	\$74,174
Speech-Language Pathologists	1,020	\$76,643
Surgical Technologists	410	\$64,057

N/A, not available.

Source: NYS Department of Labor, Employment Statistics, Occupational Wage and Employment Estimates (OES).

4. Employer Demand Surveys

a. Hospitals

Table 220. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	69.2%	100.0%
Clinical Laboratory Technicians	82.9%	60.9%
Clinical Laboratory Technologists	86.8%	58.4%
Dietitians/Nutritionists	54.1%	43.6%
Licensed Clinical Social Workers (LCSWs)	73.5%	57.3%
Licensed Master's Social Workers (LMSWs)	60.6%	63.3%
Licensed Mental Health Counselors (LMHCs)	64.7%	43.8%
Licensed Practical Nurses (LPNs)	83.8%	85.3%
Nurse Practitioners (Behavioral Health)	80.0%	39.6%
Nurse Practitioners (All other)	54.5%	42.2%
Pharmacists	50.0%	13.6%
Physician Assistants	52.9%	28.2%
Psychiatrists	89.5%	57.4%
Respiratory Therapists	84.2%	56.0%
Registered Nurses	92.6%	97.1%
Surgical Technicians	82.9%	59.6%

Table 221. Reasons for Recruitment Difficulties at Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons For Recruiting Difficulties				
	Applicants non-responsive to Interview requests	General shortage of qualified workers	Location/ transportation issues	Non - competitive benefits	Non - competitive salaries
Certified Nurse Aides/ Nurse Aides/Nurse Assistants/Patient Care Techs	61.5%	76.9%	23.1%	0.0%	34.6%
Clinical Laboratory Technicians	7.1%	92.9%	3.6%	0.0%	3.6%
Clinical Laboratory Technologists	9.4%	87.5%	6.2%	3.1%	9.4%
Dietitians/Nutritionists	10.5%	73.7%	0.0%	0.0%	15.8%
Licensed Clinical Social Workers (LCSWs)	0.0%	83.3%	12.5%	4.2%	16.7%
Licensed Master's Social Workers (LMSWs)	0.0%	89.5%	0.0%	0.0%	31.6%
Licensed Mental Health Counselors (LMHCs)	0.0%	80.0%	10.0%	0.0%	0.0%
Licensed Practical Nurses (LPNs)	10.0%	83.3%	6.7%	3.3%	33.3%
Nurse Practitioners (Behavioral Health)	0.0%	84.2%	0.0%	0.0%	5.3%
Nurse Practitioners (All other)	0.0%	64.7%	11.8%	5.9%	5.9%
Pharmacists	0.0%	66.7%	5.6%	0.0%	22.2%
Physician Assistants	0.0%	52.9%	17.6%	5.9%	5.9%
Psychiatrists	6.3%	81.3%	6.3%	0.0%	0.0%
Respiratory Therapists	12.9%	90.3%	22.6%	12.9%	32.3%
Registered Nurses (RNs)	21.9%	93.7%	18.8%	9.4%	25.0%
Surgical Technicians	14.3%	96.4%	17.9%	3.6%	28.6%

Table 222. for Retention Difficulties Hospitals at Hospitals in Upstate New York Regions (Excluding the Hudson Valley)

Occupations	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Nurse Aides/Nurse Assistants/Patient Care Techs	53.6%	25.0%	75.0%	21.4%
Clinical Laboratory Technicians	22.2%	11.1%	100.0%	22.2%
Clinical Laboratory Technologists	9.1%	9.1%	90.9%	36.4%
Dietitians/Nutritionists	0.0%	33.3%	66.7%	11.1%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	77.8%	0.0%
Licensed Master's Social Workers (LMSWs)	9.1%	27.3%	72.7%	0.0%
Licensed Mental Health Counselors (LMHCs)	0.0%	40.0%	60.0%	0.0%
Licensed Practical Nurses (LPNs)	25.0%	45.0%	80.0%	25.0%
Nurse Practitioners (Behavioral Health)	0.0%	14.3%	85.7%	28.6%
Nurse Practitioners (All other)	16.7%	50.0%	83.3%	50.0%
Pharmacists	0.0%	0.0%	100.0%	33.3%
Physician Assistants	0.0%	40.0%	80.0%	40.0%
Psychiatrists	0.0%	0.0%	60.0%	20.0%
Respiratory Therapists	0.0%	27.3%	90.9%	18.2%
Registered Nurses (RNs)	32.0%	44.0%	84.0%	48.0%
Surgical Technicians	7.1%	21.4%	92.9%	21.4%

b. Nursing Homes and Adult Care Facilities

Table 223. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Western New York Nursing Homes and Adult Care Facilities

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Certified Nurse Aides/Assistants	71.4%	85.7%
CNA Trainees/Temporary Nurse Aides	25.0%	75.0%
Dietitians/Nutritionists	60.0%	0.0%
Home Health Aides	100.0%	100.0%
Infection Preventionist Practitioners	66.7%	57.1%
Licensed Clinical Social Workers (LCSWs)	75.0%	0.0%
Licensed Master Social Workers (LMSWs)	40.0%	20.0%
Licensed Practical Nurse (LPNs)	100.0%	75.0%
MDS Coordinators	71.4%	28.6%
Nurse Directors/Managers	66.7%	22.2%
Nurse Educators	71.4%	28.6%
Occupational Therapists	42.9%	14.3%
Occupational Therapy Assistants	42.9%	14.3%
Paid Feeding Assistants	-	-
Personal Care Aides	-	-
Physical Therapists	42.9%	14.3%
Physical Therapy Assistants	42.9%	14.3%
Registered Nurses (RNs) Newly Licensed	100.0%	100.0%
Registered Nurses (RNs) Experienced	100.0%	88.9%
Residential Care Aide (ACF/ALR)	100.0%	100.0%
Respiratory Therapists	50.0%	50.0%
Speech-Language Pathologists	42.9%	42.9%

Table 224. Reasons for Recruitment Difficulties at Western New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants non-responsive to interview requests	General shortage of qualified workers	Non-competitive benefits	Non-competitive salaries
Certified Nurse Aides/Assistants	100.0%	80.0%	0.0%	20.0%
CNA Trainees/Temporary Nurse Aides	100.0%	0.0%	0.0%	0.0%
Dietitians/Nutritionists	0.0%	100.0%	0.0%	0.0%
Home Health Aides	100.0%	100.0%	0.0%	100.0%
Infection Preventionist Practitioners	25.0%	50.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	33.3%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	50.0%	100.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	37.5%	87.5%	0.0%	0.0%
MDS Coordinators	80.0%	60.0%	0.0%	20.0%
Nurse Directors/Managers	33.3%	66.7%	0.0%	16.7%
Nurse Educators	40.0%	60.0%	0.0%	20.0%
Occupational Therapists	0.0%	33.3%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	33.3%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	33.3%	0.0%	0.0%
Physical Therapy Assistants	0.0%	33.3%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	50.0%	83.3%	0.0%	0.0%
Registered Nurses (RNs) Experienced	33.3%	88.9%	0.0%	0.0%
Residential Care Aide (ACF/ALR)	100.0%	66.7%	0.0%	66.7%
Respiratory Therapists	0.0%	100.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	33.3%	0.0%	0.0%

Table 225. Reasons for Recruitment Difficulties at Western New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Recruitment Difficulties			
	Applicants failed/refused background checks or drug tests	Family care giving commitments prevented availability	Lack of scheduling flexibility for applicant	Location/ transportation issues
Certified Nurse Aides/Assistants	40.0%	20.0%	0.0%	60.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	0.0%	100.0%
Dietitians/Nutritionists	0.0%	0.0%	33.3%	0.0%
Home Health Aides	100.0%	100.0%	100.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	12.5%	0.0%	25.0%	12.5%
MDS Coordinators	0.0%	20.0%	0.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	0.0%	0.0%
Nurse Educators	0.0%	0.0%	0.0%	0.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	0.0%	16.7%	0.0%
Registered Nurses (RNs) Experienced	0.0%	0.0%	11.1%	0.0%
Residential Care Aide (ACF/ALR)	66.7%	100.0%	66.7%	66.7%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 226. Reasons for Retention Difficulties at Western New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Changed careers	Better benefits elsewhere	Better salary elsewhere	Retirements
Certified Nurse Aides/Assistants	0.0%	33.3%	100.0%	0.0%
CNA Trainees/ Temporary Nurse Aides	33.3%	0.0%	66.7%	0.0%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	100.0%	100.0%	0.0%
Infection Preventionist Practitioners	0.0%	0.0%	25.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	33.3%	33.3%	50.0%	16.7%
MDS Coordinators	0.0%	0.0%	100.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	50.0%	50.0%
Nurse Educators	50.0%	0.0%	0.0%	50.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	33.3%	66.7%	0.0%
Registered Nurses (RNs) Experienced	0.0%	25.0%	50.0%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	66.7%	100.0%	0.0%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

Table 227. Reasons for Retention Difficulties at Western New York Nursing Homes and Assisted Living Facilities

Occupation	Reasons for Retention Difficulties			
	Lack of career mobility/ advancement	Left for family commitments	Paperwork and regulatory burdens	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)
Certified Nurse Aides/Assistants	0.0%	50.0%	0.0%	50.0%
CNA Trainees/ Temporary Nurse Aides	0.0%	0.0%	0.0%	33.3%
Dietitians/Nutritionists	-	-	-	-
Home Health Aides	0.0%	100.0%	100.0%	100.0%
Infection Preventionist Practitioners	0.0%	0.0%	25.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	-	-	-	-
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	0.0%	50.0%	16.7%	33.3%
MDS Coordinators	0.0%	50.0%	50.0%	0.0%
Nurse Directors/Managers	0.0%	0.0%	50.0%	50.0%
Nurse Educators	0.0%	50.0%	0.0%	50.0%
Occupational Therapists	0.0%	0.0%	0.0%	0.0%
Occupational Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Paid Feeding Assistants	-	-	-	-
Personal Care Aides	-	-	-	-
Physical Therapists	0.0%	0.0%	0.0%	0.0%
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs) Newly Licensed	0.0%	33.3%	16.7%	0.0%
Registered Nurses (RNs) Experienced	0.0%	12.5%	12.5%	0.0%
Residential Care Aide (ACF/ALR)	0.0%	66.7%	66.7%	33.3%
Respiratory Therapists	0.0%	0.0%	0.0%	0.0%
Speech-Language Pathologists	0.0%	0.0%	0.0%	0.0%

c. Home Health Care

Table 228. Percent of Respondents Who Indicated Recruitment and/or Retention Difficulties at Western New York State Home Health Care Agencies

Occupation	Percent of Respondents Indicating Difficulty	
	Recruiting	Retaining
Compliance Officers	29.4%	15.8%
Home Health Aides	78.6%	64.3%
Homemakers	54.6%	36.4%
Intake Coordinator /Schedulers	19.1%	19.1%
Licensed Clinical Social Workers (LCSWs)	33.3%	16.7%
Licensed Master Social Workers (LMSWs)	42.9%	14.3%
Licensed Practical Nurse (LPNs)	81.8%	18.2%
Occupational Therapists	0.0%	0.0%
Occupational Therapy Assistants	-	-
Personal Care Aides	79.2%	50.0%
Physical Therapists	0.0%	0.0%
Physical Therapy Assistants	50.0%	0.0%
Registered Nurses (RNs)	61.9%	23.8%
Respiratory Therapists	0.0%	0.0%
Speech-Language Pathologists	0.0%	50.0%

Table 229. Reasons for Recruitment Difficulties at Western New York State Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties			
	Not enough applicants applied	Not enough applicants met the minimum job qualifications, including certification	Applicant failed or refused background check or drug test	Family care giving commitments prevented availability
Compliance Officers	80.0%	80.0%	0.0%	0.0%
Home Health Aides	27.3%	18.2%	9.1%	36.4%
Homemakers	50.0%	33.3%	16.7%	50.0%
Intake Coordinator	75.0%	50.0%	0.0%	0.0%
Licensed Clinical Social Workers (LCSWs)	50.0%	100.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	66.7%	66.7%	0.0%	33.3%
Licensed Practical Nurse (LPNs)	66.7%	33.3%	0.0%	11.1%
Occupational Therapists	-	-	-	-
Occupational Therapy Assistants	-	-	-	-
Personal Care Aides	73.7%	47.4%	26.3%	57.9%
Physical Therapists	-	-	-	-
Physical Therapy Assistants	0.0%	0.0%	0.0%	0.0%
Registered Nurses (RNs)	92.3%	23.1%	0.0%	15.4%
Respiratory Therapists	-	-	-	-
Speech-Language Pathologists	-	-	-	-

Table 230. Reasons for Recruitment Difficulties at Western New York State Home Health Care Agencies

Occupation	Reasons for Recruitment Difficulties		
	Lack of scheduling flexibility for applicant	Inadequate salary for applicant	Inadequate benefits for applicant
Compliance Officers	0.0%	60.0%	20.0%
Home Health Aides	36.4%	9.1%	0.0%
Homemakers	50.0%	33.3%	0.0%
Intake Coordinator	0.0%	100.0%	50.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	100.0%	100.0%
Licensed Master Social Workers (LMSWs)	0.0%	66.7%	66.7%
Licensed Practical Nurse (LPNs)	22.2%	77.8%	55.6%
Occupational Therapists	-	-	-
Occupational Therapy Assistants	-	-	-
Personal Care Aides	63.2%	63.2%	21.1%
Physical Therapists	-	-	-
Physical Therapy Assistants	0.0%	0.0%	0.0%
Registered Nurses (RNs)	38.5%	69.2%	30.8%
Respiratory Therapists	-	-	-
Speech-Language Pathologists	-	-	-

Table 231. Reasons for Retention Difficulties at Western New York State Home Health Care Agencies

Occupation	Related Reasons for Retention Difficulties				
	Staff found higher pay and benefits elsewhere	Staff left for other employment sectors	Paperwork and regulatory burdens	Retirement	Transportation issues
Compliance Officers	66.7%	33.3%	66.7%	0.0%	33.3%
Home Health Aides	11.1%	22.2%	22.2%	11.1%	22.2%
Homemakers	25.0%	50.0%	50.0%	25.0%	50.0%
Intake Coordinator	75.0%	25.0%	25.0%	25.0%	75.0%
Licensed Clinical Social Workers (LCSWs)	100.0%	100.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	100.0%	100.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	100.0%	50.0%	0.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	83.3%	75.0%	41.7%	8.3%	83.3%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	80.0%	60.0%	60.0%	20.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	0.0%	100.0%	0.0%	0.0%	0.0%

Table 232. Reasons for Retention Difficulties at Western New York State Home Health Care Agencies

Occupation	Reasons for Retention Difficulties				
	Scheduling challenges	Family care giving commitments	Too few available hours for a full-time position (only PT was available)	Pay/hours limited to protect safety net benefit eligibility (Medicaid, food stamps, etc.)	Termination due to unsatisfactory performance
Compliance Officers	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health Aides	22.2%	22.2%	11.1%	22.2%	22.2%
Homemakers	50.0%	50.0%	25.0%	50.0%	50.0%
Intake Coordinator	75.0%	25.0%	0.0%	0.0%	50.0%
Licensed Clinical Social Workers (LCSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Master Social Workers (LMSWs)	0.0%	0.0%	0.0%	0.0%	0.0%
Licensed Practical Nurse (LPNs)	50.0%	50.0%	0.0%	0.0%	0.0%
Occupational Therapists	-	-	-	-	-
Occupational Therapy Assistants	-	-	-	-	-
Personal Care Aides	58.3%	41.7%	33.3%	58.3%	58.3%
Physical Therapists	-	-	-	-	-
Physical Therapy Assistants	-	-	-	-	-
Registered Nurses (RNs)	20.0%	20.0%	0.0%	0.0%	0.0%
Respiratory Therapists	-	-	-	-	-
Speech-Language Pathologists	0.0%	0.0%	100.0%	0.0%	0.0%

5. Health Care Workforce Production and Project Need

a. Graduations

Table 233. The Number of Graduations for Selected Health Care Occupations in Western New York, 2018-2022

Occupational Program	School Year					Change Between 2018 and 2022	
	2018	2019	2020	2021	2022	Number	Percent
Audiologists & Speech Language Pathologists ^a	215	214	217	182	219	4	1.9%
Clinical Laboratory Technicians	13	16	12	10	17	4	30.8%
Clinical Laboratory Technologists	26	26	30	32	37	11	42.3%
Clinical Nutritionists	19	21	20	19	1	-18	-94.7%
Creative Arts Therapists ^b	11	10	17	17	12	1	9.1%
Dental Assistants	22	20	20	0	24	2	9.1%
Dental Hygienists	53	45	48	49	0	-53	-100.0%
Dietitians	67	80	88	80	36	-31	-46.3%
EMTs and Paramedics	15	38	35	15	3	-12	-80.0%
Health Care Administrators	69	104	108	119	153	84	121.7%
License Practical Nurses (LPNs)	376	392	437	440	262	-114	-30.3%
Marriage and Family Therapists	13	7	6	5	8	-5	-38.5%
Medical Assistants	136	114	101	54	51	-85	-62.5%
Mental Health Counselors	116	138	212	274	173	57	49.1%
Nuclear Medical Technologists	12	9	7	10	6	-6	-50.0%
Nurse Anesthetist	13	17	15	17	18	5	38.5%
Occupational Therapists	219	225	242	189	180	-39	-17.8%
Occupational Therapy Assistants	54	42	54	6	76	22	40.7%
Opticians, Dispensing	21	23	30	18	14	-7	-33.3%
Pharmacists	186	196	200	182	156	-30	-16.1%
Phlebotomists	9	7	0	20	48	39	433.3%
Physical Therapists	166	180	177	150	172	6	3.6%
Physical Therapy Assistants	50	47	42	19	43	-7	-14.0%
Physician Assistants	128	123	138	120	127	-1	-0.8%
Radiation Therapists and Technologists	101	128	110	104	106	5	5.0%
Registered Nurses (RNs) ^c	870	858	756	983	950	80	9.2%
Registered Nurses with Advanced Education ^d	122	148	136	178	161	39	32.0%
Respiratory Therapists	21	25	28	21	22	1	4.8%
Social Workers ^e	392	393	371	424	417	25	6.4%
Substance Abuse/Addiction Counseling	31	31	29	22	23	-8	-25.8%
Surgical Technology/Technologist	50	48	33	35	39	-11	-22.0%

^a Audiologists & speech-language pathologists include graduations in audiology, speech-language pathology, and communication sciences and disorders.

^b Creative arts therapists include graduations in art therapy, dance therapy, and music therapy.

^c Graduations of BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs, are excluded from these counts.

^d Registered nurses with advanced education include graduations or certificates in adult health nursing, clinical nurse specialist, critical care nursing, family practice nursing, geriatric nursing, maternal and child health nursing, palliative care nursing, pediatric nursing, perioperative/OR nursing, public health nursing, women's health nursing, and nursing practice.

^e Social workers include graduations in social work and in clinical/medical social work.

Sources: Integrated Postsecondary Education Data System; NYS Education Department, Excelsior College, and Empire State University.

b. Licenses

Table 234. Number of Licensed Individuals in Selected Health Care Professions in Western New York, 2019–2023

Occupation	2019	2020	2021	2022	2023	Change Between 2019 and 2023	
						Number	Percent
Clinical Laboratory Technicians	182	190	179	176	180	-2	-1.1%
Clinical Laboratory Technologists	859	888	885	866	876	17	2.0%
Dental Assistants	241	252	251	254	230	-11	-4.6%
Dental Hygienists	1,192	1,214	1,201	1,206	1,181	-11	-0.9%
Dietitians/Nutritionists	398	400	424	434	417	19	4.8%
Licensed Practical Nurses (LPNs)	6,964	6,877	6,755	6,951	6,854	-110	-1.6%
Nurse Practitioners ^a	1,680	1,812	1,972	2,014	2,244	564	33.6%
Occupational Therapists	1,047	1,088	1,132	1,179	1,211	164	15.7%
Occupational Therapy Assistants	538	544	526	518	504	-34	-6.3%
Pharmacists	1,856	1,858	1,927	1,970	1,927	71	3.8%
Physical Therapists	1,646	1,697	1,751	1,805	1,789	143	8.7%
Physical Therapist Assistants	530	535	533	543	541	11	2.1%
Physician Assistants	1,152	1,248	1,316	1,362	1,470	318	27.6%
Registered Nurses (RNs)	21,088	21,312	21,963	22,157	22,287	1,199	5.7%
Respiratory Therapists	529	538	533	537	546	17	3.2%
Social Workers ^b	2,527	2,614	2,733	2,866	2,992	465	18.4%
Speech-Language Pathologists	1,270	1,311	1,329	1,345	1,384	114	9.0%

^a Nurse practitioners are licensed as registered nurses and are certified in 1 or more of 16 specialties.

^b Social workers include both Licensed Clinical Social Workers and Licensed Master Social Workers.

Source: New York State Education Department, Office of Professions.

c. Employment Projections

Table 235. Employment Projections for Selected Health Care Occupations for Western New York, 2020–2030

Occupational Title	2020	2030	Change Between 2020 and 2030		Average Annual Openings ^a
			Number	Percent	
Cardiovascular Technologists and Technicians	320	370	50	15.6%	35
Clinical Laboratory Technologists and Technicians	900	1,050	150	16.7%	85
Dental Assistants	1,210	1,450	240	19.8%	174
Dental Hygienists	1,160	1,380	220	19.0%	102
Diagnostic Medical Sonographers	310	400	90	29.0%	39
Dietitians and Nutritionists	380	470	90	23.7%	39
Emergency Medical Technicians and Paramedics	900	1,100	200	22.2%	90
Healthcare Social Workers	1,060	1,380	320	30.2%	142
Home Health and Personal Care Aides	17,790	25,010	7,220	40.6%	3,302
Licensed Practical and Licensed Vocational Nurses	4,970	5,870	900	18.1%	500
Magnetic Resonance Imaging Technologists	140	170	30	21.4%	13
Medical and Health Services Managers	1,410	2,000	590	41.8%	189
Medical Assistants	2,140	2,730	590	27.6%	339
Medical Secretaries	940	1,090	150	16.0%	125
Mental Health and Substance Abuse Social Workers	830	1,140	310	37.3%	121
Nuclear Medicine Technologists	90	110	20	22.2%	2
Nurse Anesthetists	200	240	40	20.0%	14
Nurse Practitioners	1,330	2,170	840	63.2%	184
Nursing Assistants	5,970	7,010	1,040	17.4%	894
Occupational Therapists	790	980	190	24.1%	69
Occupational Therapy Assistants	270	350	80	29.6%	48
Pharmacists	1,590	1,810	220	13.8%	82
Pharmacy Technicians	1,530	1,920	390	25.5%	159
Phlebotomists	340	440	100	29.4%	60
Physical Therapist Assistants	450	650	200	44.4%	80
Physical Therapists	1,310	1,650	340	26.0%	94
Physician Assistants	880	1,240	360	40.9%	96
Radiation Therapists	80	90	10	12.5%	1
Radiologic Technologists	1,240	1,450	210	16.9%	121
Recreational Therapists	60	70	10	16.7%	1
Registered Nurses (RNs)	15,530	18,280	2,750	17.7%	1,155
Respiratory Therapists	540	700	160	29.6%	46
Speech-Language Pathologists	1,040	1,460	420	40.4%	122
Surgical Technologists	530	620	90	17.0%	59

^aAnnual openings reflect creation of new positions in the occupation and replacement for those retiring or otherwise leaving the occupation. Source: NYS Department of Labor, Jobs in Demand/Projects, Long-Term Occupation Projections, 2020 - 2030.

IV. APPENDIX

A. Data Sources and Methods

The following describes the data sources used in this report. Where appropriate, the methods used for calculating rates are also included.

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 3 and 244 as well as on each regional profile page. Data sources include:

1. Center for Health Workforce Studies

New York State Registered Nurse (RN) Graduations

CHWS surveys RN education programs in New York annually to describe trends in the production of RNs in the state. The 2022 survey included questions about applications, acceptances, faculty, perspectives on the local job market, and COVID-19 impacts.

Employer Demand Surveys

CHWS, in conjunction with statewide and regional provider organizations, conducts annual surveys of human resources staff from home health care agencies, hospitals, and nursing homes across New York State. The surveys asked about the professions and occupations that pose the greatest recruitment and retention problems in 2023. Respondents were asked to assess recruitment and retention difficulties on a 5-point Likert scale, ranging from “easy” to “difficult.” The percentages reported in this report indicated those facilities that reported either “moderately difficult,” “very difficult,” or “extremely difficult” on recruitment and/or retention issues. The provider organizations that CHWS collaborated with on these surveys included:

- Association on Aging in New York
- Empire State Association of Assisted Living
- Greater New York Hospital Association
- Healthcare Association of New York State, Inc.
- Healthcare Association of Western and Central New York
- Home Care Association of New York State, Inc.
- Iroquois Healthcare Association
- Leading Age New York
- New York State Association of Health care Providers, Inc.
- New York State Center for Adult Care
- New York State Health Facility Association
- Suburban Hospital Alliance

Home health care agencies and hospitals may have sites in multiple counties. In these cases, the counties may be located in different NYSDOL regions. Consequently, information on recruitment and retention for these settings was reported in each region where sites were located. Additionally, in instances where total responses within a region were less than 5, no information is provided, or regions were combined. Information for federally qualified health centers (FQHCs) were collected through a focus group and are reported statewide only.

2. Department of Labor Jobs

Data from New York State Quarterly Census of Employment and Wages (QCEW, formerly known as ES-202) for 2018 to 2022 were used to describe regional changes in health care employment by setting. Note that this is a count of jobs not individuals. A number of events potentially affected the job counts, including closures, mergers, and/or expansions. Consequently, large changes in jobs in specific health sectors (i.e., hospitals, nursing homes, or home health care) may reflect changes in ownership or the service delivery system rather than actual changes in the workforce. Additionally, more recent changes in jobs and employment such as temporary or permanent layoffs or retirements due to the COVID-19 pandemic may not be reflected in the job counts. For more information about the QCEW data, please visit the QCEW Technical Notes page <https://dol.ny.gov/occupational-employment-and-wage-statistics-technical-notes>. When reviewing the counts of jobs, please note:

- These counts include full-time and part-time positions. One person might hold two part-time positions and consequently there is not a one-to-one match of individual workers compared to the number of jobs reported.
- To protect individual privacy, if job counts in an area are reported by less than 3 institutions, NYSDOL does not publicly release these job counts.

Salaries

Salary data is reported by both NYSDOL and Occupational Employment and Wage Statistics (OEWS) and the US Bureau of Labor Statistics Occupational Employment Survey (OES). The regional-level wage estimates are from OEWS, and the state-level wage estimates are from OES. The regional wage estimates are based on responses from 6 semi-annual panels collected over a three-year period. Wages were then updated to the first quarter of 2023 by making cost-of-living adjustments. These wage estimates include both part-time and full-time employees, as well, as part-time consultants. The Department of Labor does not report salaries in a region with fewer than 3 institutions in a particular setting. The reported state-level wage estimates from BLS include the annual 10th percentile wage (Entry), annual median wage (Median), and annual 90th percentile wage (Experienced). In reviewing both datasets, please be aware that:

- In 2021, the OCC_CODE of Emergency Medical Technicians and Paramedics from both datasets included 29-2042 and 29-2043.
- In 2018, the OCC_CODE of Home Health and Personal Care Aides from the BLS data included 31-1011 and 39-9021.
- The state-level employment and wage estimates of Medical Records and Health Information Technicians were not reported as their own occupational category 2019 and 2020 and were not included in the salary table.
- In 2018, the OCC_CODE of Medical Secretaries and Administrative Assistants, 43-6013, only included medical secretaries.
- The OCC_CODE of Occupational Therapy Assistants and Aides from both datasets included 31-2011 and 31-2012.
- The OCC_CODE of Physical Therapist Assistants and Aides from both datasets included 31-2021 and 31-2022.
- In 2018, the OCC_CODE of Radiologic Technologists and Technicians, 29-2034, only included radiologic technologists.

Projections

NYSDOL develops projections for the state and NYSDOL regions. The state projections and regional projections are for 2020-2030. 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 rather than expansion of the occupation. Limitations for these projections include unanticipated external factors such as recession, scope of work or education changes for specific occupational titles, changes in state and/or federal reimbursement, and advancements in technology. In reviewing both datasets, please be aware that:

- The OCC_CODE of Home Health and Personal Care Aides for state data is 31-1130. For the regional data they are broken out separately home health aide (31-1011) and personal care aide (39-9021).
 - The state projections of Medical Records and Health Information Technicians in 2020-2030 were not reported as their own occupational category 2019 and 2020 and were not included in the projections table.
 - The OCC_CODE of Occupational Therapy Assistants and Aides from both datasets include 31-2011 and 31-2012.
 - The OCC_CODE of Physical Therapist Assistants and Aides from both datasets include 31-2021 and 31-2022.
 - The OCC_CODE of both the regional and state projections for Medical Secretaries and Administrative Assistants is 43-6013, which includes only medical secretaries.
3. US Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

The IPEDS system is a collection of interrelated surveys conducted annually by the US Department of Education, National Center for Education Statistics. IPEDS gathers information from every college, university, and technical and/or vocational institution that participates in the federal student financial aid program. The data from school year 2017/2018 (hereafter referred to as 2018) to school year 2021/2022 (hereafter referred to as 2022) were used to describe the number of new graduates each year potentially entering health occupations. These data were collected from two- and four-year universities, vocational schools, and technical schools. The number of graduations were displayed and aggregated by NYDOL regions.

These data do not reflect programs that may not have reported graduations or individuals who completed on-the-job training programs. Large changes in graduations may reflect closures, mergers, new programs, and/or other administrative changes in how and where data are reported. Graduations for RNs are from the New York State Education Department, Excelsior College, and Empire State University and do not include graduations from BSN completers, those RNs already holding RN diplomas or ADN degrees who obtained BSNs.

Graduations may include entry-level degrees and those degrees that lead to licensure. For example, social workers include those graduating with bachelor's degrees and those graduating with master's degrees. A master's is required for licensure in New York State.

- Health care administrators include CIPS codes 51.0701, 51.0702, 51.0718, and 51.2211.
- Nurse midwives include Nurse Midwife/Nursing Midwifery and Direct Entry Midwifery.
- Audiologists & speech-language pathologists include graduations in audiology (51.0202), speech-language pathology (51.0203), audiologists and speech-language pathologists (51.0204), and communication sciences and disorders (51.0201).
- Creative arts therapists include graduations in art therapy (51.2301), dance therapy (51.2302), and music therapy (51.2305).
- Registered nurses with advanced education include graduations or certificates in adult health nursing (51.3803), clinical nurse specialist (51.3813), critical care nursing (51.3814), family practice nursing (51.3805), geriatric nursing (51.3821), maternal and child health nursing (51.3806), palliative care nursing (51.3819), pediatric nursing (51.3809), perioperative/OR nursing (51.3812), public health nursing (51.3811), women's health nursing (51.3822), and nursing practice (51.3818).

- Social worker graduations include graduations in social work (44.0701) and clinical/medical social worker (51.1503).

4. New York State Education Department (NYSED) Licensure Data

Licensure data from 2019 - 2023 presented in this report reflect counts of licensed health care professionals in New York. Data on licenses are available from NYSED on the number of individuals licensed in a health care profession. Licensure data in a health care profession represent the upper limit of the number of individuals in New York who can practice in a profession. However, some individuals who are licensed in a health care profession may not be working in the profession, may be working less than full-time, or may be working in the profession in another state. Licensure data, however, can provide valuable information on major trends in the supply of health care professionals in the state. In reviewing licensure data, please note:

- Counts of health care professionals by region 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.
- Social workers (SWs) are licensed in New York as either licensed clinical social workers (LCSWs) or licensed master social workers (LMSWs). Although state and federal labor department data sources provide statistics for LCSWs and LMSWs combined collectively as social workers, the licensing distinction is reflected for the purposes of understanding recruitment and retention difficulties.
- Nurse practitioners are licensed as RNs but are certified in 1 or more of 16 NP specialties. Information presented in the report at the regional level represents a duplicated count of NPs across all specialties. The statewide count, however, is unduplicated.

5. US Census Bureau, American Community Survey

The American Community Survey (ACS) is conducted each year and is used to provide population estimates. The 2018 - 2022 5-year estimates from the ACS were used to describe selected population characteristics by NYSDOL regions. The population characteristics included total population, age by category, poverty, race/ethnicity, and education level. The education levels and rates were based on individuals aged 25 years and older. The following ACS categories were combined into 1 category for this report:

- Category "Population with Less than a High School Diploma" data was a combination of "Total population aged 25 and older with less than 9th grade education" and "Total population aged 25 and older with 9th to 12th grade education, no diploma."
- Category "Population with a high school diploma or equivalent" was a combination of "Total population 25 years and older who is a high school graduate (includes equivalency)" and "Total population aged 25 years and older, some college no degree."

6. New York State Department of Health

Data for the New York State Community Health Indicator Report (CHIRS) for 2018 - 2020 (2017 - 2019 for cancer), were used to describe the health of the population by NYSDOL regions. The health indicators were obtained from CHIRS and include information on deaths, births, and hospitalizations. Both counts and rates are reported for an average of 3 years. Diabetes hospitalization data are for those with diabetes as the primary diagnosis for hospitalization. The rates for calculating these health indicators are as follows:

- Infant death rates are reported per 1,000 live births.
- Total birth rates are reported per 1,000 females aged 15 to 44 years.
- Teen birth rates are reported per 1,000 females aged 15 to 19 years.
- Low-birthweight rates and percentage of late/no prenatal care are 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 asthma hospital admissions, aged 25 to 44 are based on population aged 25 to 44 years, and rates per 10,000 for asthma hospital admissions, aged 45 to 64 are based on population aged 45 to 64 years.
- Rates per 10,000 for pediatric asthma hospital admissions are based on population aged birth to 17 years.
- All other rates per 10,000 for hospitalizations and emergency department (ED) visits are based on the total population.

B. 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 health and substance abuse facilities, and other residential care facilities)
- Home health care
- Ambulatory care settings (excluding home health care), including:
 - Medical and diagnostic laboratories
 - Offices and clinics of Doctor of Medicine
 - Offices and clinics of dentists
 - Offices and clinics of other health practitioners
 - Outpatient care centers; and
 - Other ambulatory health services

This classification scheme provides standardization among the data sets presented, but it has several limitations. By limiting the analyses to the NAICS health care services industries, health care workers in hospital-sponsored ambulatory care sites may be included in hospital employment counts. In addition, health care professionals in industries outside of the settings listed, such as those working in schools, insurance firms, or who are self-employed, are excluded from the health care sector counts.

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. Additionally, nursing aides, orderlies, and attendant's occupational category includes multiple job titles, levels of training, and certifications.

There are some job titles in a health care 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 difference in defining a home health aide as any individual providing services in the home or as an individual who completes home health aide certification requirements.

Throughout this report some abbreviations are used, including:

- CNA -- certified nursing aide
- FPL -- federal poverty level
- FQHC -- federally qualified health center
- LCSW -- licensed clinical social workers
- LMSW -- licensed master social workers
- LPN -- licensed practical nurses
- MDS -- minimum data set (coordinators)
- NP -- nurse practitioners
- RN -- registered nurses

C. Geographic Areas

For purposes of this report, NYSDOL regions are used as described below and as depicted in Figure 1 on page 3. The regions and their respective counties 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, Schuyler, Steuben, Tioga, and Tompkins.
- Western New York: The counties of Allegany, Cattaraugus, Chautauqua, Erie, and Niagara.

For the purpose of this report, the downstate category includes the NYSDOL regions of New York City and Long Island. The upstate category includes the following NYSDOL regions: Capital District, Central New York, Finger Lakes, Hudson Valley, Mohawk Valley, North Country, Southern Tier, and Western New York.

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