

THE HEALTH CARE WORKFORCE, 2002
UPSTATE NEW YORK AND LONG ISLAND

Trends in the Supply and Demand for Health Workers

February 2003

**The Center for Health Workforce Studies
School of Public Health
University at Albany
One University Place
Rensselaer, New York 12144-0250**

Phone: (518) 402-0250

Fax (518) 402-0252

<http://chws.albany.edu>

PREFACE

This report provides extensive data on the health workforce in New York State, including data on trends in the supply and distribution of health workers. The report is designed to provide valuable information to the health industry, health professionals, educators, policy makers, and the public. The report analyzes health care employment, licensure, and other data on the health workforce in New York State outside of New York City.

This report was prepared by the Center for Health Workforce Studies at the University at Albany. It is a companion to a report on the New York City Health Workforce Tracking System that the Center has published annually over the past four years. Copies of the New York City report are available at the Center's web site: <http://chws.albany.edu>.

The Center for Health Workforce Studies is located at the School of Public Health, University at Albany, State University of New York. The Center is a not-for-profit research organization dedicated to health workforce data collection and analysis. Several Center staff contributed to this study, including Robert Martiniano, Maria Kouznetsova, Jean Moore, and Edward Salsberg.

February 2003

TABLE OF CONTENTS

INTRODUCTION..... 1

KEY FINDINGS 2

OVERVIEW..... 3

GENERAL TRENDS: UPSTATE NEW YORK AND LONG ISLAND..... 7

1. Employment by Region 7

2. Employment by Setting 9

3. Licensed Health Professionals 14

4. Health Occupations Projections for New York State 15

5. Nursing Program Graduations..... 17

REGIONAL ANALYSIS 19

A. Capital District..... 19

B. Central New York..... 23

C. Finger Lakes 25

D. Hudson Valley 27

E. Long Island 29

F. Mohawk Valley..... 31

G. North Country 33

H. Southern Tier 35

I. Western New York..... 37

INTRODUCTION

- Health care continues to be one of the strongest sectors of the New York State economy and health care professionals and others who work in health care settings represent more than 11% of the State's total workforce. Despite the general strength of the health sector, the growth of health care employment has slowed over the last several years and the sector is facing a number of significant challenges in the coming years, making it difficult to predict future health care employment.
- Health facilities throughout New York State are still facing serious shortages of key workers. These shortages are likely to persist for the next two years regardless of overall health care employment levels. Shortages of registered nurses continue to be a major concern as they are the largest health profession. Shortages of experienced specialty nurses are one of the more difficult problems facing hospitals. Hospitals are also experiencing shortages of other health workers, including pharmacists, radiologic technicians, respiratory therapists and LPNs.
- In the longer term, over the next decade, health care employment is likely to rise significantly. Driven in part by the aging of the country, at the national level, the federal Bureau of Labor Statistics has forecast that employment in health care occupations will grow nearly 29% between 2000 and 2010. This is twice the rate of growth of non-health care jobs. While this national forecast may not be fully applicable to New York State, there is no reason to believe that the number of health jobs will not grow significantly over the decade.
- Health facilities in New York State are facing great fiscal uncertainties due to the general state of the economy. Although the health care sector and its workforce are generally less affected by a recession than other sectors and workers, it is very likely that the economic problems of the region and nation and efforts to contain public spending will lead to slower growth in health care jobs. While there will continue to be a need to replace those retiring or otherwise leaving their health care jobs, turnover also usually slows in a recession.
- Both Medicare and Medicaid, which provide significant funding for the health sector in New York, are likely to face fiscal pressures in 2003 and beyond.
- Given this mixed picture, over the next year, the industry may see shortages in some occupations simultaneous with cutbacks in other occupations.
- While the shortages of registered nurses continues to be a significant problem for health facilities, enrollment in nursing programs is up and health facilities are implementing a number of strategies to try to address the shortages, providing some hope for a lessening of the shortages in the next few years.

KEY FINDINGS

- In 2000, there were nearly 490,000 health sector jobs¹ in Upstate New York and Long Island, making health care one of the largest sectors in the State.
- Health care employment in upstate New York and Long Island remained relatively stable, increasing by slightly over 1% between 1998 and 2000.
- The Capital region experienced the largest overall growth in health care employment between 1998 and 2000 at over 3.5%, while the Western New York region experienced the largest overall decline (2.6%) in employment during the same period.
- Physician offices and clinics experienced the largest growth at 8.9%, followed by medical and dental labs and dental offices, both with increases of over 5%.
- While hospitals employ more individuals than any other health setting, with over 41% of all the jobs in the health sector, jobs in hospitals declined by 2% between 1998 and 2000. The number of jobs also declined in home health care services.
- Employment in nursing homes and similar facilities grew by over 4% between 1998 and 2000.
- The number of nurse aide and orderly jobs in New York State is projected to increase by over 23,000 between 1998 and 2008, with over 26,000 annual openings reflecting the high annual turnover of these workers.^{2,3}
- The number of home health aide jobs in New York State is projected to increase by 20,000 between 1998 and 2008, with over 17,000 annual openings.^{2,3}
- The number of registered nurse jobs in New York State is projected to increase by over 16,000 between 1998 and 2008, with over 12,000 annual openings. The number of licensed practical nurse jobs is projected to increase by almost 6,000 during the same period, with over 2,600 annual openings.^{2,3}
- Although the total number of RN graduations in upstate New York regions and Long Island declined between 1996 and 2002, RN graduations in these areas are projected to experience increases in RN graduations between 2002 and 2004.

¹ “Jobs” or “employment” as used in this report reflects data from the New York State Department of Labor and the U.S. Bureau of Labor Statistics. They refer to the number of filled positions, e.g., nurse in a setting, e.g., hospital. Consequently, one individual with more than one job is counted multiple times.

² Projections are presently not available at the sub-state level, therefore the figures presented represent the entire state, including New York City.

³ Annual openings reflect both creation of new positions in the occupation and turnover of existing positions due to retirements, job changes within the occupation, and career changes to other occupations. An occupation with far more annual job openings compared to the number of new positions indicates significant turnover within that occupation.

OVERVIEW

I. Goals

This report describes trends in the health care workforce in New York State (other than New York City) by setting, health occupation, and by New York State Labor Department (DOL) regions. The goals of this report are to:

- Evaluate health care employment in total and by region for Long Island and upstate New York, by health care setting and by licensed health professionals;
- Identify the professions and occupations that are likely to experience significant increases or decreases;
- Assist policymakers and other stakeholders to target health professions education and job training funds to meet priority needs;
- Help guide health workforce policies, including decisions about the capacity of health professions education programs; and.
- Inform current and prospective students about health care employment prospects and opportunities.

II. Data Sources and Terminology

The data sources used in this report include the following:

A. Center for Health Workforce Studies:

Trends in Nursing Education in New York State, January 2003.

B. United States Bureau of Labor Statistics/New York State Department of Labor:

- Covered Employment and Wages Program (ES-202)

The data was used to evaluation regional changes in health care employment by setting.

- Employment Projections

Employment projections used in this report reflect a count of the number of jobs in those occupational categories in 1998 and the projected number of jobs in those categories in 2008. Annual openings reflect both creation of new positions in the occupation and turnover of existing positions due to retirements, job changes within the occupation, and career changes to other occupations. Occupations with a small increase in the number of total jobs between 1998 and 2008 but high annual openings indicate significant annual turnover within the occupation rather than expansion of the occupation.

C. SED State Licensure Data

The licensure numbers presented in this report reflect counts at two points in time: April 1, 2001 and April 1, 2002. These are the number of individuals licensed by New York State in the profession. This number represents the maximum number of individuals that could be employed in that profession, although some may not be actively working in that profession. Counts by county are based on the mailing address in the licensure file that may be a home or a practice location.

Terminology

The settings used in this report are from the federal BLS Standard Industrial Classification (SIC) system for the health care sector. The breakdown within the health care sector is as follows:

- Hospitals;
- Nursing and personal care facilities;
- Home health services;
- Medical and dental laboratories;
- Offices and clinics; and
- Other health and allied services not elsewhere classified.

The classification scheme provides standardization among the data sets presented but has some limitations. By limiting the analyses to the SIC health services industries, health care workers in hospital-operated ambulatory care sites may be included in hospital employment counts. In addition, health care professionals in industries outside of the above settings such as those in schools, insurance firms, or those who are self-employed are excluded from the health sector counts. The Center estimates that, nationally, 12% of the health care workforce is employed outside the standard health care settings.

Occupations are usually grouped by Bureau of Labor Statistics (BLS) Occupational Employment Statistics (OES) categories. These occupational categories also have limitations. For example, Registered Nursing (RN) makes no distinction between Nurse Practitioners, RN managers and critical care RNs, etc. The standard “nursing aides, orderlies and attendants” occupational category also includes multiple job titles, levels of training and certification status. There also are some job titles that overlap with occupational classifications, and this may cause some problems in reporting. For example, confusion may result from the difference between defining a home health aide as any individual providing services in the home and one who has completed the certification requirements.

III. Geographic Areas

The regions (see Exhibit 1 on the next page) used in this report are:

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

Central New York: The counties of Cayuga, Cortland, Onondaga, and Oswego.

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

Hudson River: 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, Madison, Montgomery, Oneida, and Schoharie.

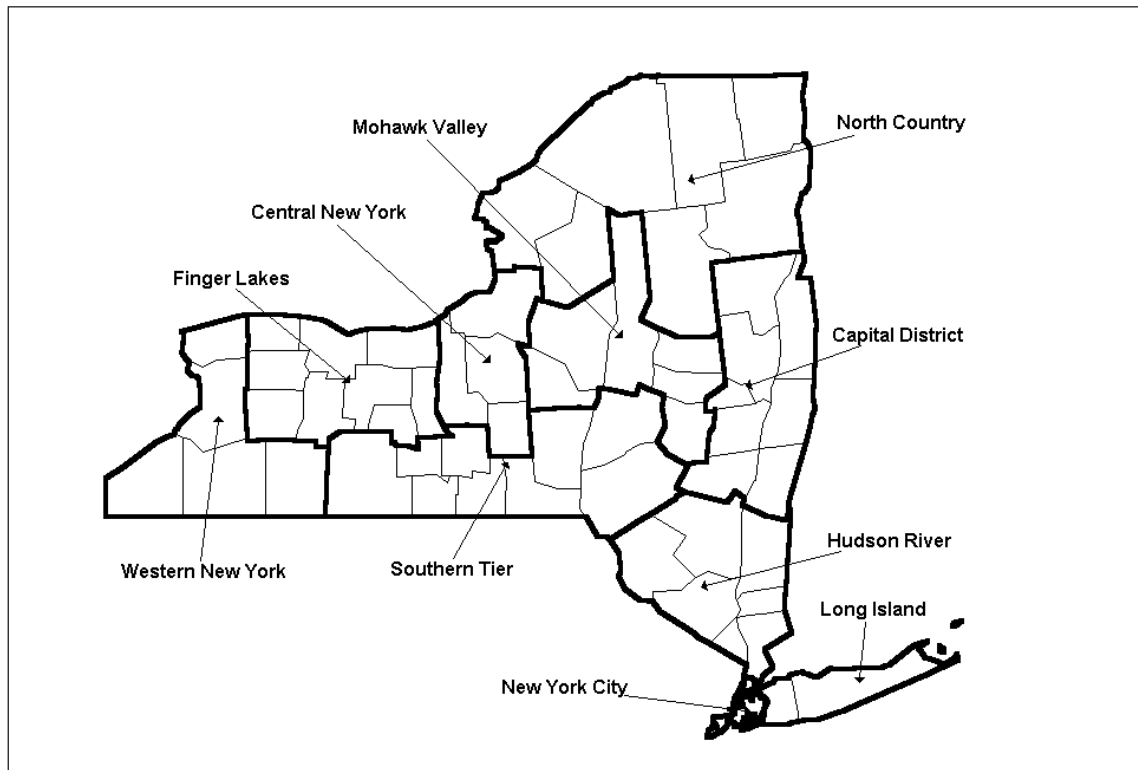
North Country: The counties of Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, and St. Lawrence.

Southern Tier: Broome, Chemung, Chenango, Delaware, Otsego, Schuyler, Steuben, Tioga, and Tompkins.

Western New York: Allegany, Cattaraugus, Chautauqua, Erie, and Niagara.

Exhibit 1

New York State Counties by Labor Department Region



GENERAL TRENDS: UPSTATE NEW YORK AND LONG ISLAND

1. Employment by Region

Health care employment in upstate New York and Long Island remained relatively stable, increasing by slightly over 1% between 1998 and 2000. Outside of New York City, the region in New York State with the largest health care employment is Long Island with more than 120,000 jobs. The region with the largest increase in health care employment between 1998 and 2000 was the Capital Region. The Finger Lakes had the second largest increase in health care employment. Western New York and the Mohawk Valley both experienced losses in health care employment between 1998 and 2000, with Western New York experiencing a decline of over 2% in total health care employment (Exhibit 2). The Capital Region has the most health sector jobs per 100,000 population at 4,767 followed by Western New York at 4,764 (Exhibit 3).

**Exhibit 2
Health Care Employment by Region
for Upstate New York and Long Island, 1998 - 2000**

Region	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Capital District	47,414	48,377	49,098	1,684	3.6%
Finger Lakes	55,478	55,996	57,154	1,676	3.0%
Long Island	118,933	119,946	120,883	1,950	1.6%
Hudson Valley	95,804	97,095	96,826	1,022	1.1%
North Country	15,656	15,856	15,810	154	1.0%
Southern Tier	29,060	29,420	29,331	271	0.9%
Central New York	29,698	29,936	29,904	206	0.7%
Mohawk Valley	22,030	22,308	21,990	-40	-0.2%
Western New York	68,960	68,113	67,170	-1,790	-2.6%
Totals	483,032	487,048	488,165	5,133	1.1%

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

Exhibit 3
Health Care Employment by Region
Per 100,000 Population

Region	2000 Population	Number of Jobs	
		2000	Per 100,000
Capital District	1,029,927	49,098	4,767
Finger Lakes	1,199,588	57,154	4,764
Long Island	2,753,913	120,883	4,389
Hudson Valley	2,179,189	96,826	4,443
North Country	425,871	15,810	3,712
Southern Tier	718,973	29,331	4,080
Central New York	711,275	29,904	4,204
Mohawk Valley	505,700	21,990	4,348
Western New York	1,443,743	67,170	4,652
Totals	10,968,179	488,165	4,451

Source: New York State Department of Labor, ES-202; US Census, 2000

2. Employment by Setting

In 2000, hospitals continued to be the largest health sector of employment by far with over 200,000 or 41% of total health care jobs outside of New York City (Exhibit 4). However, while overall employment was stable, employment in hospitals declined between 1998 and 2000. Physician offices and clinics experienced the largest growth at nearly 9%, followed by medical and dental laboratories (5.3%), dental offices and clinics (5.2%), and nursing and personal care facilities (4.3%). Home health services and hospitals both experienced declines in the number of jobs between 1998 and 2000 (Exhibit 5).

Exhibit 4

Health Sector Employment by Setting for Upstate New York and Long Island, 2000

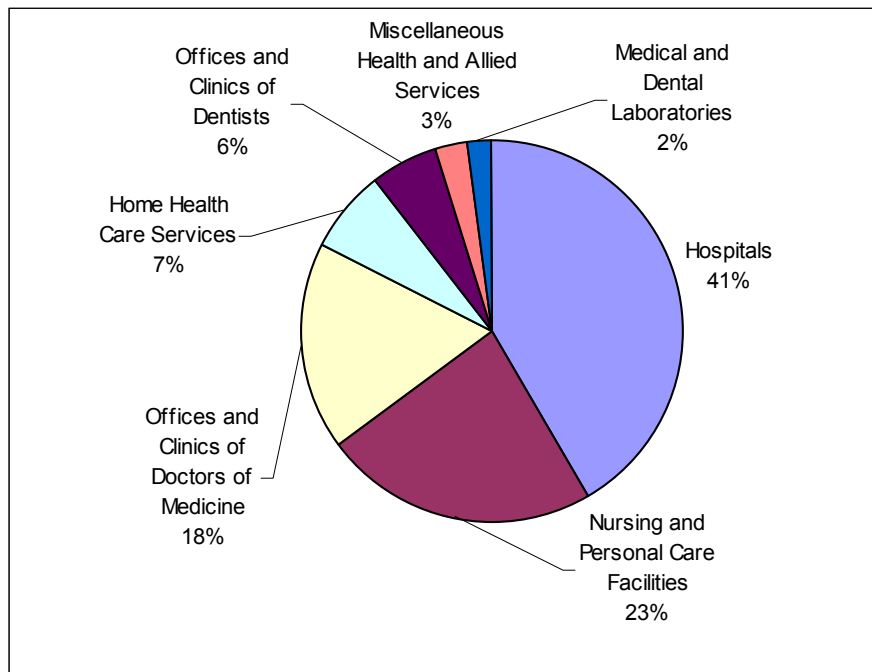


Exhibit 5
Change in Health Care Employment by Setting
for Upstate New York and Long Island

Setting	1998	1999	2000	Change Between 1998 to 2000	
				Number	Percent
Offices and Clinics of Doctors of Medicine	79,728	84,160	86,705	6,977	8.9%
Medical and Dental Laboratories	8,502	8,574	8,952	450	5.3%
Offices and Clinics of Dentists	27,965	29,081	29,408	1,443	5.2%
Nursing and Personal Care Facilities	107,074	109,188	111,698	4,624	4.3%
Hospitals	208,100	206,402	204,016	-4,084	-2.0%
Miscellaneous Health and Allied Services nec ⁴	14,889	14,231	13,724	-1,165	-7.8%
Home Health Care Services	36,775	35,411	33,662	-3,113	-8.5%
Totals	483,032	487,048	488,165	5,133	1.1%

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

⁴ Not elsewhere classified.

a. Hospital Employment

Every region experienced employment losses at hospitals between 1998 and 2000 except the Finger Lakes region, which experienced a 6% increase. In total, the employment at hospitals declined by slightly over 4,000 jobs. Between 1998 and 2000, both the North Country and Western New York regions experienced employment declines of more than 7% (Exhibit 6).

Exhibit 6
Change in Hospital Employment by DOL Region

Region	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Capital District	20,670	20,731	20,664	-6	0.0%
Central New York	11,501	11,456	11,194	-307	-2.7%
Finger Lakes	25,076	25,403	26,564	1,488	5.9%
Hudson Valley	40,651	40,211	39,739	-912	-2.2%
Long Island	46,630	46,202	45,588	-1,042	-2.2%
Mohawk Valley	9,940	9,961	9,585	-355	-3.6%
North Country	7,764	7,844	7,205	-559	-7.2%
Southern Tier	14,947	15,032	14,876	-71	-0.5%
Western New York	30,920	29,563	28,601	2,319	-7.5%
Totals	208,100	206,402	204,016	-4,084	-2.0%

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

b. Nursing and Personal Care Facility Employment

Employment at nursing and personal care facilities in areas outside of New York City increased by over 4,600 jobs between 1998 and 2000, with the North Country experiencing the largest percentage increase of over 12% and the Hudson Valley experiencing the largest absolute increase of almost 2,000 jobs. Between 1998 and 2000, employment at nursing and personal care facilities in the Capital Region declined by over two percent (Exhibit 7).

Exhibit 7
Change in Nursing and Personal Care Facility Employment by DOL Region

Region	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Capital District	11,462	11,373	11,190	-272	-2.4%
Central New York	7,539	7,694	7,704	165	2.2%
Finger Lakes	13,607	13,777	13,891	284	2.1%
Hudson Valley	20,598	21,334	22,474	1,876	9.1%
Long Island	19,294	19,967	20,937	1,643	8.5%
Mohawk Valley	7,149	7,287	7,165	16	0.2%
North Country	4,203	4,088	4,717	514	12.2%
Southern Tier	7,350	7,325	7,322	-28	-0.4%
Western New York	15,872	16,343	16,297	425	2.7%
Totals	107,074	109,188	111,698	4,624	4.3%

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

c. Home Health Care Services Employment

Employment in home health care services in areas outside of New York City declined by over 3,000 jobs between 1998 and 2000, with Hudson Valley decreasing by more than 1,700 jobs, or over 21%. Central New York also experienced a decline of almost 16% in home health care employment between 1998 and 2000. Home health care employment in the Capital District grew by almost 10% between 1998 and 2000 (Exhibit 8).

Exhibit 8
Change in Home Health Care Services Employment by DOL Region

Region	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Capital District	2,741	3,077	3,010	269	9.8%
Central New York	1,752	1,597	1,473	-279	-16.0%
Finger Lakes	5,331	5,308	5,286	-45	-0.9%
Hudson Valley	8,019	7,625	6,313	-1,706	-21.3%
Long Island	11,320	10,329	10,306	-1,014	-9.0%
Mohawk Valley	1,100	1,038	1,081	-19	-1.7%
North Country	404	534	540	136	33.6%
Southern Tier	972	971	995	23	2.3%
Western New York	5,135	4,933	4,659	-476	-9.3%
Totals	36,775	35,411	33,662	-3,113	-8.5%

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

3. Licensed Health Professionals

Registered nurses continue to be, by far, the largest number of licensed health care professionals in New York State followed by licensed practical nurses. The number of physician assistants (8.4%), occupational therapists (7.4%), and speech-language pathologists (5.5%) each increased by more than 5% between 2001 and 2002 in areas outside of New York City. Additionally, the number of nurse practitioners, occupational therapy assistants, and physical therapists all grew between 4% and 5% between 2001 and 2002 in areas outside of New York City. The number of registered nurses declined by slightly less than 1% between 2001 and 2002 in areas outside of New York City while the number the licensed practical nurses grew by over 1.3% during the same period (Exhibit 9).

Exhibit 9
Growth by Licensed Health Professionals⁵
for Upstate New York and Long Island, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physician Assistants	3,239	3,510	271	8.4%
Occupational Therapists	4,620	4,962	342	7.4%
Speech-Language Pathologists	6,621	6,983	362	5.5%
Nurse Practitioners	6,977	7,318	341	4.9%
Occupational Therapy Assistants	2,331	2,444	113	4.9%
Dentists	9,515	9,959	444	4.7%
Physical Therapists	8,418	8,756	338	4.0%
Physical Therapy Assistants	2,752	2,844	92	3.3%
Respiratory Therapists	3,013	3,067	54	1.8%
Social Workers	21,086	21,419	333	1.6%
Licensed Practical Nurses	48,998	49,656	658	1.3%
Psychologists	5,259	5,292	33	0.6%
Physicians	39,430	39,604	174	0.4%
Dental Hygienists	6,658	6,667	9	0.1%
Registered Nurses	144,461	143,425	-1,036	-0.7%
Pharmacists	11,646	11,145	-501	-4.3%
Dietitians-Nutritionists	2,885	2,748	-137	-4.8%

Source: New York State Education Department

In Section V, which presents data by New York State Department of Labor Region, includes counts for health care profession by individual regions.

⁵ These numbers report reflects a count of individuals licensed by New York State in the profession, though not necessarily working in that profession.

4. Health Occupations Projections for New York State

Between 1998 and 2008, the Labor Department projected the most annual openings in nursing aide and orderly, home health aide, and registered nursing jobs throughout New York State. Many of the openings represent replacement of individuals in existing positions and not necessarily new jobs in the occupation. Despite this, the number of nursing aide and orderly jobs in the state is projected to increase by over 24,000, the number of home health aide jobs by 20,000, and registered nursing jobs by over 26,000 between 1998 and 2008. Additionally, between 1998 and 2008, the number of licensed practical nursing positions is projected to increase throughout New York State by over 5,000 jobs (Exhibit 10).

Exhibit 10
Employment Projections for Health Care Occupations⁶
for New York State, including New York City, 1998 – 2008

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	105,900	129,000	23,100	21.8%	26,600
Home Health Aides	63,200	83,200	20,000	31.6%	17,180
Registered Nurses	154,600	171,300	16,700	10.8%	12,290
Psychiatric Aides	22,400	21,600	-800	-3.6%	4,560
Dental Assistants	14,700	20,900	6,200	42.2%	3,620
Medical Assistants	17,500	25,800	8,300	47.4%	3,120
Physicians & Surgeons	55,300	63,300	8,000	14.5%	2,700
Social Workers, Medical & Psychiatric	17,700	21,900	4,200	23.7%	2,670
Licensed Practical Nurses	49,300	55,000	5,700	11.6%	2,610
Medicine & Health Service Managers	18,400	21,600	3,200	17.4%	2,520
Medical Secretaries	17,700	18,500	800	4.5%	2,500
Psychologists	14,200	15,600	1,400	9.9%	1,800
Dental Hygienists	9,900	14,000	4,100	41.4%	1,070
Physical & Corrective Therapy Assistants	4,900	6,200	1,300	26.5%	1,000
Emergency Medical Technicians	7,600	8,800	1,400	15.8%	990
Radiologic Technologists, Hospitals	12,600	14,300	1,700	13.5%	780
Speech Pathologist & Audiologists	8,400	11,100	2,700	51.2%	730
Dietitians & Nutritionists	4,800	5,200	400	8.3%	650
Pharmacy Technicians	5,200	5,700	500	9.6%	630
Medical/Clinical Laboratory Technicians	10,100	11,500	1,400	13.9%	620
Physical Therapists	7,800	9,400	1,600	20.5%	560
Medical/Clinical Laboratory Technologists	10,800	11,100	300	2.8%	510
Medical Records Technicians	4,400	6,000	1,600	36.4%	500
Pharmacists	13,000	14,100	1,100	8.5%	460

⁶ Employment projections used in this report reflect a count of the number of jobs in those occupational categories in 1998 and the projected number of jobs in those categories in 2008. Annual openings reflect both creation of new positions in the occupation and replacement for those retiring or leaving the profession for other reasons. **These projections represent the entire state, including New York City.**

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998-2008
			Number	Percent	
Pharmacy Assistants	3,200	3,500	300	9.4%	440
Respiratory Therapists	5,200	6,700	1,500	28.8%	430
Surgical Technicians	3,200	3,800	600	18.8%	430
Occupational Therapists	5,000	6,400	1,400	28.0%	400
Physician Assistants	4,500	6,100	1,600	35.6%	350
Dentists	9,100	9,900	800	8.8%	270
Occupational Therapy Assistants	1,400	1,800	400	28.6%	240
Recreational Therapists	3,500	3,700	200	5.7%	180

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

5. Nursing Program Graduations

Between 1996 and 2000, RN graduations from New York State nursing programs have steadily declined throughout New York State and in each region. This trend reversed in 2001 with two regions experiencing small increases. By 2004, all upstate New York and Long Island regions are projected to have increases in the number of RN graduations over the 2000 levels. Between 2000 and 2004, RN graduations are projected to increase in all upstate New York and Long Island regions, with RN graduations in the Southern Tier increasing by 91% between 2000 and 2004 and the Capital District increasing by almost 51% during the same period.

Despite these increases between 2000 and 2004, only three upstate regions are projected to have more RN graduations in 2004 than were in 1996, with RN graduations in the Capital District projected to increase by almost 25% over the number of 1996 graduations. RN graduations in the Mohawk Valley also are projected to increase by slightly over 18%, and RN graduations in the Southern Tier are projected to increase by slightly over 7% between 1996 and 2004. (Exhibit 11).

Exhibit 11
New York State RN Graduations
By New York State Department of Labor Regions, 1996, 2000-2004

Department of Labor Region	1996	2000	2001	2002	Projected		Percent Change		
					2003	2004	1996 – 2002	2002 – 2004	1996 – 2004
Western New York	890	557	554	535	490	589	-39.9%	10.1%	-33.8%
Finger Lakes	518	402	394	400	464	472	-22.8%	18.0%	-8.9%
Central New York	476	331	293	319	356	402	-33.0%	26.0%	-15.5%
Southern Tier	478	268	303	316	459	512	-33.9%	62.0%	7.1%
Mohawk Valley	259	226	220	219	231	306	-15.4%	39.7%	18.1%
North Country	274	187	205	209	205	257	-23.7%	23.0%	-6.2%
Capital District	343	284	263	302	353	428	-12.0%	41.7%	24.8%
Hudson River	1,058	827	736	652	701	971	-38.4%	48.9%	-8.2%
Long Island	937	798	751	679	792	839	-27.5%	23.6%	-10.5%
Totals	5,233	3,880	3,719	3,631	4,051	4,776	-30.6%	31.5%	-8.7%

Source: Center for Health Workforce Studies

REGIONAL ANALYSIS

A. Capital District

Total health care employment in the Capital District increased by 3.6% between 1998 and 2000. This was the greatest increase for any region outside of New York City.

1. Employment by Setting

Employment in physician offices and clinics experienced an almost 20% increase between 1998 and 2000 with employment in home health services increasing by 10% during the same period. Employment in dental offices also increased by slightly over 4% between 1998 and 2000. Nursing home and personal care facilities decreased by over 2% between 1998 and 2000 (Exhibit 12).

Exhibit 12
Growth by Setting for the Capital District

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Offices and Clinics of Doctors of Medicine	8,424	9,308	10,091	1,667	19.8%
Home Health Care Services	2,741	3,077	3,010	269	9.8%
Offices and Clinics of Dentists	2,465	2,517	2,566	101	4.1%
Medical and Dental Laboratories	556	548	561	5	1.0%
Hospitals	20,670	20,731	20,664	-6	0.0%
Nursing and Personal Care Facilities	11,462	11,373	11,190	-272	-2.4%
Miscellaneous Health and Allied Services, nec	1,096	823	1,016	-80	-7.3%
Totals	47,414	48,377	49,098	1,684	3.6%

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

2. Licensed Health Professionals

The number of occupational therapists in the Capital District grew by nearly 9% between 2001 and 2002, followed by number of physician assistants at over 7%. The number of licensed practical nurses grew by over 2% between 2001 and 2002, while the number of registered nurses declined by slightly less than 1%. The number of licensed pharmacists decreased by over 6% between 2001 and 2002 (Exhibit 13).

Exhibit 13
Change in the Number of Licensed Health Care Occupations⁷
for the Capital District, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapists	414	451	37	8.9%
Physician Assistants	417	447	30	7.2%
Speech-Language Pathologists	665	709	44	6.6%
Occupational Therapy Assistants	297	315	18	6.1%
Nurse Practitioners	488	512	24	4.9%
Respiratory Therapists	291	305	14	4.8%
Licensed Practical Nurses	4,849	4,976	127	2.6%
Physical Therapists	845	863	18	2.1%
Social Workers	1,902	1,942	40	2.1%
Psychologists	453	462	9	2.0%
Dental Hygienists	735	740	5	0.7%
Physical Therapy Assistants	399	397	-2	-0.5%
Registered Nurses	14,673	14,558	-115	-0.7%
Dietitians-Nutritionists	270	258	-12	-4.4%
Pharmacists	1,323	1,241	-82	-6.2%

Source: New York State Education Department

⁷ County was determined by using the address included in the licensure file though the county can either be a home or practice location.

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be 1,250 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 900. The number of registered nursing jobs is projected to increase by over 2,550 jobs between 1998 and 2008, with almost 1,000 annual openings (Exhibit 14).

Exhibit 14 Employment Projections for the Top Ten Health Care Growth Occupations for the Capital District, 1998 – 2008

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998 to 2008
			Number	Percent	
Nursing Aides & Orderlies	5,120	6,060	940	18.4%	1,250
Registered Nurses	10,030	12,580	2,550	25.4%	990
Home Health Aides	2,000	3,030	1,030	51.5%	620
Psychiatric Aides	1,610	1,730	120	7.5%	360
Medical Secretaries	1,510	1,860	350	23.2%	260
Licensed Practical Nurses	3,030	3,720	690	22.8%	200
Dental Assistants	900	1,100	200	22.2%	190
Medicine & Health Service Managers	1,080	1,390	310	28.7%	170
Social Workers, Medical & Psychiatric	970	1,330	360	37.1%	170
Physicians & Surgeons	3,440	3,980	540	15.7%	170

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

B. Central New York

Total health care employment in the Central New York experienced a slight increase of 0.7% between 1998 and 2000.

1. Employment by Setting

Employment in Central New York in medical and dental laboratories increased by over 18% and employment in physician offices and clinics increased by over 8% between 1998 and 2000. During the same period, employment in home health care services dramatically decreased by 16% and employment in hospitals decreased by over 2% (Exhibit 15).

**Exhibit 15
Growth by Setting for the Central New York**

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	576	574	681	105	18.3%
Offices and Clinics of Doctors of Medicine	5,691	5,921	6,153	462	8.1%
Offices and Clinics of Dentists	1,588	1,639	1,654	66	4.2%
Nursing and Personal Care Facilities	7,539	7,694	7,704	165	2.2%
Miscellaneous Health and Allied Services, nec	1,051	1,057	1,046	-5	-0.5%
Hospitals	11,501	11,456	11,194	-307	-2.7%
Home Health Care Services	1,752	1,597	1,473	-279	-16.0%
Totals	29,698	29,936	29,904	206	0.7%

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

2. Licensed Health Professionals

The number of physician assistants in the Central New York Region increased by 13% between 2001 and 2002, and the number of occupational therapy assistants increased by over 10% during the same period. The number of licensed practical nurses increased by over 2% between 1998 and 2000, while the number of registered nurses declined by slightly less than 1% (Exhibit 16).

**Exhibit 16
Change in the Number of Licensed Health Care Occupations
for Central New York, 2001 to 2002**

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physician Assistants	177	200	23	13.0%
Occupational Therapy Assistants	79	87	8	10.1%
Speech-Language Pathologists	315	331	16	5.1%
Psychologists	185	190	5	2.7%
Physical Therapists	492	505	13	2.6%
Licensed Practical Nurses	4,095	4,188	93	2.3%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapists	222	227	5	2.3%
Nurse Practitioners	794	810	16	2.0%
Respiratory Therapists	293	296	3	1.0%
Physical Therapy Assistants	169	170	1	0.6%
Dental Hygienists	492	494	2	0.4%
Social Workers	969	972	3	0.3%
Registered Professional Nurses	9,182	9,110	-72	-0.1%
Pharmacists	588	577	-11	-1.9%
Dietitians-Nutritionists	171	161	-10	-5.8%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be 750 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by nearly 500. The number of registered nursing jobs is projected to increase by over 1,230 jobs between 1998 and 2008, with almost 570 annual openings and the number of home health aide jobs is projected to increase by 55% with 480 annual openings (Exhibit 17).

Exhibit 17 Employment Projections for the Top Ten Health Care Growth Occupations for the Central New York Region, 1998 - 2008

Occupation	Change between 1998 and 2008		Annual Openings, 1998-2008
	1998	2008	
Nursing Aides & Orderlies	3,140	3,630	750
Registered Nurses	6,260	7,490	570
Home Health Aides	1,490	2,310	480
Medical Assistants	870	1,190	140
Licensed Practical Nurses	2,420	2,730	130
Social Workers, Medical & Psychiatric	790	1,010	120
Dental Assistants	580	720	120
Medical Secretaries	790	790	110
Medicine & Health Service Managers	500	600	70
Physicians & Surgeons	1,720	1,860	70

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

C. Finger Lakes

Total health care employment in the Finger Lakes region grew by 3% between 1998 and 2000, the second largest percentage increase of any of the upstate regions.

1. Employment by Setting

Employment in medical and dental laboratories increased by 38% between 1998 and 2000, although the number of jobs only increased by 208. The Finger Lakes region was the only region in New York State with an increase in employment in hospitals, growing 6% between 1998 and 2000. Employment in home health care services decreased by less than 1% between 1998 and 2000 (Exhibit 18).

Exhibit 18
Growth by Setting for the Finger Lakes

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	547	757	755	208	38.0%
Hospitals	25,076	25,403	26,564	1,488	6.0%
Offices and Clinics of Dentists	2,900	2,957	3,020	120	4.1%
Nursing and Personal Care Facilities	13,607	13,777	13,891	284	2.1%
Offices and Clinics of Doctors of Medicine	6,210	6,153	6,276	66	1.1%
Home Health Care Services	5,331	5,308	5,286	-45	-0.9%
Miscellaneous Health and Allied Services, nec	1,806	1,641	1,364	-442	-24.5%
Totals	55,478	55,996	57,154	1,676	3.0%

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

2. Licensed Health Professionals

Between 2001 and 2002, the number occupational therapists in the Finger Lakes increased by over 9%. The number of nurse practitioners and the number physician assistants in the Finger Lakes both increased by over 5% between 2001 and 2002. The number of licensed practical nurses grew by nearly 2% between 2001 and 2002 in the Finger Lakes Region, while the number of registered nurses decreased by slightly over 1% during the same period. Additionally, the number of Dietitians-Nutritionists decreased by over 9% between 2001 and 2002, and the number of licensed pharmacists decreased by over 5% during the same period (Exhibit 19).

Exhibit 19
Change in the Number of Licensed Health Care Occupations
for the Finger Lakes Region, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapists	457	501	44	9.6%
Nurse Practitioners	993	1047	54	5.4%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Registered Physician Assistants	385	405	20	5.2%
Physical Therapists	736	765	29	3.9%
Occupational Therapy Assistants	210	218	8	3.8%
Physical Therapy Assistants	219	227	8	3.7%
Speech-Language Pathologists	727	750	23	3.2%
Licensed Practical Nurses	5,775	5,885	110	1.9%
Psychologists	343	347	4	1.2%
Ophthalmic Dispensing	300	303	3	1.0%
Dental Hygienists	975	979	4	0.4%
Social Workers	1,649	1,652	3	0.2%
Respiratory Therapists	258	256	-2	-0.8%
Registered Professional Nurses	14,563	14,402	-161	-1.1%
Respiratory Therapist Technicians	97	95	-2	-2.1%
Pharmacists	999	943	-56	-5.6%
Dietitians-Nutritionists	257	233	-24	-9.3%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be nearly 1,800 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by nearly 2,000. The number of home health aide jobs is projected to increase by over 2,780 between 1998 and 2008, with almost 1,520 annual openings. The number of registered nursing jobs is projected to increase by over 3,000 between 1998 and 2008, with over 1,100 annual openings (Exhibit 20).

Exhibit 20 **Employment Projections for the Top Ten Health Care Growth Occupations** **for the Finger Lakes Region, 1998 – 2008**

Occupation	1998	2008	Percent of Change		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	6,730	8,680	1,950	29.0%	1,790
Home Health Aides	4,590	7,370	2,780	60.6%	1,520
Registered Nurses	10,720	13,790	3,070	28.6%	1,110
Psychiatric Aides	2,140	2,250	110	5.1%	470
Licensed Practical Nurses	4,440	5,630	110	26.8%	320
Medical Secretaries	1,790	2,200	410	22.9%	310
Social Workers, Medical & Psychiatric	1,270	1,760	490	38.6%	220
Dental Assistants	810	1,170	360	44.4%	200
Medicine & Health Service Managers	1,010	1,310	300	29.7%	160
Physicians & Surgeons	2,500	3,120	620	24.8%	150

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

D. Hudson Valley

Total health care employment in the Hudson Valley grew slightly between 1998 and 2000, just over 1%.

1. Employment by Setting

Employment in physician offices in the Hudson Valley grew by over 11% between 1998 and 2000 with employment in nursing and personal care facilities increasing by over 9% increase during the same period. Employment in home health care services in the Hudson Valley decreased by more than 21% between 1998 and 2000, while employment in medical and dental laboratories decreased by almost 18% during the same period (Exhibit 21).

Exhibit 21
Growth by Setting for the Hudson Valley

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Offices and Clinics of Doctors of Medicine	15,920	17,154	17,732	1,812	11.4%
Nursing and Personal Care Facilities	20,598	21,334	22,474	1,876	9.1%
Offices and Clinics of Dentists	5,699	6,023	6,134	435	7.6%
Hospitals	40,651	40,211	39,739	-912	-2.2%
Miscellaneous Health and Allied Services, nec	3,116	3,213	2,954	-162	-5.2%
Medical and Dental Laboratories	1,802	1,535	1,480	-322	-17.9%
Home Health Care Services	8,019	7,625	6,313	-1,706	-21.3%
Totals	95,804	97,095	96,826	1,022	1.1%

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

2. Licensed Health Professionals

The number of physician assistants in the Hudson Valley grew by nearly 11% between 2001 and 2002, with the number of nurse practitioners increasing by almost 9% during the same period. The number of licensed Dietitians-Nutritionists in the Hudson Valley declined by nearly 5% between 2001 and 2002, and the number of pharmacists declined by nearly almost 4% during the same period (Exhibit 22).

Exhibit 22
Change in the Number of Licensed Health Care Occupations
for the Hudson Valley, 2001 to 2002

Occupations	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physician Assistants	496	549	53	10.7%
Nurse Practitioners	1,140	1,239	99	8.7%
Occupational Therapists	1,003	1,079	76	7.6%
Physical Therapy Assistants	402	428	26	6.5%

Occupations	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physical Therapists	1,807	1,919	112	6.2%
Speech-Language Pathologists	1,288	1,352	64	5.0%
Respiratory Therapists	558	574	16	2.9%
Social Workers	6,022	6,153	131	2.2%
Dental Hygienists	968	988	20	2.1%
Licensed Practical Nurses	7,669	7,749	80	1.0%
Psychologists	1,647	1,664	17	1.0%
Registered Professional Nurses	30,410	30,205	-205	-0.7%
Occupational Therapy Assistants	555	547	-8	-1.4%
Pharmacists	2,176	2,091	-85	-3.9%
Dietitians-Nutritionists	693	659	-34	-4.9%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be nearly 2,900 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 2,700. The number of home health aide jobs is projected to increase by over 4,300 between 1998 and 2008, with almost 2,210 annual openings. The number of registered nursing jobs is projected to increase by over 3,000 between 1998 and 2008, with over 1,500 annual openings (Exhibit 23).

Exhibit 23 **Employment Projections for the Top Ten Health Care Growth Occupations** **for the Hudson Valley Region, 1998 - 2008**

Occupation	1998	2008	Percent of Change		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	11,170	13,880	2,710	24.3%	2,870
Home Health Aides	6,360	10,720	4,360	68.6%	2,210
Registered Nurses	16,990	20,240	3,250	19.1%	1,540
Psychiatric Aides	4,420	4,680	260	5.9%	970
Medical Assistants	4,250	6,550	2,300	54.1%	800
Dental Assistants	2,370	3,050	680	28.7%	530
Licensed Practical Nurses	5,570	6,810	1,240	22.3%	370
Psychologists	2,680	3,000	320	11.9%	350
Social Workers, Medical & Psychiatric	2,110	2,730	620	29.4%	340
Medical secretaries	2,130	2,280	150	7.0%	310

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

E. Long Island

Total health care employment in the Long Island region grew by over 1% between 1998 and 2000.

1. Employment by Setting

Between 1998 and 2000, employment in nursing and personal care facilities in the Long Island region increased by over 8%, and the employment in physician offices and clinics increased by over 6%. During the same period, employment in home health care services declined by almost 9%, and employment in hospitals declined by over 2% (Exhibit 24).

**Exhibit 24
Growth by Setting for Long Island**

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Nursing and Personal Care Facilities	19,294	19,967	20,937	1,643	8.5%
Offices and Clinics of Doctors of Medicine	25,208	26,556	26,880	1,672	6.6%
Offices and Clinics of Dentists	8,890	9,314	9,411	521	5.9%
Medical and Dental Laboratories	3,369	3,435	3,509	140	4.2%
Miscellaneous Health and Allied Services, nec	4,221	4,143	4,252	31	0.7%
Hospitals	46,630	46,202	45,588	-1,042	-2.2%
Home Health Care Services	11,320	10,329	10,306	-1,014	-9.0%
Totals	118,933	119,946	120,883	1,950	1.6%

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

2. Licensed Health Professionals

Between 2001 and 2002, the number occupational therapy assistants in Long Island increased by over 14%, and the number of both physician assistants and occupational therapists increased by slightly over 9% during the same period. The number of pharmacists declined by over 3%, and the number of Dietitians-Nutritionists declined by over 2% between 2001 and 2002. The number of licensed practical nurses increased by less than 1%, while the number of registered nurses remained relatively stable (Exhibit 25).

**Exhibit 25
Change in the Number of Licensed Health Care Occupations
For Long Island, 2001 to 2002**

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapy Assistants	256	293	37	14.5%
Physician Assistants	1,060	1,158	98	9.2%
Occupational Therapists	1,286	1,403	117	9.1%
Speech-Language Pathologists	2,249	2,392	143	6.4%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physical Therapists	2,491	2,621	130	5.2%
Physical Therapy Assistants	832	850	18	2.2%
Social Workers	7,243	7,325	82	1.1%
Respiratory Therapists	801	808	7	0.9%
Licensed Practical Nurses	9,818	9,866	48	0.5%
Nurse Practitioners	1,779	1,784	5	0.3%
Midwifery	99	99	0	0.0%
Registered Nurses	36,891	36,865	-26	-0.1%
Psychologists	1,991	1,989	-2	-0.1%
Dental Hygienists	1,626	1,611	-15	-0.9%
Dentists	3,461	3,420	-41	-1.2%
Dietitians-Nutritionists	889	867	-22	-2.5%
Pharmacists	3,571	3,449	-122	-3.4%

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be nearly 3,600 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 3,300. The number of registered nursing jobs is projected to increase by over 4,000 jobs, with almost 2,000 annual openings. The number of home health aides is projected to increase by over 2,000, with nearly 1,600 annual openings (Exhibit 26).

Exhibit 26 Employment Projections for the Top Ten Health Care Growth Occupations for the Long Island Region, 1998 – 2008

Occupation	1998	2008	Percent of Change		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides and Orderlies	14,020	17,350	3,330	23.8%	3,590
Registered Nurses	20,420	24,780	4,360	21.4%	1,910
Home Health Aides	5,540	7,670	2,130	38.4%	1,580
Dental Assistants	3,200	4,130	930	29.1%	710
Psychiatric Aides	3,220	3,300	80	2.5%	690
Medical Assistants	3,320	4,960	1,640	49.4%	600
Physicians & Surgeons	10,000	12,010	2,010	20.1%	550
Medical Secretaries	3,050	3,270	220	7.2%	440
Licensed Practical Nurses	6,600	7,790	1,120	18.0%	400
Social Workers, Medical & Psychiatric	2,250	3,110	860	38.2%	390

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

F. Mohawk Valley

Total health care employment in the Mohawk Valley declined slightly between 1998 and 2000 (.2%).

1. Employment by Setting

Between 1998 and 2000, employment in medical and dental laboratories increased by slightly over 14% in the Mohawk Valley, and employment in physician offices and clinics increased by nearly 11%. During the same period, employment in hospitals declined by over 3%, and employment in home health care services by nearly 2% (Exhibit 27).

Exhibit 27
Growth by Setting for the Mohawk Valley

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	453	482	516	63	14.0%
Offices and Clinics of Doctors of Medicine	2,238	2,392	2,479	241	10.8%
Miscellaneous Health and Allied Services, nec	248	246	263	15	6.1%
Nursing and Personal Care Facilities	7,149	7,287	7,165	16	0.2%
Offices and Clinics of Dentists	901	902	901	0	0.0%
Home Health Care Services	1,100	1,038	1,081	-19	-1.7%
Hospitals	9,940	9,961	9,585	-355	-3.6%
Totals	22,030	22,308	21,990	-40	-0.2%

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

2. Licensed Health Professionals

Between 2001 and 2002 in the Mohawk Valley, the number of occupational therapists grew by over 8%, and the number of nurse practitioners grew by 6%, although the absolute number of increases is rather small. Between 2001 and 2002, the number of respiratory therapist technicians declined by nearly 13%, and the number of Dietitians-Nutritionists declined by nearly 9%. The Mohawk Valley experienced increases in both the number of registered nurses and licensed practical nurses between 2001 and 2002, 3.4% and 2.2% respectively (Exhibit 28).

Exhibit 28
Change in the Number of Licensed Health Care Occupations
for the Mohawk Valley, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapists	258	280	22	8.5%
Nurse Practitioners	315	334	19	6.0%
Speech-Language Pathologists	148	156	8	5.4%
Registered Nurses	6,146	6,356	210	3.4%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physician Assistants	105	108	3	2.9%
Social Workers	501	513	12	2.4%
Licensed Practical Nurses	3,436	3,511	75	2.2%
Psychologists	62	63	1	1.6%
Physical Therapists	285	289	4	1.4%
Physical Therapy Assistants	193	195	2	1.0%
Respiratory Therapists	141	141	0	0.0%
Occupational Therapy Assistants	196	195	-1	-0.5%
Dental Hygienists	278	276	-2	-0.7%
Pharmacists	460	442	-18	-3.9%
Dietitians-Nutritionists	68	62	-6	-8.8%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be over 1,000 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 900. The number of registered nursing jobs is projected to increase by over 970 between 1998 and 2008, with 430 annual openings (Exhibit 29).

Exhibit 29 Employment Projections for the Top Ten Health Care Growth Occupations for the Mohawk Valley Region, 1998 - 2008

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	3,930	4,840	910	23.2%	1,000
Registered Nurses	4,550	5,520	970	21.3%	430
Home Health Aides	780	1,230	450	57.7%	250
Licensed Practical Nurses	2,480	2,880	400	16.1%	140
Social Workers, Medical & Psychiatric	400	540	140	35.0%	70
Medicine & Health Service Managers	410	510	100	24.4%	60
Psychologists	390	400	10	2.6%	50
Medical Secretaries	320	350	30	9.4%	50
Physicians & Surgeons	880	1,020	140	15.9%	50
Dental Assistants	280	320	40	14.3%	50

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

G. North Country

Total health care employment in the North Country grew by 1% between 1998 and 2000, with a total growth in employment of less than 200 jobs.

1. Employment by Setting

Between 1998 and 2000, employment in home health care services in the North Country grew over a 33%, employment in nursing and personal care facilities increased by over 12%, and employment in physicians offices and clinics increased by over 10%. During the same period, employment in hospitals declined by over 7% (Exhibit 30).

**Exhibit 30
Growth by Setting for the North Country**

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	18	18	27	9	48.6%
Home Health Care Services	404	534	540	136	33.6%
Offices and Clinics of Dentists	625	681	719	94	15.0%
Nursing and Personal Care Facilities	4,203	4,088	4,717	514	12.2%
Offices and Clinics of Doctors of Medicine	1,975	2,129	2,182	207	10.5%
Hospitals	7,764	7,844	7,205	-559	-7.2%
Miscellaneous Health and Allied Services, nec	668	563	421	-247	-37.0%
Totals	15,656	15,856	15,810	154	1.0%

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

2. Licensed Health Professionals

Between 2001 and 2002, the number of speech-language pathologists in the North Country increased by over 12%, and the number of social workers increased by nearly 6%. During the same period, the number of pharmacists decreased by over 4%. The number of registered nurses and the number of licensed practical nurses both grew slightly in the North Country between 2001 and 2002, at .3% and .6% respectively (Exhibit 31).

**Exhibit 31
Change in the Number of Licensed Health Care Occupations
for the North Country, 2001 to 2002**

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapy Assistants	45	54	9	20.0%
Speech-Language Pathologists	141	158	17	12.1%
Social Workers	271	287	16	5.9%
Physical Therapists	221	233	12	5.4%
Physical Therapy Assistants	117	121	4	3.4%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Dental Hygienists	189	195	6	3.2%
Psychologists	68	70	2	2.9%
Nurse Practitioners	177	180	3	1.7%
Physician Assistants	131	132	1	0.8%
Licensed Practical Nurses	2,482	2,498	16	0.6%
Registered Nurses	4,720	4,734	14	0.3%
Dietitians-Nutritionists	70	69	-1	-1.4%
Respiratory Therapists	67	66	-1	-1.5%
Occupational Therapists	103	100	-3	-2.9%
Pharmacists	314	300	-14	-4.5%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be 550 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 410. The number of registered nursing jobs is projected to increase by almost 700 between 1998 and 2008, with 310 annual openings (Exhibit 32).

Exhibit 32 Employment Projections for the Top Ten Health Care Growth Occupations for the Mohawk Valley Region, 1998 - 2008

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	2,230	2,640	410	18.4%	550
Registered Nurses	3,340	4,030	690	20.7%	310
Home Health Aides	960	1,420	460	47.9%	290
Psychiatric Aides	1,050	1,330	280	26.7%	280
Licensed Practical Nurses	1,420	1,670	250	17.6%	90
Medical Secretaries	360	420	60	16.7%	60
Social Workers, Medical & Psychiatric	360	490	130	36.1%	60
Dental Assistants	260	330	70	26.9%	60
Medicine & Health Service Managers	320	400	80	25.0%	50
Psychologists	400	430	30	7.5%	50

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

H. Southern Tier

Total health care employment in the Southern Tier grew by nearly 1% between 1998 and 2000, or slightly less than 300 positions.

1. Employment by Setting

Between 1998 and 2000, employment in physician offices and clinics in the Southern Tier increased by over 7%, and employment in both home health care services and dental offices increased by more than 2%. During the same period, employment in hospitals decreased by less than 1% (Exhibit 33).

Exhibit 33
Growth by Setting for the Southern Tier

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	96	102	168	72	74.4%
Offices and Clinics of Doctors of Medicine	3,740	3,944	4,015	275	7.4%
Home Health Care Services	972	971	995	23	2.3%
Offices and Clinics of Dentists	1,488	1,541	1,520	32	2.1%
Nursing and Personal Care Facilities	7,350	7,325	7,322	-28	-0.4%
Hospitals	14,947	15,032	14,876	-71	-0.5%
Miscellaneous Health and Allied Services, nec	466	506	435	-31	-6.6%
Totals	29,060	29,420	29,331	271	0.9%

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

2. Licensed Health Professionals

Between 2001 and 2002, the number of speech-language pathologists in the Southern Tier grew by over 6%, and the number of physical therapy assistants grew by over 5%. During the same period, the number of licensed pharmacists declined by nearly 5%. The number of licensed practical nurses in the Southern Tier between 2001 and 2002 grew by nearly 3%, while the number of licensed registered nurses declined by slightly over 1% during the same period (Exhibit 34).

Exhibit 34
Change in the Number of Licensed Health Care Occupations
for the Southern Tier, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Speech-Language Pathologists	260	277	3	6.5%
Physical Therapy Assistants	196	207	11	5.6%
Occupational Therapists	215	226	11	5.1%
Physician Assistants	157	165	8	5.1%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Psychologists	179	188	9	5.0%
Licensed Practical Nurses	3,360	3,453	93	2.8%
Respiratory Therapists	184	189	5	2.7%
Social Workers	1,024	1,048	24	2.3%
Physical Therapists	414	417	3	0.7%
Nurse Practitioners	472	475	3	0.6%
Occupational Therapy Assistants	74	74	0	0.0%
Dental Hygienists	461	456	-5	-1.1%
Registered Nurses	8,525	8,421	-104	-1.2%
Dietitians-Nutritionists	164	161	-3	-1.8%
Pharmacists	574	546	-28	-4.9%

Source: New York State Education Department

3. Employment Projections by Health Occupation

BLS estimates that between 1998 and 2008, there will be nearly 1,000 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by 800. The number of registered nursing jobs is projected to increase by over 1,140 jobs between 1998 and 2008, with 600 annual openings (Exhibit 35).

Exhibit 35 Employment Projections for the Top Ten Health Care Growth Occupations for the Southern Tier Region, 1998 - 2008

Occupation	1998	2008	Change between 1998 and 2008 Annual Openings,		
			Number	Percent	1998-2008
Nursing Aides & Orderlies	3,840	4,640	800	20.8%	960
Registered Nurses	6,820	7,960	1,140	16.7%	600
Home Health Aides	1,780	2,660	880	49.4%	550
Psychiatric Aides	1,100	1,100	0	0.0%	230
Licensed Practical Nurses	2,450	2,920	470	19.2%	150
Dental Assistants	560	800	240	42.9%	140
Social Workers, Medical & Psychiatric	840	1,070	230	27.4%	130
Medical Assistants	670	1,040	370	55.2%	130
Medicine & Health Service Managers	540	700	160	29.6%	90
Psychologists	550	590	40	7.3%	70

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008

I. Western New York

Health care employment in the Western New York declined by 2.6% between 1998 and 2000, the only region with a drop in health care employment.

1. Employment by Setting

Between 1998 and 2000, employment in medical and dental laboratories in Western New York increased by over 15%, and employment in physician offices and clinics increased by over 5%. During the same period, employment in hospitals declined by over 7%, and employment in home health care services declined by over 9% (Exhibit 36).

Exhibit 36
Growth by Setting for the Western New York

Setting	1998	1999	2000	Change between 1998 to 2000	
				Number	Percent
Medical and Dental Laboratories	1,086	1,124	1,255	169	15.6%
Offices and Clinics of Doctors of Medicine	10,323	10,604	10,899	576	5.6%
Nursing and Personal Care Facilities	15,872	16,343	16,297	425	2.7%
Offices and Clinics of Dentists	3,408	3,507	3,484	76	2.2%
Hospitals	30,920	29,563	28,601	-2,319	-7.5%
Home Health Care Services	5,135	4,933	4,659	-476	-9.3%
Miscellaneous Health and Allied Services, nec	2,216	2,039	1,975	-241	-10.9%
Totals	68,960	68,113	67,170	-1,790	-2.6%

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

2. Licensed Health Professionals

Between 2001 and 2002, the number of both physician assistants and physical therapy assistants in Western New York grew by approximately 11%. During the same period, the number of Dietitians-Nutritionists declined by over 8%. Between 2001 and 2002, the number of licensed practical nurses remained relatively stable, while the number of registered nurses declined by slightly during the same period (Exhibit 37).

Exhibit 37
Change in the Number of Licensed Health Care Occupations
for Western New York, 2001 to 2002

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Physician Assistants	311	346	35	11.3%
Physical Therapy Assistants	225	249	24	10.7%
Occupational Therapists	662	695	33	5.0%
Speech-Language Pathologists	828	858	30	3.6%
Respiratory Therapists	420	432	12	2.9%

Occupation	2001	2002	Change between 2001 to 2002	
			Number	Percent
Occupational Therapy Assistants	619	634	15	2.4%
Nurse Practitioners	819	837	18	2.2%
Physical Therapists	1,127	1,144	17	1.5%
Social Workers	1,505	1,527	22	1.5%
Licensed Practical Nurses	7,514	7,530	16	0.2%
Dental Hygienists	934	928	-6	-0.6%
Registered Nurses	19,081	18,774	-307	-1.6%
Psychologists	331	319	-12	-3.6%
Pharmacists	1,641	1,556	-85	-5.2%
Dietitians-Nutritionists	303	278	-25	-8.3%

Source: New York State Education Department

3. Projected Demand for Health Occupations

BLS estimates that between 1998 and 2008, there will be over 2,300 annual openings for nurse aide and orderly jobs. The majority of the annual openings will be due to aides and orderlies leaving the field, and during the period, total nursing aide and orderly jobs are projected to increase by more than 2,000. The total number of home health aide jobs is projected to increase by over 1,380 between 1998 and 2008, with almost 1,100 annual openings. The number of registered nursing jobs is projected to increase by over 1,400 between 1998 and 2008, with over 1,000 annual openings (Exhibit 38).

Exhibit 38 Employment Projections for the Western New York Region, 1998 - 2008

Occupation	1998	2008	Change between 1998 and 2008		Annual Openings, 1998-2008
			Number	Percent	
Nursing Aides & Orderlies	9,170	11,280	2,110	23.0%	2,330
Home Health Aides	3,860	5,240	1,380	35.8%	1,080
Registered Nurses	13,000	14,430	1,430	11.0%	1,040
Medical Assistants	1,520	2,260	740	48.7%	270
Medical Secretaries	1,600	1,770	170	10.6%	240
Dental Assistants	990	1,370	380	38.4%	240
Licensed Practical Nurses	4,300	4,820	520	12.1%	230
Social Workers, Medical & Psychiatric	1,240	1,590	350	28.2%	200
Physicians & Surgeons	3,140	3,750	610	19.4%	170
Medicine & Health Service Managers	1,100	1,380	280	25.5%	160

Source: New York State Department of Labor, Occupational Outlook, 1998- 2008