

The Health Care Workforce in New York City

Trends in the Supply of and Demand for Health Workers in New York City



# THE HEALTH CARE WORKFORCE IN NEW YORK CITY, 2002

Trends in the Supply and Demand For Health Workers in New York City

September 2002

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#### **PREFACE**

This is the fourth annual report on the New York City Health Workforce Tracking System conducted by the Center for Health Workforce Studies. The New York City Health Workforce Tracking System is designed to provide information about health workforce trends and developments to the health industry, health professionals, educators, policy makers, and the public.

The Tracking System is principally supported through funding from the 1199 Hospital League Health Care Industry Planning and Placement Fund, Inc., a joint labor management fund responsible for the education and training of its members. This report helps the Fund to better understand trends in the supply and demand for health workers in New York City; more effectively plan for health worker education and training; and target available training dollars to meet priority needs. The Center also receives support from the Bureau of Health Professions, HRSA, for analysis of health workforce data and trends.

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, Jean Moore, Maria Kouznetsova, Edward Salsberg, and Michael Dill.

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#### **EXECUTIVE SUMMARY**

#### Overview

- ➤ Health care continues to be one of the strongest sectors of the New York City economy and health care professionals and others who work in health care settings represent more than 12% of the New York City 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 significantly challenges in the coming years, making it difficult to predict future health care employment.
- ➤ Health facilities in the New York metropolitan area 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 appear to be the most difficult problem for hospitals. Hospitals are also experiencing shortages of other health workers, including pharmacists, radiologic technicians, respiratory therapists and LPNs. Health facilities also report significant needs for bi-lingual workers in a wide array of professions.
- ➤ 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 the New York metropolitan area, there is no reason to believe that the number of health jobs will not grow significantly over the decade.
- ➤ Health facilities in the region are facing great uncertainty due to the general state of the economy and the significant financial consequences of the events of September 11<sup>th</sup> 2001. 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 will lead to slower growth in total 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.
- ➤ Decisions in Albany in 2002 to provide higher Medicaid reimbursement for health facilities, much of it targeted to health workers, probably helped maintain or increase health care employment in the state. However, 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. In fact, scheduled cuts in Medicare funding for teaching hospitals could have a negative impact on total health care employment.
- ➤ 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.

The recent report of the Health Workforce Commission established by the American Hospital Association, "In Our Hands: How Hospital Leaders Can Build a Thriving Workforce" recommends many strategies for the health care sector to help recruit and retain its workforce. It is noteworthy that the health sector in New York already has some of the policies recommended in the report in place, including the investment in worker education and training. Nevertheless, implementation of other recommendations in the report, including strategies to improve working conditions and collaborate with the workforce, would be beneficial to the workforce and the industry and could reduce future shortages and improve the quality of care.

#### **Key Findings**

This report is based on extensive data analysis of a variety of federal and local data sets and structured interviews with health care leaders in New York City. These findings should assist health care providers in understanding their current workforce needs and efforts to address future needs.

#### 1. Hospitals continue to have shortages of nurses and other categories of workers.

The Center routinely surveys a sample of Human Resources (HR) Directors from voluntary and public hospitals in New York City on employment trends and needs. In 2002, HR Directors indicated recruitment problems in a wide array of health occupations, including:

- experienced registered nurses;
- pharmacists;
- radiologic technicians;
- mammographers; and
- bi-lingual workers.

Additionally, recruitment problems of laboratory technologists and respiratory therapists seem to pose some problems, though not as widespread.

# 2. Nursing vacancy rates remain very high and turnover rates increased in New York City hospitals in 2002.

According to the Greater New York Hospital Association (GNYHA) Survey of Nursing Staffing in Hospitals, vacancy rates and turnover rates remain high for all nursing staff (Exhibits I and II). Vacancy and turnover rates for nurse managers and RN staff nurses have increased since 1999. While the vacancy rates for LPNs have decreased slightly, the vacancy and turnover rates for LPNs are far higher than the vacancy and turnover rates for the other categories of nurses (Exhibit I and II). While the vacancy rate for nurse aides and technicians is slightly less than the other categories of workers, the turnover rate is similar to the other categories of nurses.

**Exhibit I Comparison of Vacancy Rates for Nursing Staff** 

	1999	2000	2001
Nurse Managers	5.9%	6.4%	7.7%
RN Staff Nurses	5.4%	7.8%	7.8%
LPNs	12.5%	11.9%	10.5%
<b>Nurse Aides/Technicians</b>	N/A	7.0%	6.7%

Source: Greater New York Hospital Association

**Exhibit II Comparison of Turnover Rates for Nursing Staff** 

	1999	2000	2001
Nurse Managers	7.6%	10.0%	12.0%
RN Staff Nurses	7.8%	8.6%	11.5%
LPNs	13.5%	9.8%	14.0%
Nurse Aides/Technicians	N/A	9.8%	12.0%

Source: Greater New York Hospital Association

The federal Bureau of Labor Statistics (BLS) has projected that the nation will need more than one million new RNs over the next decade to fill new positions or to replace RNs leaving the field. If the BLS estimates of job growth and replacement needs are applied to New York State, the expected number of RN graduates in 2003 would be well below the number needed to fill expected future RN job openings in the state. Additionally, a report by the Health Resources and Services Administration on the supply of and demand for registered nurses indicates that by 2010, New York State will demand 10% more registered nurses than the supply can support. The difference in demand over supply increases to 16% in 2015 and almost 24% in 2020.

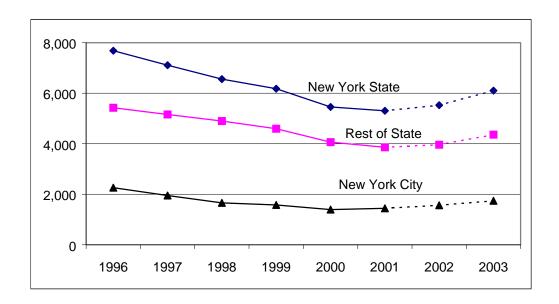
3. While registered nursing graduations declined for the fifth straight year in 2001, enrollments and graduations in registered nursing education programs in New York State and in New York City are projected to rise in 2002 and 2003.

Reversing a five-year trend, New York State RN graduations are projected to increase in 2002 and 2003. Between 1996 and 2001, RN graduations in New York State declined more than 31%. A survey of registered nursing education program directors conducted late last year indicated that graduations are projected to rise by almost 4% between 2001 and 2002 and by 11% between 2002 and 2003 for New York State. Between 1996 and 2001, nursing graduations in New York City declined by over 36% but are projected to rise in 2002 and 2003 by over 8% and 12%, respectively (Exhibit III).

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<sup>&</sup>lt;sup>1</sup> Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Analysis, "Projected Supply, Demand, and Shortages of Registered Nurses, 2000 – 2020", July 2002.

Exhibit III New York State RN Graduations, 1996 to 2003



#### 4. Job growth in the health care sector in New York City has slowed.

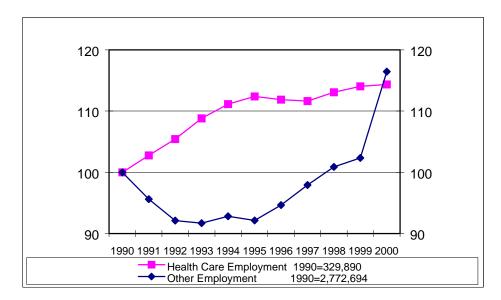
Between 1990 and 1995, overall health care employment grew by about 10%. Beginning in 1996, overall growth in health care employment declined for two years, then in 1998 started to grow but at a much slower rate. Preliminary data indicates that employment in the health care sector continues to grow, despite both the weakening economy and the events of September 11<sup>th</sup>, with growth between June 2001 and June 2002 of 1.8%.<sup>2</sup>

The growth of employment outside of the health sector in New York City declined between 1990 and 1995 and then began rising in 1996. Between 1999 and 2000, employment outside of the health care sector in New York City rose substantially, increasing by 12%, while health care employment grew by less than 1%. Preliminary data indicates that total employment outside of the health care sector has declined since July 2001 with increases in employment rebounding initially in June 2002. Despite these increases, total employment in June 2002 is still lower than in June 2001 by slightly over 3%.

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<sup>&</sup>lt;sup>2</sup> US Department of Labor, Bureau of Labor Statistics, "State and Area Employment, Hours, and Earnings."

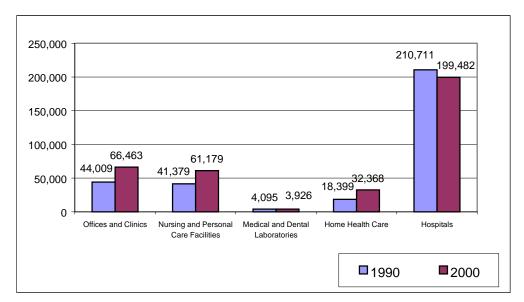
Exhibit IV Growth in Employment for New York City, 1990 to 2000 1990 = 100



5. Between 1990 and 2000, job growth in the health care sector in New York City occurred in offices and clinics, nursing and personal care facilities, and home health care but not in hospitals. Although employment in non-public hospitals increased steadily, there was a significant decrease in public hospital employment.

Between 1990 and 2000, employment in the health care sector in New York City grew in all settings but hospitals. During that time period, the number of jobs in offices and clinics grew by 51% while jobs in home health care grew by almost 76% (Exhibit V). In contrast, employment in hospitals between 1990 and 2000 decreased by 5%. All of this decrease occurred in public hospitals; voluntary hospitals employment increased slightly. Despite declining employment, hospitals remain the major employers of health care workers in New York City, with over 52% of all health care employees working in hospitals.

Exhibit V Growth of Healthcare Employment by Sector between 1990 and 2000



6. Similar to New York City, growth in the health care sector in New York State between 1990 and 2000 occurred in offices and clinics, nursing and personal care facilities, and home health care but not in hospitals. Although employment in non-public hospitals increased steadily, there was a significant decrease in public hospital employment.

Between 1990 and 2000, employment in the health care sector in New York State grew in all settings but hospitals. During that time period, the number of jobs in offices and clinics grew by almost 47% while jobs in home health care grew by slightly over 34% and jobs in nursing and personal care facilities grew by slightly over 33% (Exhibit VI)

**Exhibit VI**Change in Health Sector Employment Between 1990 and 2000 for New York State

Health Setting	1990	2000	<b>Percent Change</b>
Hospitals	430,078	403,499	-6.2%
Offices and Clinics	138,240	202,551	46.5%
Nursing and Personal Care Facilities	130,116	173,273	33.2%
Home Health Care	49,735	66,671	34.1%
Medical and Dental Laboratories	12,101	27,602	22.5%
Health Care Employment Not Elsewhere Classified	22,533	13,415	10.9%
Totals	782,803	889,011	13.6%

Source: USDOL, ES-202

#### 7. Home health care employment has begun to grow again.

Between 1990 and 1997, home health care employment grew by over 93%, then declined by 13% between 1997 and 1999, and then increased by almost 5% between 1999 and 2000 (Exhibit VII). The decline between 1997 and 1999 was attributed in part to changes in government reimbursement policies.

75,000 60,000 45,000 30,000 15,000 1991 1992 1993 1994 1995 1996 1997 1998 New York City New York State Source: USDOL, ES-202

Exhibit VII Home Health Care Employment in New York State, 1990 - 2000

# 8. Employment in the health sector is expected to grow sharply in the U.S. between 2000 and 2010

According to the federal Bureau of Labor Statistics, overall health care employment is expected to grow sharply over the current decade. When looked at by setting, jobs in offices and clinics are projected to increase by over 40%, or 1.2 million jobs (Exhibit VIII), outpacing the growth in hospitals (10% or 487,700), home health care services (68% or 437,700), and nursing and personal care facilities (22% or 394,100).

Exhibit VIII
National Projected Health Sector Job Growth by Setting, 2000 – 2010

			Grow	<b>th</b>
<b>Health Care Setting</b>	2000	2010	Number	Percent
Offices and clinics	3,098,800	4,344,000	1,245,200	40.2%
Hospitals	4,960,300	5,448,000	487,700	9.8%
Home health care services	643,000	1,080,000	437,000	68.0%
Nursing and personal care facilities	1,795,900	2,190,000	394,100	21.9%
Medical and dental laboratories	209,000	270,000	61,000	29.2%
Health and allied services not elsewhere classified	358,200	550,000	191,800	53.5%
Totals	11,065,200	13,882,000	2,816,800	25.5%

Source: USDOL, BLS, Industry employment by occupation, 2000 and projected 2010.

#### **OVERVIEW**

#### **Background**

The health care sector in New York City (the City) has continued to experience growth in employment. More than 377,000 full-time and part-time workers were employed in the health care sector in 2000, representing 10.5% of the City's workforce. Between 1990 and 2000, health care employment rose by more than 14%, driven in large part by increases in the non-hospital workforce.

This is fourth annual report on the New York City health care workforce. The Tracking System is designed to collect, compile, and analyze data on the City's health workforce by examining the health system and the health workforce from a variety of perspectives and identifying current trends. The report examines the health system and the health workforce by setting, by sector and by health occupation using standard data sources, interviews with health care leaders and special studies on a variety of related topics.

#### Goals

The goals of this report are to:

- Determine which health care settings are most likely to experience increases or decreases in their employment;
- Identify the professions and occupations that are likely to experience significant increases or decreases in the City;
- Assist the 1199 Hospital League Health Care Industry Planning and Placement Fund, 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;
- Inform current and prospective students about health care employment prospects and opportunities; and
- Recommend improvements in workforce data collection to better inform public policy debates and decisions.

#### **Data Sources and Terminology**

The data sources used in this report include the following:

- 1. Government Reports and Data
  - United States Bureau of Labor Statistics/New York State Department of Labor
    - Covered Employment and Wages Program (ES-202)
    - Occupational Employment Statistics

- > State and Area Current Employment Statistics
- > Employment Projections
- HRSA State Health Workforce Profiles for New York State
- o New York State Department of Health
  - Certificate of Need Applications
  - > SED State Licensure Data

#### 2. Interviews with Health Facility Leaders

The Center conducted extensive structured interviews on health workforce recruitment and retention, workforce shortages, nursing recruitment and retention strategies, and training needs with executive staff of hospitals, nursing homes and home care agencies, including Chief Operating Officers, Human Resources Directors, Nursing Directors, and Finance Officers.

#### 3. Center for Health Workforce Studies

o Trends in Nursing Education in New York State, April 2002;

#### 4. Greater New York Hospital Association

- o Survey of Nurse Staffing in Hospitals in the New York City Region, 2002; and
- o Continuing Care Staffing in the New York City Region, 2002.

#### 5. Other Sources of Data

o Local 1199/Hospital League Job Vacancy Data

The following briefly describes the terminology used in this report:

#### Public and Private Sectors

Data presentation and analyses sometimes refer to the public and private sectors. The public sector consists of those institutions operated by the government, such as the Health and Hospitals Corporation. The private sector includes both not-for-profit (or "voluntary") and for-profit (proprietary) institutions not operated by the government.

#### Setting and Occupation

In general, the settings used are the Standard Industrial Classification (SIC) health care industries:

- o Hospitals;
- o Nursing and personal care facilities;
- o Home health services;

- o Medical and dental laboratories;
- o Offices and clinics: and
- Other health and allied services not elsewhere classified.

These classification schemes provided some standardization among the data sets presented, but they have some limitations worth noting. For instance, by limiting the analyses to the SIC health services industries, health care workers in hospital 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, etc. are excluded. An estimated 12% of health care workers nationally are employed outside the standard health care settings.

Occupations are usually grouped by Bureau of Labor Statistics (BLS) Occupational Employment Statistics categories. These occupational categories also have limitations. For example, Registered Nursing (RN) makes no distinction between RN managers and critical care RNs, and the standard "nursing aides, orderlies and attendants" occupational category 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.

#### • Geographic Areas

Several different geographical areas are used throughout this report, depending largely on the detail available in the data:

New York City: The five counties/boroughs: Bronx, Kings, Manhattan, Queens,

and Staten Island.

**Greater New York City**: New York City, Long Island and Westchester County.

**New York City PMSA** Primary Metropolitan Statistical Area:

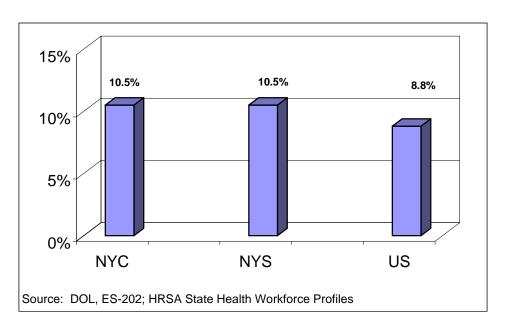
New York City, Putnam, Westchester and Rockland counties.

#### GENERAL TRENDS IN THE HEALTH SECTOR WORKFORCE

#### **Overall Health Sector Employment**

Between 1990 and 2000, 10% of the new jobs created in the United States were in the health care sector. This trend is expected to increase between 2000 through 2010. An estimated 2.8 million jobs, or one in eight new jobs, will be added to the health sector between 2000 and 2010, and nine of the twenty occupations projected to grow the fastest are in health services. Health sector employment accounted for 10.5% of total employment in both New York City and in New York State in 2000 (Exhibit 1). However, this excludes health professionals working outside of the health sector such as nurses in schools and physicians working for insurance companies. Nationally, health sector employment represents nearly 9% of the total United States labor force; but the total United States health workforce (health sector employment plus health professionals employed in other settings) comprises 10.5% of the total United States labor force.

Exhibit 1 Health Sector Employment as a Percentage of Total Employment



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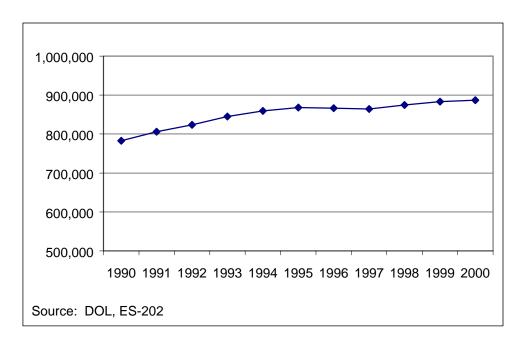
<sup>&</sup>lt;sup>1</sup> Berman, Jay, "Industry output and employment projections to 2010," Monthly Labor Review, Vol. 124, No. 11.

<sup>&</sup>lt;sup>2</sup> USDOL, BLS, Occupational Outlook, "Health Services", Web Site Access, June 21, 2002.

#### **New York State**

Employment in the health sector in New York State has increased between 1990 and 2000, with the addition of over 104,000 jobs, or more than 13% growth (Exhibit 2). Growth in health care employment has, however, slowed considerably in the last several years, with a combined increase of only 2% between 1995 and 2000. Preliminary data indicates 1.4% growth between 2000 and 2001.<sup>3</sup>

Exhibit 2 Trends in Total New York State Health Sector Employment, 1990 - 2000



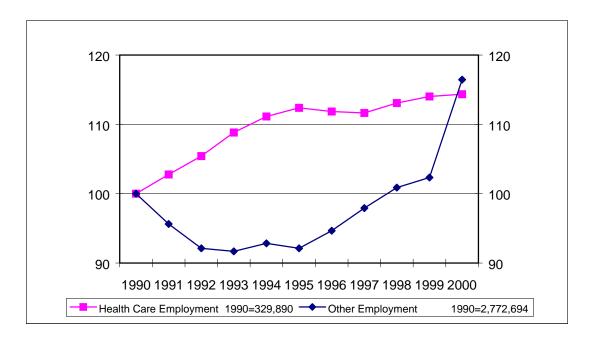
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<sup>&</sup>lt;sup>3</sup> US Department of Labor, Bureau of Labor Statistics, State and Area Employment, Hours, and Earning, Web-site data extract, September 16, 2002.

#### **New York City**

Between 1990 and 1995, health care employment in New York City grew by over 12% while employment in all other sectors decreased by almost 8%. Between 1995 and 2000, however, the trends reversed. Between 1995 and 2000, health care employment grew by 2% while employment in other sectors grew by over 26%. Overall, between 1990 and 2000, health care employment grew by over 14%, while employment in other sectors grew by over 16%. Exhibit 3 shows the relative growth of employment in New York City between 1990 and 2000. Preliminary data indicates that total employment outside of the health care sector in New York City has declined since July 2001 with increases in employment rebounding initially in June 2002. Despite these increases, total employment in June 2002 is still lower than in June 2001 by slightly over 3%. In contrast, preliminary data indicates that health care sector employment grew slightly by 1.3% between July 2000 and July 2001 and by 1.8% between July 2001 and July 2002.

Exhibit 3 New York City Employment Growth Between 1990 and 2000 1990 = 100



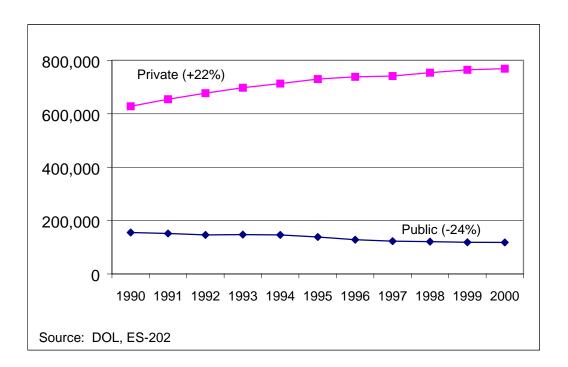
<sup>&</sup>lt;sup>4</sup> USDOL, BLS, "State and Areas Employment, Hours, and Earnings," Web Access, September 13, 2002.

#### PUBLIC AND PRIVATE HEALTH WORKFORCE EMPLOYMENT

#### **New York State**

Growth in private and public health sector employment is similar in New York State and New York City, with major growth in private sector employment and a major decline in public sector employment. Between 1990 and 2000, private sector health services employment in New York State increased by almost 140,000 jobs, or 22%, while public sector health services employment decreased 24% (Exhibit 4).

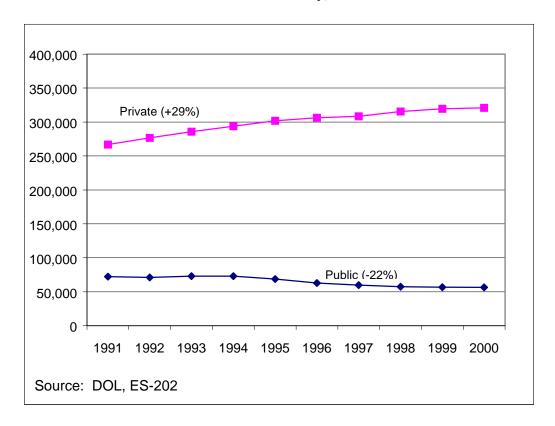
Exhibit 4
Trends in Public and Private Health Employment
For New York State, 1990 – 2000



#### **New York City**

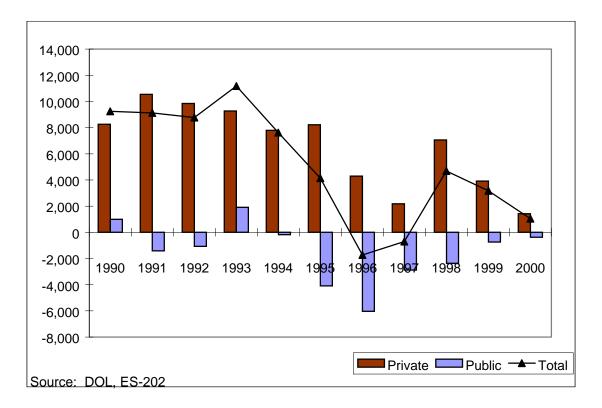
Between 1990 and 2000, private health service employment increased 29%, while public health service employment decreased 22% in the City (Exhibit 5).

Exhibit 5
Trends in Public and Private Health Employment
For New York City, 1990 – 2000



Overall, health sector employment, fueled by increases in private employment, steadily increased between 1990 and 1995. In 1996 and 1997, significant reductions in public employment overshadowed limited growth in private employment, and overall health sector employment declined. Beginning again in 1998, growth in private employment outpaced declines in public employment, although the percentage of increase has steadily gotten smaller (Exhibit 6).

Exhibit 6
Change in the Number Employed in Health Care from the Previous Year
For Public and Private Employment in New York City, 1990 - 2000



#### THE HEALTH WORKFORCE BY SETTING

#### **New York State**

Despite a 6.2% decrease in overall hospital employment in New York State between 1990 and 2000, hospitals remained the largest health services employer in 2000 with more than 403,000 employees. Additionally, health services employment in New York State grew between 1990 and 2000 for all other major health care settings (Exhibit 7).

Exhibit 7

Change in Health Sector Employment Between 1990 and 2000 for New York State					
Health Setting	1990	2000	<b>Percent Change</b>		
Hospitals	430,078	403,499	-6.2%		
Offices and Clinics	138,240	202,551	46.5%		
Nursing and Personal Care Facilities	130,116	173,273	33.2%		
Home Health Care	49,735	66,671	34.1%		
Medical and Dental Laboratories	12,101	27,602	22.5%		
Health Care Employment Not Elsewhere Classified	22,533	13,415	10.9%		
Totals	782,803	889,011	13.6%		

Source: DOL, ES-202

Hospitals in New York City were also the largest employer of health workers and made up 52% of overall health care services employment in New York City in 2000 in contrast to 44% statewide (Exhibit 8).

**Exhibit 8 Health Sector Employment by Setting for New York State and New York City, 2000** 

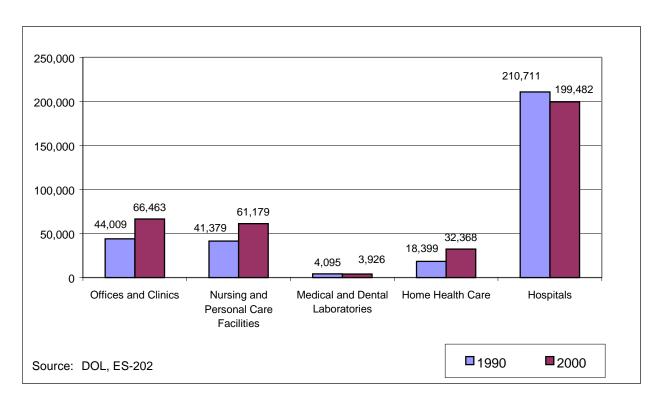


New York State Source: USDOL. BLS. ES-202 New York City

#### **New York City**

While hospitals were the largest employer of New York City health workers as depicted in Exhibit 8, accounting for more than half of all health care employment both in 1990 and 2000, hospital employment in New York City declined by 5.3% between 1990 and 2000 driven by significant decreases in public hospital employment (Exhibit 9).

Exhibit 9 Number of Workers by Healthcare Setting in New York City 1990 and 2000



As depicted in Exhibit 9, between 1990 and 2000, health sector employment significantly increased in certain employment settings in New York City, including:

- Offices and clinics with an increase of 51%;
- Home health care with an increase of 76%; and
- Nursing and personal care facilities with an increase of 48%.

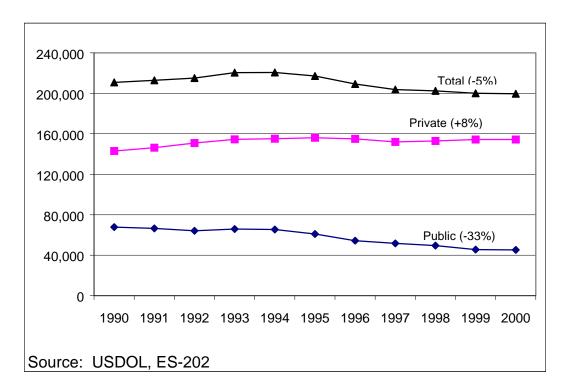
Employment in New York City medical and dental laboratories had an overall declined of 4% between 1990 and 2000 but has experienced 12% growth since 1997.

#### New York City Hospital Employment Trends

Overall, total hospital employment in New York City decreased by over 5% between 1990 and 2000. While hospital employment increased by 5% between 1990 and 1994, it declined by almost 10% between 1994 and 2000 (Exhibit 10).

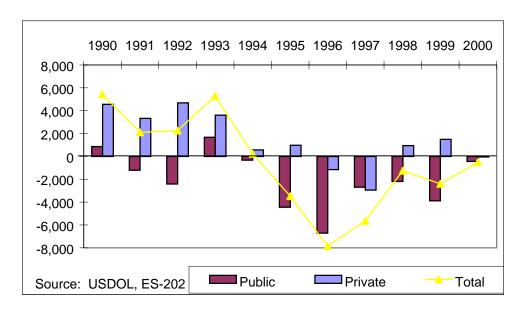
In 2000, private hospital employment was over three times that of the public employment. Overall, private hospital employment experienced overall growth of 8% between 1990 and 2000. Specifically, private hospital employment increased between 1990 and 1995 then decreased slightly between 1995 and 1997. After slight increases in 1998 and 1999, private hospital employment remained relatively stable between 1999 and 2000. Public hospital employment declined in New York City by over 33% between 1990 and 2000, with over 21% of the decline occurring between 1993 and 1998 (Exhibit 11).

Exhibit 10 Trends in Hospital Employment for New York City, 1990 - 2000



Annual changes in total hospital employment were driven by substantial increases in private hospital employment between 1990 and 1993, when increases in private hospital employment overshadowed minor decreases in public hospital employment. Substantial public hospital employment decreases between 1995 and 1999 contributed to overall decreases in total hospital employment. Both sectors remained relatively stable in 2000 (Exhibit 11).

Exhibit 11
Annual Change from the Prior Year in Hospital Employment for New York City,
Public and Private Employment, 1990 - 2000

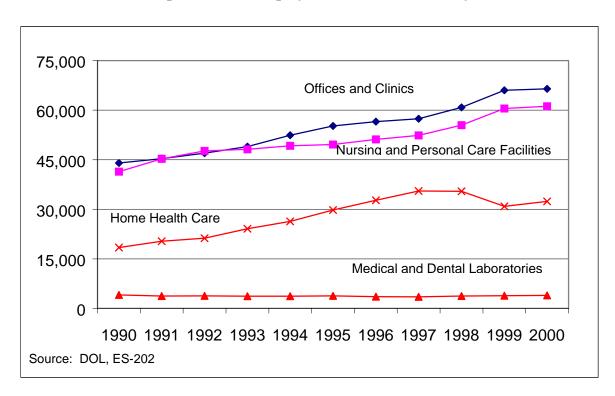


#### New York City Non-Hospital Health Setting Employment Trends

Between 1990 and 2000, the most significant trends in non-hospital health employment were as follows:

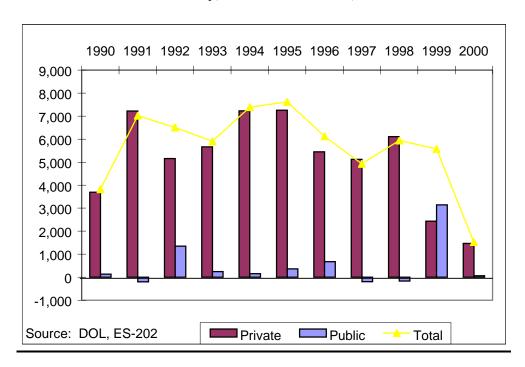
- Home health care employment increased by 75% between 1990 and 2000. After steep increases between 1990 and 1996, two years of declines in 1998 and 1999, employment in home health care grew by almost 5% between 1999 and 2000;
- Employment in offices and clinics and in nursing and personal care facilities" increased 51% and 48%, respectively, between 1990 and 2000; and
- Employment in medical and dental laboratories decreased 4% between 1990 and 2000, with fluctuations throughout the decade (Exhibit 12).

Exhibit 12 Trends in Non-Hospital Health Employment for New York City, 1990 – 2000



Between 1990 and 2000, annual changes in non-hospital health employment in New York City was driven by substantial year-to-year increases in private employment, including the growth of over 5,000 new jobs each year between 1991 and 1998. Public employment in non-hospital settings was more sporadic with a mixture of declines and increases between 1990 and 2000. In 1999, both private and public employment grew, with public non-hospital employment experiencing its largest growth and the private non-hospital employment experiencing one of its smallest growths. In 2002, both private and public non-hospital employment grew but less than in 1999 (Exhibit 13).

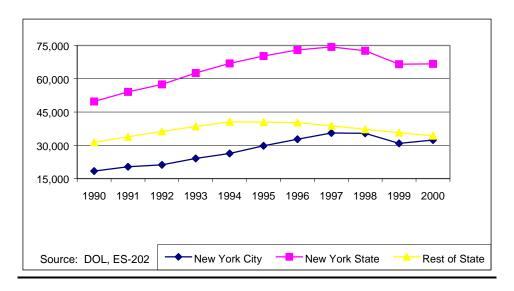
Exhibit 13
Annual Change from the Prior Year in Non-Hospital Health Care Employment for New York City, Public and Private, 1990 – 2000



#### **Home Health Care Employment Trends**

Overall, employment in home health care increased both in the City and in the rest of the state between 1990 and 2000, with growth during the first part of the decade and declines during the latter part of the 1990s. New York City home health care employment increased 93% between 1990 and 1997, declined 13% between 1997 and 1999, and then increased 5% between 1999 and 2000. The rest of New York State showed an increase of 29% between 1990 and 1994, virtually no growth in 1995 and 1996, and a decline of 15% between 1996 and 2000 (Exhibit 14). This shift from rapid growth to moderate growth or decline is not consistent with Bureau of Labor Statistics projections indicating that home health will be one of the fastest growing industries between 2000 and 2010. The decline may, in part, reflect changes in government reimbursement policies that have reduced demand for services. More recently, home health agencies report increasing difficulty filling vacancies for RNs and home health aides in upstate New York.

Exhibit 14 Home Health Care Employment for New York State, 1990 – 2000



#### THE HEALTH WORKFORCE BY OCCUPATION

### **The Supply of Healthcare Workers**

#### 1. Introduction

In order to understand workforce imbalances, it is important to know the composition of the workforce in the health services sector. As illustrated in Exhibit 15, the majority of these workers are in health occupations, with registered nurses (RNs), nurse aides, and licensed practical nurses (LPNs) constituting nearly one-third of health services sector employees.

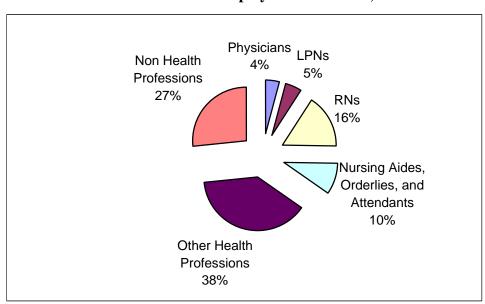


Exhibit 15
Health Services Employment in the US, 2000<sup>5</sup>

### 2. Number of Jobs in Selected Health Occupations

The growth of jobs in health care occupations between 1997 and 2000 in New York State and in the New York City PSMA<sup>6</sup> varied by occupation (Exhibits 16 and 17). While these figures represent paychecks and not discrete individuals or full time equivalents, i.e., an individual working two jobs, whether full time or part time, would be counted twice, they are useful in identifying trends in occupations or job titles. Findings include:

- The number of RN jobs increased by almost 6% statewide and in the PSMA by over 14%;
- The number of LPN jobs increased slightly statewide and increased by over 6% in the PSMA;

<sup>&</sup>lt;sup>5</sup> Includes all workers in health sector employment. It does not include health professionals working outside of the health sector.

<sup>&</sup>lt;sup>6</sup> Includes New York City and the Counties of Putnam, Rockland, and Westchester.

- The number of nursing aides, orderlies and attendants decreased both statewide (-15.2%) and in the PSMA (-19.8%);
- The number of pharmacists increased by 12% statewide and by more than 11% in the PSMA;
- The number of medical and clinical laboratory technologists declined both statewide (-11.9%) and in the PSMA (-21.0%); and
- The number of surgical technicians increased both statewide and in the PSMA.

	1997	1998	2000	% Change
HEALTHCARE TECHNICIANS/TECHNOLOGISTS				C
Licensed Practical Nurses	47,080	48,760	47,370	0.6%
Radiologic Technologists and Technicians	12,220	12,510	12,010	-1.7%
Medical and Clinical Laboratory Technologists	10,760	10,710	9,480	-11.9%
Medical and Clinical Laboratory Technicians	10,740	10,050	10,690	-0.4%
Pharmacy Technicians and Aides	6,780	8,420	14,130	108.4%
Medical Records and Health Information Technicians	4,590	4,400	6,450	40.5%
Surgical Technologists	3,330	3,150	4,790	43.8%
Dietetic Technicians	2,320	1,790	1,890	-18.5%
Cardiology Technologists and Technicians	2,160	2,080	2,280	5.6%
Nuclear Medicine Technologists	770	970	1,090	41.6%
HEALTHCARE PROFESSIONALS				
Registered Nurses	151,150	150,760	159,670	5.6%
Social Workers, Medical, Public Health, Mental Health and	17,150	16,830	12,810	-25.3%
Substance Abuse	ŕ	,	ŕ	
Pharmacists	11,480	12,640	12,860	12.0%
Dental Hygienists	9,420	9,920	11,140	18.3%
Physical Therapists	7,860	7,570	9,490	20.7%
Physician Assistants	5,350	4,510	5,310	-0.7%
Dietitians and Nutritionists	4,440	4,120	3,910	-11.9%
Respiratory Therapists	4,340	5,140	4,890	12.7%
MANAGEMENT/ADMINISTRATIVE SUPPORT				
Medicine and Health Services Managers	17,140	17,110	17,760	3.6%
Medical Secretaries	16,240	17,600	14,730	-9.3%
HEALTH CARE PARAPROFESSIONALS				
Nursing Aides, Orderlies, and Attendants	106,180	101,050	90,000	-15.2%
Home Health Aides	60,970	60,070	107,130	
Dental Assistants	15,390	14,710	16,870	9.6%
Medical Assistants	13,460	17,770	17,260	28.2%

Source: USDOL, BLS, OES

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<sup>&</sup>lt;sup>7</sup> There have been definitional changes between 1997 and 2000 for several of the health occupations, including social workers and pharmacy technicians and aides, making it difficult to ascertain the true change in the numbers of those occupations.

	1997	1998	2000	% Change
HEALTHCARE TECHNICIANS/TECHNOLOGISTS				
Licensed Practical Nurses	19,490	20,710	20,690	6.5%
Radiologic Technologists and Technicians	5,320	5,690	5,640	6.0%
Medical and Clinical Laboratory Technologists	5,660	5,510	4,490	-21.0%
Medical and Clinical Laboratory Technicians	4,930	4,600	5,640	14.4%
Pharmacy Technicians and Aides	2,720	3,290	5,330	96.0%
Medical Records and Health Information Technicians	2,200	2,100	2,850	29.5%
Surgical Technologists	1,770	1,660	2,920	65.0%
Dietetic Technicians	760	630	930	22.4%
Cardiology Technologists and Technicians	1,170	1,090	930	-20.5%
Nuclear Medicine Technologists	330	540	550	66.7%
HEALTHCARE PROFESSIONALS				
Registered Nurses	69,250	72,310	79,260	14.5%
Social Workers, Medical, Public Health, Mental Health and	8,860	8,500	6,130	-30.8%
Substance Abuse	,	,	,	
Pharmacists	5,000	5,860	5,560	11.2%
Dental Hygienists	3,360	3,250	N/A	N/A
Physical Therapists	3,370	3,360	3,610	7.1%
Physician Assistants	2,360	1,830	2,320	-1.7%
Dietitians and Nutritionists	1,950	1,810	2,340	20.0%
Respiratory Therapists	2,120	2,960	2,370	11.8%
MANAGEMENT/ADMINISTRATIVE SUPPORT				
Medicine and Health Services Managers	9,660	9,930	9,220	-4.6%
Medical Secretaries	6,030	7,530	4,930	-18.2%
HEALTH CARE PARAPROFESSIONALS				
Nursing Aides, Orderlies, and Attendants	55,680	52,010	44,670	-19.8%
Home Health Aides	38,480	39,240	61,960	61.0%
Dental Assistants	58,480 6,880	6,650	6,980	1.5%
	,	,	-	
Medical Assistants	6,280	9,530	8,550	36.1%

Source: USDOL, BLS, OES

<sup>&</sup>lt;sup>7</sup> There have been definitional changes between 1997 and 2000 for several of the health occupations, including social workers and pharmacy technicians and aides, making it difficult to ascertain the true change in the numbers of those occupations.

#### 3. Licensure Data for Selected Health Professions

State licensure data are a source of information on the supply of health professionals. Data are available from the New York State Education Department (SED) on the number of individuals actively licensed in a health profession. By law, SED licenses more than 25 health professions, and individuals must secure a New York State license before practicing in one of these health professions. Licensure data in a health profession represents the upper limit on the number of individuals in the state who can practice in the profession. It is important to recognize the limitations of these data:

- Some individuals who are licensed in a health profession may be working either less than full time or not at all in the profession; and
- Licensure counts by county reflect mailing addresses and not necessarily practice addresses and many workers live in different counties than where they work. Thus, the data are presented for the New York City region rather than just for New York City alone.

Licensure data can, however, provide valuable information on major trends in the supply of a health profession in a region. Exhibit 18 presents the number of licensees in selected occupations in April 2001 and April 2002 for the New York City PMSA.

Change in the Number of Licensed Individuals in Selected Health Service Occupations For the New York City PSMA, April 2001 to April 2002

Exhibit 18

	<u>April 2001</u>	<u>April 2002</u>	Percent Change
Registered Nurses	72,833	71,572	-1.7%
Licensed Practical Nurses	21,401	21,125	-1.3%
Social Work	18,917	19,167	1.3%
Pharmacy	6,854	6,540	-4.6%
Physical Therapy	4,620	4,982	7.8%
Speech-Language Pathology	2,892	3,086	6.7%
Nurse Practitioners	2,577	2,840	10.2%
Occupational Therapy	2,473	2,657	7.4%
Registered Physician Assistant	2,082	2,303	10.6%
Dietetics-Nutrition	1,929	1,807	-6.3%
Dental Hygiene	1,920	1,955	1.8%
Respiratory Therapist	1,554	1,582	1.8%
Ophthalmic Dispensing	1,201	1,148	-4.4%
Physical Therapy Assistant	1,091	1,127	3.3%
Occupational Therapy Assistant	1,069	1,106	3.5%
Respiratory Therapist Technician	653	639	-2.1%

Source: New York State Education Department

#### Changes of note between 2000 and 2001 include:

- The number of licensed registered nurses and practical nurses both declined slightly;
- Physician Assistants and nurse practitioners both grew by over 10%;
- The number of physical therapists, occupational therapists, physical therapy assistants, and occupational therapy assistants all increased; and
- The number of pharmacists decreased by over 4%.

### 4. Trends in Nursing Education in New York State, 1996 - 2003

# Overview

There are more RNs in New York and in the nation than any other health occupation. An increased demand for RNs in conjunction with a decline in supply is contributing to a continuing shortage of RNs. This section of the report examines the educational pipeline for RNs in New York, providing trend data on RN graduations by degree type, by region, and by sponsorship and examines the demand for RNs in the health care job market.

There were 105 educational programs in New York State in 2001. Exhibit 19 provides a breakdown of these programs by degree type and sector.

**Exhibit 19 Distribution of Nursing Education Programs by Degree Type and by Sector** 

	Sector					
<b>Degree Type</b>	<b>SUNY</b>	<b>CUNY</b>	<b>Private</b>	<b>Totals</b>		
Diploma	0	0	1	1		
Associates	35	9	15	59		
Bachelors	10	5	29	45		
<b>Totals</b>	45	14	46	105		

To help understand trends in the supply of RNs in New York, the Center surveyed the registered nursing (RN) education programs in the state annually for each of the past three years. The latest survey was conducted in the winter of 2001. Of the 105 RN educational programs in New York State, 101 responded to the survey, or 96%.

# **Findings**

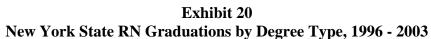
- o The number of RNs graduating in New York State decreased by 3% between 2000 and 2001; the fifth consecutive year of decline.
- O Based on current enrollments, RN graduations in New York State are expected to rise slightly in 2002 (206; 3.9%) and more substantially from 2002 to 2003 (617; 11.2%). The number of graduates in 2003 in projected to be 15.5% (823) above the number of RN graduates in 2001.
- The number of RN graduates projected for 2003 is unlikely to be sufficient to meet demand for registered nurses.
- o RN graduations are likely to continue rising for the next several years; nearly 70% of the RN programs reported an increase in applications and 61% reported an increase in enrollments between 2000 and 2001.
- o Twenty-two RN programs (22%) reported turning away qualified applicants.
- o Graduations from associate degree nursing programs are projected to increase 25% between 2001 and 2003 while graduations from bachelor degree programs are projected to rise only 4%.
- o Every region in New York State had fewer RN graduations in 2001 than in 1996, but increases in RN graduations are projected for most regions of the state in 2003 and 2003.

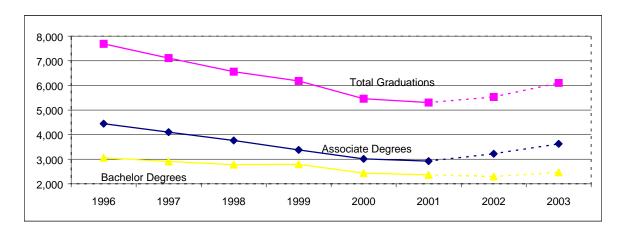
- o Both public and private sector RN programs reported significant declines in nursing degrees awarded between 1996 and 2001, with the largest decreases at CUNY. However, CUNY expects a significant increase in graduates in both 2002 and 2003.
- o New York City graduations declined 38% between 1996 and 2000 but are projected to increase by 25% between 2000 and 2003.
- O CUNY is the major supplier of RNs in New York City. CUNY RN graduations, after declining by 39% between 1996 and 2001, are projected to increase 24% between 2001 and 2003.
- o Private institution RN graduations in New York City declined 43% between 1996 and 2000 but are projected to increase 41% between 2000 and 2003.
- o Both associate and bachelor degree program NYC graduations are projected to increase between 2001 and 2003 by 31% and 10%, respectively.
- o Educational programs perceive that the job market for new RNs in 2001 was better than it was in 2000.

# **New York State RN Graduations**

Overall, the number of graduates of RN education programs in New York State declined by 31% between 1996 and 2001. This trend will reverse in 2002 with total graduations projected to increase by 15% between 2001 and 2003.

Graduations from bachelor degree RN programs declined by 23% between 1996 and 2001 and are projected to decline by an additional 3% between 2001 and 2002, bringing the total decline between 1996 and 2002 to 25%. Bachelor degree graduations are projected to increase by 7% between 2002 and 2003<sup>8</sup>. Graduations from associate degree RN programs declined by 34% between 1996 and 2001 but are projected to increase by 24% between 2001 and 2003 (Exhibit 20).





<sup>&</sup>lt;sup>8</sup> The number of graduates includes some nurses receiving bachelor degrees who were already RNs holding associate degrees or diplomas in nursing. The Center estimates that about 12% of total graduates were already licensed RNs.

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# New York State RN Graduations by Sector

Graduations across all sectors declined between 1996 and 2000. SUNY nursing graduations declined by 23% between 1996 and 2000 and declined by another 4% between 2000 and 2001. SUNY graduations are project to rise slightly between 2001 and 2002 and more significantly between 2002 and 2003, with a combined increase of 17% between 2001 and 2003.

Graduations from independent college programs declined by 33% between 1996 and 2000 and increased slightly in 2001 and in 2002. RN graduations from independent college programs are projected to increase more significantly in 2003, with a combined increase of 10% between 2000 and 2003.

CUNY graduations declined 34% between 1996 and 2000 and declined another 7% between 2000 and 2001. CUNY graduations increased 12% between 2000 and 2001 and are projected to rise in both 2002 and 2003. CUNY graduations are expected to increase by 24% between 2000 and 2003 (Exhibit 21).

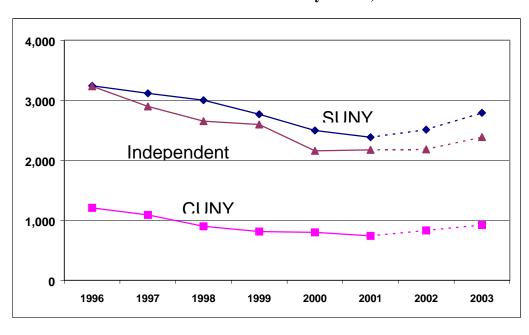


Exhibit 21 New York State RN Graduations by Sector, 1996 - 2003

### **New York State RN Graduations by HSA Region**

All Health System Agency (HSA) regions<sup>9</sup> within New York State experienced declines in RN graduations between 1996 and 2001. Western NY had the largest decline, 42.6%, followed by New York City at 36.1% and Central NY at 30.3%. The Long Island Region experienced the smallest decline in graduations, 18.4%.

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<sup>&</sup>lt;sup>9</sup> The eight Health System Agency regions of New York State were used for the regional analysis of this study. These regions have been used for health planning purposes in New York State for almost thirty years.

The trend in declining graduations began to reverse itself in 2001 with the Finger Lakes (2.6%), New York-Penn (10.7%), Northeastern (3.8%), and New York City regions (3.4%) experiencing increases in graduations between 2000 and 2001. The Central and Hudson Valley regions are projected to have increases in RN graduations between 2001 and 2002, and the Long Island Region is projected to have an increase in RN graduations between 2002 and 2003. The Western New York Region is projected to continue its declining RN graduations through 2003 (Exhibit 22).

Exhibit 22 New York State RN Graduations by HSA Region, 1996, 2000 - 2003

						Percent (	Change
	1996	2000	2001	2002	2003	96 to 01	01 to 03
Western NY	890	557	511	501	468	-42.6%	-1.9%
Finger Lakes	654	449	461	457	513	-29.5%	11.3%
Central NY	870	667	606	693	788	-30.3%	30.0%
NY-Penn	183	112	124	137	216	-32.2%	74.2%
Northeastern NY	641	470	488	523	598	-23.9%	22.5%
Hudson Valley	1,058	827	769	774	808	-27.3%	5.1%
New York City	2,258	1,395	1,442	1,564	1,740	-36.1%	11.3%
Long Island	937	798	765	714	787	-18.4%	2.9%
Regents	194	181	136	164	182	-29.9%	33.8%
_	7,685	5,456	5,302	5,527	6,100	-31.0%	15.1%

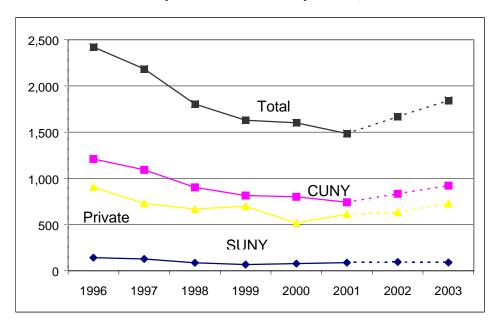
# New York City RN Graduations by Sector

RN graduations in New York City declined over 36% between 1996 and 2001. Between 2001 and 2003, RN graduations are projected to increase by over 11%. CUNY, a major supplier of RNs in New York City, produced between 52 and 57 percent of all RN graduations in New York City between 1996 and 2001. CUNY graduations declined 39% between 1996 and 2001. CUNY graduations are projected to increase in both 2002 and 2003, with a total increase of 24% between 2001 and 2003.

Independent college RN graduations in New York City declined 26% between 1996 and 1998, increased slightly in 1999, and then decreased significantly between 1999 and 2000. The total decline in graduations between 1996 and 2000 was 43%. Beginning in 2001, independent college RN graduations increased and are projected to increase in 2002 and 2003. Between 2000 and 2003, independent college RN graduations are projected to increase 41%.

SUNY graduations in New York City declined by 45% between 1996 and 2000, but the number of SUNY graduations represents only a small portion of all RN graduations in New York City (Exhibit 23).

Exhibit 23 New York City RN Graduations by Sector, 1996 - 2003

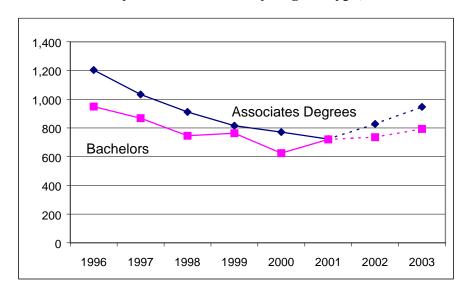


# New York City Graduations by Degree Type

Associate degree graduations in New York City showed a steady decrease between 1996 and 2001, with a total decline in graduations of 40%. Associate degree graduations in New York City are projected to increase in both 2002 and 2003, with a projected increase of 31% between 2000 and 2003.

Bachelor degree graduations had a more uneven decline with decreases in graduations in 1997 and 1998, a slight increase in 1999, a major decrease in 2000, and then increases between 2000 and 2003. The total decrease for bachelor level graduations in New York City between 1996 and 2000 was 35% and the total projected increase between 2000 and 2003 is 27% (Exhibit 24).

Exhibit 24 New York City RN Graduations by Degree Type, 1996 - 2003



# **Applications and Acceptances to RN Education Programs**

Both applications and acceptances to RN education programs in New York State increased between 2000 and 2001. Seventy percent of the programs reported an increase in applications for 2001 compared to 52% for 2000. Additionally, 61% of the nursing programs reported an increase in the number of students accepted into their nursing program for 2001 compared to 39% for 2000 (Exhibit 25).

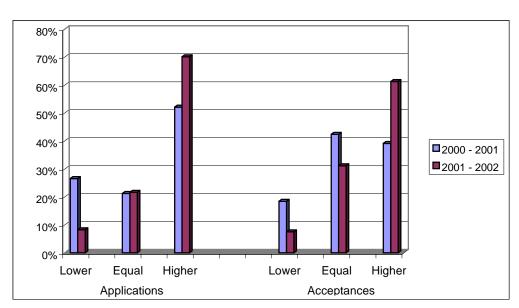


Exhibit 25 Applications and Acceptances to New York State Nursing Programs, 2000 and 2001

In New York City, 63% of the RN education programs reported applications were higher in 2001 than in 2000, with only 8% reporting that applications were lower. Fifty percent of the RN education programs reported that acceptances were higher in 2001 than in 2000, with another 42% reporting that acceptances were the same.

# **RN Programs Turned Away Qualified Applicants**

Twenty-two of the 101 respondents, or 22%, reported that they turned away qualified applicants. Of the twenty-two programs that turned away qualified applicants, eleven programs indicated that the reason for turning away qualified applicants was the lack of qualified faculty. Ten of the eleven that turned away qualified applicants were in the public sector (either SUNY or CUNY programs) and ten of the eleven were associate degree nursing programs. This may reflect less competitive wages at public nursing programs, rather than a shortage of RNs qualified to teach in RN education programs. Of the remaining eleven respondents, the majority cited a lack of clinical or laboratory space or a limit on the number of nursing program acceptances as the reasons for turning away qualified applicants.

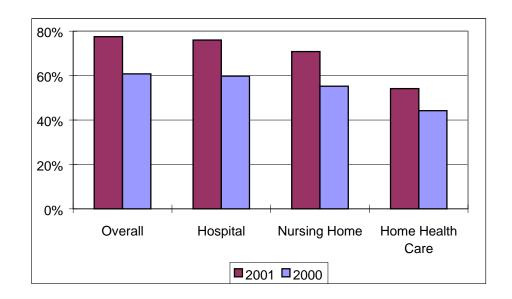
27

Of the twenty-two that turned away qualified applicants, ten were in New York City and another 3 were on Long Island. Five of the ten New York City programs cited lack of faculty as the reason for turning away qualified applicants.

# The Labor Market for RNs

RN education program directors reported that the number of new jobs was better for newly graduating RNs in 2001 than it was in 2000. Seventy-seven percent of all RN education program directors, an increase of 21%, reported many job openings available for their graduating nurses. This held true across hospital, nursing home, and home health care settings (Exhibit 26).

Exhibit 26
Perception of Nursing Program Directors on the Number of Job Openings in 2000 and 2001



### The Future Demand for RNs

The Bureau of Labor Statistics (BLS) projects that slightly over one million new RNs will be needed between 2000 and 2010<sup>10</sup>. Of that amount, 561,000 represent an increase in demand while 443,000 represent replacements for existing RNs leaving the workforce.

Over 7.5% of all nurses in the US practice in New York State. If the BLS estimates of job growth and replacement needs are applied to New York State, the expected number of RN graduations is substantially below what is needed to fill expected future RN job openings in the state.

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<sup>&</sup>lt;sup>10</sup> Daniel Hecker, Occupational Employment Projections to 2010, Monthly Labor Review, Bureau of Labor Statistics, November 2001.

# **The Demand for Healthcare Workers**

# 1. Survey of Human Resources Directors

As part of the Health Workforce Tracking System, Human Resource Directors from a sample of voluntary and public hospitals agreed to participate in a semi-annual telephone survey on hospital employment trends and needs. Survey topics include:

- Types of workers the facility is actively hiring;
- The occupations that are most difficult to recruit;
- Changes in service (shifts, expansions, reductions) that will impact on the workforce; and
- The impact of new credentialing or certification requirements.

Key findings from the survey conducted in the first six months of 2002 are summarized below:

- Most hospitals reported continuing difficulty recruiting RNs, especially those with specialty care experience (e.g., experience in intensive care, coronary care, operating room, emergency room, neonatal intensive care);
- Most hospitals experienced difficulty recruiting pharmacists, radiological technicians, and mammographers.
- Hospitals that were not outsourcing their hospital information systems reported continuing difficulty recruiting information systems staff, particularly those with greater technical skills;
- Some recruitment difficulties were noted for respiratory therapists and laboratory technologists.
- Many hospitals reported difficulty finding bi-lingual or multi-lingual workers, especially social workers (identified needs include health workers fluent in Spanish, Russian, French, Chinese, Korean, and Hindi).

# 2. Greater New York Hospital Association (GNYHA) Survey of Nurse Staffing in Hospitals

The GNYHA conducted surveys looking at vacancy and turnover rates for each of the last three years beginning in 1999 to learn more about nurse staffing at their member hospitals within the New York City region. Major findings from the three surveys include:

- The overall vacancy rate for direct patient care RNs in 2001 was 7.8%, an increase from the 5.4% average vacancy rate reported in 1999, but the same as the rate reported in 2000.
- The vacancy rate for licensed practical nurses (LPNs) has steadily decreased since 1999, going from 12.5% in 1999 to 10.5% in 2001 (Exhibit 27).

Exhibit 27 Comparison of Hospital Vacancy Rates for Nursing Staff

	1999	2000	2001
Nurse Managers	5.9%	6.4%	7.7%
RN Staff Nurses	5.4%	7.8%	7.8%
LPNs	12.5%	11.9%	10.5%
<b>Nurse Aides/Technicians</b>	N/A	7.0%	6.7%

Source: GNYHA

Of more interest is the percentage of hospitals reporting vacancy rates at or above 10%. While the percentage of hospitals with vacancy rates at or above 10% for nurse managers and the LPNs has remained relatively stable since 1999, the vacancy rate for RN staff nurses has increased almost four-fold since 1999 (Exhibit 28).

Exhibit 28
Percentage of Hospitals Reporting 10% or More Vacancy Rate

	1999	2000	2001
Nurse Managers	29.8%	28.9%	28.6%
RN Staff Nurses	8.8%	32.2%	32.5%
LPNs	34.8%	31.5%	34.9%
Nurse Aides/Technicians	N/A	37.3%	30.0%

Source: GNYHA

Hospital human resource directors, as cited previously, have reported increasing difficulty in recruiting specialty care nurses. Data from the GNYHA surveys supports this. While the percentage of hospitals reporting that it took more than three months to fill nursing positions in general medical-surgical areas decreased between 2000 and 2001, the percentage of hospitals reporting it taking more than three months to fill positions in specialty care areas increased between 2000 and 2001 (Exhibit 29).

**Exhibit 29 Percentage of Hospitals Reporting More than an Average of Three Months to Fill Positions** 

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	2000	2001
General Medical-Surgical	24.4%	12.3%
<b>Critical Care/Specialty Units</b>	44.9%	52.6%
Perioperative	38.5%	66.1%
<b>Emergency Department</b>	41.0%	53.7%
Psychiatry	12.8%	25.0%
Pediatrics	7.7%	22.2%

Source: GNYHA

Between 1999 and 2001, turnover rates have increased for all of these nursing titles, suggesting that health providers are shuffling the existing nursing workforce rather than increasing the supply of nurses (Exhibit 30).

**Exhibit 30 Comparison of Turnover Rates for Nursing Staff** 

	1999	2000	2001
Nurse Managers	7.6%	10.0%	12.0%
RN Staff Nurses	7.8%	8.6%	11.5%
LPNs	13.5%	9.8%	14.0%
Nurse Aides/Technicians	N/A	9.8%	12.0%

Source: Greater New York Hospital Association

# 3. Greater New York Hospital Association (GNYHA) Survey on Continuing Care Staffing in the New York City Region, 2001

In a recently completed staffing survey of its member residential health care facilities located in New York City, Long Island, and Westchester<sup>11</sup>, the GNYHA found:

- Nearly 40% of respondents reported vacancy rates of 10% or higher for management RNs, staff RNs, LPNs, and certified nurse aides (CNAs).
- The largest number of vacancies was for staff RNs (16%) and LPNs (15.6%), followed by management RN vacancies (10.5%) and CNA vacancies (6.7%).
- Nearly one-third of facilities reported actively recruiting for more than 10 CNAs and over one-third of facilities used agency CNAs to fill vacancies.
- The vast majority of facilities reported having the most difficulty recruiting staff RNs (80%), LPNs (72%) and management RNs (70%).

# 4. Tracking Job Vacancies Reported to Local 1199 in 1999 and 2000

Under an agreement between Local 1199 and the League of Voluntary Hospitals, when a hospital is seeking to fill a vacancy in a title covered by their collective bargaining agreement, the facility must notify the union to give union members priority consideration for the position. As part of the Health Workforce Tracking System, all job vacancies in titles represented by Local 1199 reported to the union by its facilities in 2000 and 2001 were reviewed. Exhibit 31 depicts the most frequently reported job vacancies by title. A limitation of this data source is that it represents titles of unionized workers and does not represent the full range of vacant positions at the reporting facilities. In addition, data on the total number of positions in each occupation covered by 1199 is not available, so it is not possible to compare the number of job vacancies to

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<sup>&</sup>lt;sup>11</sup> Skyline News, Greater New York Hospital Association, May 28, 2001.

the total number of positions. While 1199 added 15 new facilities in 2001, they only accounted for 31, or .4% of the vacancies.

Exhibit 31
Vacancies in Permanent Jobs for Titles Covered Under Collective Bargaining,
2000 and 2001

	2000		2001		
	Number of	% of Total	Number of	% of Total	Percent Change
	Vacancies	Vacancies	Vacancies	Vacancies	2000 to 2001
Nursing Attendants/Certified Nurse Aides	702	12.5%	1105	15.6%	57.4%
Licensed Practical Nurse	434	7.7%	455	6.4%	4.8%
Housekeeping Worker	379	6.9%	492	7.0%	29.8%
Dietary Worker	370	6.5%	417	5.9%	12.7%
Registered Nurses	350	6.2%	447	6.3%	27.7%
Ward Clerk/ Unit Secretary	223	3.9%	239	3.4%	7.2%
Social Worker/MSW	174	3.1%	247	3.5%	42.0%
Laboratory Technologist	116	2.0%	122	1.7%	5.2%
Nurse Tech/Patient Care Associate	110	1.9%	194	2.7%	76.4%
Billing Rep	101	1.8%	165	2.3%	63.4%
All Other	2,707	47.8%	3194	45.1%	18.0%
Total	5,666	100.0%	7,077	100%	24.9%

Source: Local 1199

Major findings from the 1199 vacancy data include:

- The number of reported vacancies increased by almost 25% between 2000 and 2001;
- Nurse Technicians/Patient Care Associates, Billing Representatives, and Nursing Attendants/Certified Nurse Aides all had increases in the number of vacancies over 50%;
- The ten health worker titles listed represent over half of all vacancies reported to 1199 in 2000 and 2001;
- Nurse attendant/certified nurse had the most reported vacancies in both 2000 and 2001, accounting for over 12% of vacancies in 2000 and over 15% in 2001;
- Licensed Practical Nurses had the second most vacancies in 2000 with slightly less than 8% and the third most vacancies in 2001 with over 6%;
- Housekeeping workers accounted for the third highest number of vacancies reported in 2000 with almost 8% in 2000 and the second highest number of vacancies in 2001 with 7%;
- Dietary workers accounted for the fourth highest number of vacancies in 2000 with 6.5% and the fifth largest in 2001 with almost 6%; and
- Registered nurse had the fifth highest number of reported vacancies in 2000 with slightly over 6% and the fourth highest in 2001 with slightly over 6%. However, most registered nurses in the New York City area are not represented by 1199.

# **Future Demand for Health Workers**

According to the Bureau of Labor Statistics (BLS), in the decade from 1990 to 2000, 1 in 10 new jobs nationally were created in the health care sector. This trend is expected to continue in the ten-year period beginning in 2000, with over 2.8 million of the 22 million new jobs projected to be in health occupations<sup>12</sup>. While non-health care jobs are projected to rise by over 14% between 2000 and 2010, health care occupations are projected to rise by almost 29%. Additionally, nine of the 20 occupations projected to grow the fastest between 2000 and 2010 are in health occupations.<sup>13</sup>

The health occupations projected to have the biggest percentage increase in new jobs are:

- personal and home care aides (62%);
- medical assistants (57%);
- physician assistants (53%);
- medical records and health information technicians (49%); and
- home health aides (47%).

The health occupations projected to have the largest number of new jobs are:

- registered nurses (561,000 new jobs);
- nurse aides, orderlies, and attendants (323,000);
- home health aides (291,000);
- personal and home care aides (258,000); and
- medical assistants (187,000).

Within the health sector, jobs in offices and clinics are projected to increase by over 40%, or 1.2 million jobs (Exhibit 32), outpacing the growth in hospitals (10% or 487,700), home health care services (68% or 437,700), and nursing and personal care facilities (22% or 394,100).

Exhibit 32 National Projected Health Sector Job Growth by Setting, 2000 – 2010

			Growth	
Health Care Setting	2000	2010	Number	Percent
Offices and clinics	3,098,800	4,344,000	1,245,200	40.2%
Hospitals	4,960,300	5,448,000	487,700	9.8%
Home health care services	643,000	1,080,000	437,000	68.0%
Nursing and personal care facilities	1,795,900	2,190,000	394,100	21.9%
Medical and dental laboratories	209,000	270,000	61,000	29.2%
Health and allied services not elsewhere				
classified	358,200	550,000	191,800	53.5%
Totals	11,065,200	13,882,000	2,816,800	25.5%

Source: USDOL, BLS, Industry employment by occupation, 2000 and projected 2010.

<sup>12</sup> Berman, Jay, "Industry output and employment projections to 2010," Monthly Labor Review, Vol. 124, No. 11.

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<sup>&</sup>lt;sup>13</sup> USDOL, BLS, Occupational Outlook, "Health Services", Web Site Access, June 21, 2002.

### New York City Certificate of Need Approvals

The Health Workforce Tracking System monitored Certificate of Need (CON) approvals for New York City for the third year. Any major change in service by licensed health care providers in New York State e.g., hospitals, nursing homes, or health centers, must be approved by the State Health Department (DOH). It should be noted that CON projects approved in 2001 are not necessarily completed in 2001. There are frequent delays, as facilities may need to arrange financing and make final plans for these projects. Additionally, major capital project projects such as construction projects are designed for implementation over multiple years.

In the previous two tracking reports, well over half of the CON approvals were classified as ambulatory services. This changed in 2001, when only 44% of the CON approvals were classified as ambulatory services. This is in part due to DOH delaying the review of primary care clinic applications until more consistent review criteria could be established. Review of primary care clinic applications began again in early 2002.

The most significant findings are:

- Due to the delay in primary care clinic reviews, there was a significant decrease in the number of ambulatory services CON approvals;
- There were a broad range of hospital-based service CON approvals in 2001, including 2 new computer system purchases and many pediatric and neonatal services expansions. Compared to 1998 and 1999, there was an increase in the number of hospital-based CON approvals;
- CON approvals in 2001 for Nursing and Personal Care Facilities were down from 1998 and 1999.
- CON approvals in 2001 for home health services and dialysis services were down from the number of approvals in 1998 and 1999.

Exhibit 33 provides a summary of 2001 CON approvals for New York City.

# Exhibit 33

# New York State Department of Health Certificate of Need Approvals, New York City, 2001

Ambulatory	8 primary care extension clinic certifications
Services	12 extension clinic certifications
	1 extension clinic relocation
	22 new diagnostic and treatment centers constructions
	1 laboratory construction, 2 laboratory replacement
	5 specialty extension clinic certifications
	4 lithotripter service certification
	1 ambulatory surgery service certification
	2 diagnostic and treatment center MRI services constructions
Nursing &	1 psychiatric partial hospitalization program
<b>Personal Care</b>	1 nursing unit renovation
<b>Facilities</b>	
Home Health	1 Home Health Agency relocation
Services	1 Long Term Home Health Care Program capacity expansion
	2 nursing service new operator establishments
Dialysis	5 dialysis station creations or expansions
Services	1 CAPD program certification
Hospital-based	1 Bed Conversions
Services	3 Bed Certifications
	5 Bed De-certifications
	1 additional beds purchase
	1 Bed psychiatry unit relocation
	2 center relocations
	1 linear accelerator certification
	2 CT scanner certifications, 1 CT scanner purchase, 1 pet scanner set up
	6 MRI purchase
	1 catchment area expansion
	3 LTHHCP capacity expansions, 1 capacity expansion
	3 emergency departments expansion
	1 radiology system purchase
	15 department renovations
	1 construction of 123 bed replacement building
	2 computer system purchases
	1 purchase and re-establishment of doctor's hospital
	1 piping system replacement, 1 windows and railings replacement, 4 façade upgrades, 1
	emergency power systems upgrade, 2 roofs and skylights renovation

Source: New York State, DOH

# Appendix I

# **Description of Standard Industrial Classification for the Health Care Industry**

### **Offices and Clinics**

- O Doctors of medicine and osteopathy practicing alone and in groups of practitioners who have the same or different specialties;
- o Group medical practices including clinics, free standing emergency care centers, and ambulatory surgical centers;
- o Offices and clinics of dentists;
- Offices and clinics of other health practitioners such as chiropractors, optometrists, and podiatrists, as well as occupational and physical therapists, psychologists, audiologists, speech-language pathologists, dietitians, and other miscellaneous health practitioners.

# **Hospitals**

Hospitals include facilities providing a range of services from diagnostic services to surgery and continuous nursing care. Some hospitals specialize in treatment of the mentally ill, cancer patients, or children.

# **Nursing and Personal Care Facilities**

Nursing facilities provide inpatient nursing, rehabilitation, and health-related personal care to those who need continuous health care, but do not require hospital services. Nursing aides provide the vast majority of direct care. Other facilities, such as convalescent homes, help patients who need less assistance.

#### **Medical and Dental laboratories**

Medical laboratories provide professional analytic or diagnostic services to the medical profession or directly to patients following a physician's prescription. Workers analyze blood, take x-rays, or perform other clinical tests. In dental laboratories, workers make dentures, artificial teeth, and orthodontic appliances.

### **Home Health Care Services**

Skilled nursing or medical care is provided in the home, under a physician's supervision.

# Health and allied services, not elsewhere classified

This category includes kidney dialysis centers, outpatient facilities such as drug treatment clinics and rehabilitation centers, and other miscellaneous service providers such as blood banks and providers of childbirth preparation classes.