

2008



Health Care Employment Projections:

An analysis of Bureau of Labor Statistics Settings and Occupational Projections,
2006-2016



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

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The Center for Health Workforce Studies
School of Public Health, University at Albany
One University Place
Rensselaer, NY 12144
Phone: (518) 402-0250
Fax: (518) 402-0252
<http://chws.albany.edu>

PREFACE

This report, prepared by the Center for Health Workforce Studies (the Center), presents a summary of labor projections for the period 2006 through 2016 for health care settings and health care occupations. The report is designed to provide information about projected trends to help health care industry, educators, policy makers, and other stakeholders better understand which health occupations and professions will be in greatest demand in the next 10 years and how to best to allocate resources to meet those needs.

The Center is part of the School of Public Health, University at Albany, State University of New York. Its mission is to provide timely, accurate data and conduct policy-relevant research about the health workforce. This report was prepared by Robert Martiniano, with assistance from Jean Moore, Maria Kouznetsova, Debra Krohl, and Lyrissa Smith. The views expressed in this report are those of the Center and do not necessarily represent positions or policies of the School of Public Health, the University at Albany or the State University of New York.

BACKGROUND

Every two years, the federal Bureau of Labor Statistics (BLS) publishes occupational and industry projections for employment in the United States for the coming decade. Projections by sector and by occupation for the period 2006 through 2016 were released in November 2007. The Center analyzed these projections and summarized the most significant findings related to health care employment.

This report presents projections for health sector employment and health occupations employment. Health sector employment includes all jobs in the various health settings (hospitals, nursing homes, home health care, private practitioner offices, etc.), including those jobs not considered health occupations, such as computer technicians and food service workers. Health occupations employment¹ includes health care jobs within the health sector, such as registered nurses (RNs) working in hospitals, as well as those jobs outside the health sector, such as RNs working in schools.

The BLS projections are national in scope and do not include projections by state or region. Factors that influence demand for health services nationally, such as an aging population, are likely to have similar effects on demand at the regional, state, and local levels, although geographic variation is possible. It is difficult to accurately predict health care employment because many factors influence the demand for and use of services (e.g., the nation's economy, reimbursement policies, health workforce shortages). Nevertheless, the BLS projections represent the most comprehensive forecast of future jobs in the U.S.

SUMMARY OF FINDINGS

Health care continues to be the fastest growing employment sector in the country. Between 2006 and 2016, the health care sector is projected to grow by more than 21%, compared to slightly more than 9% for all other employment sectors. Within health care, jobs in home health care and offices of health practitioners, particularly physician offices, are projected to grow the fastest.

¹ Includes 79 health occupations as identified by the Center for Health Workforce Studies.

The health occupations projected to add the most new jobs between 2006 and 2016 are RNs; personal and home care aides; home health aides; nursing aides, orderlies, and attendants; and medical assistants. Over one million new RNs will be needed between 2006 and 2016. The largest percentage growth of RNs will occur in home health care and offices of health practitioners. While the growth of RN jobs in hospitals is the lowest among all health care settings, hospitals are still projected to add the largest number of new RN jobs, more than 300,000 between 2006 and 2016.

In addition, many of health occupations will need more recruits to fill vacancies created by retirements or other departures. Demand for other health professions, including licensed practical nurses (LPNs), physicians and surgeons, and pharmacy technicians is also expected to grow. Given the growing demand for health care workers in a variety of occupations and professions, current health workforce shortages are not only likely to persist but also to worsen.

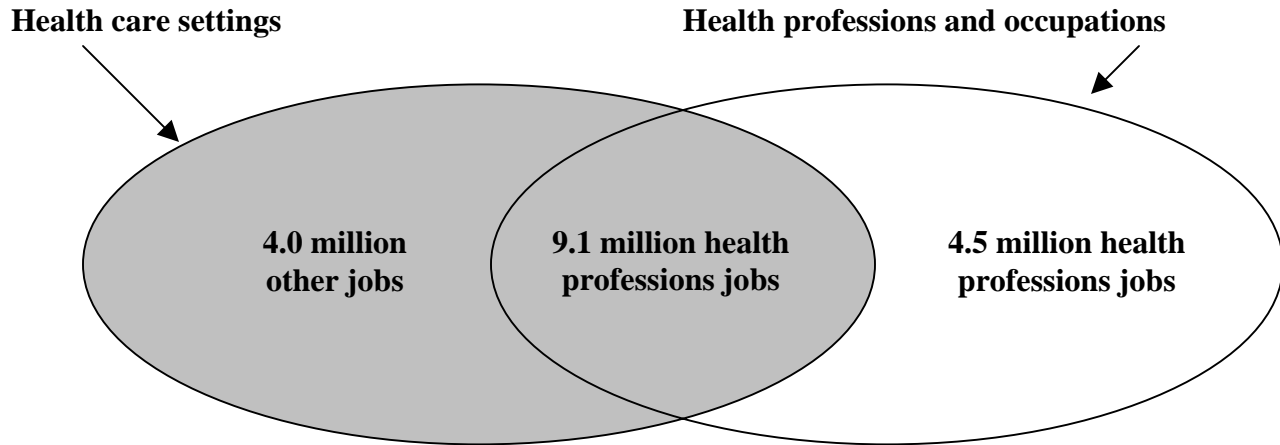
KEY FINDINGS

1. Health care employment comprises a growing share of the total U.S. workforce.

In 2006, there were nearly 17.6 million jobs either in the health sector or in health occupations outside of the health sector, accounting for almost 12% of the total U.S. workforce.

Of the 17.6 million, slightly more than 13.1 million jobs, or 9% of U.S. employment, were in the health sector in 2006, including health-related occupation and non health-related occupation jobs. The remaining 4.5 million jobs, or 3% of U.S. employment, were in health occupations outside of the health sector (Exhibits 1 and 2).

Exhibit 1
The U.S. Health Workforce, 2006



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016.

Exhibit 2
The U.S. Health Workforce, 2006

	Health Professional Jobs	Other Jobs	Totals
Health Care Settings	9,093,186	4,015,914	13,109,100
Other Work Settings	4,490,814	133,020,086	137,510,900
Totals	13,584,000	137,036,000	150,620,000

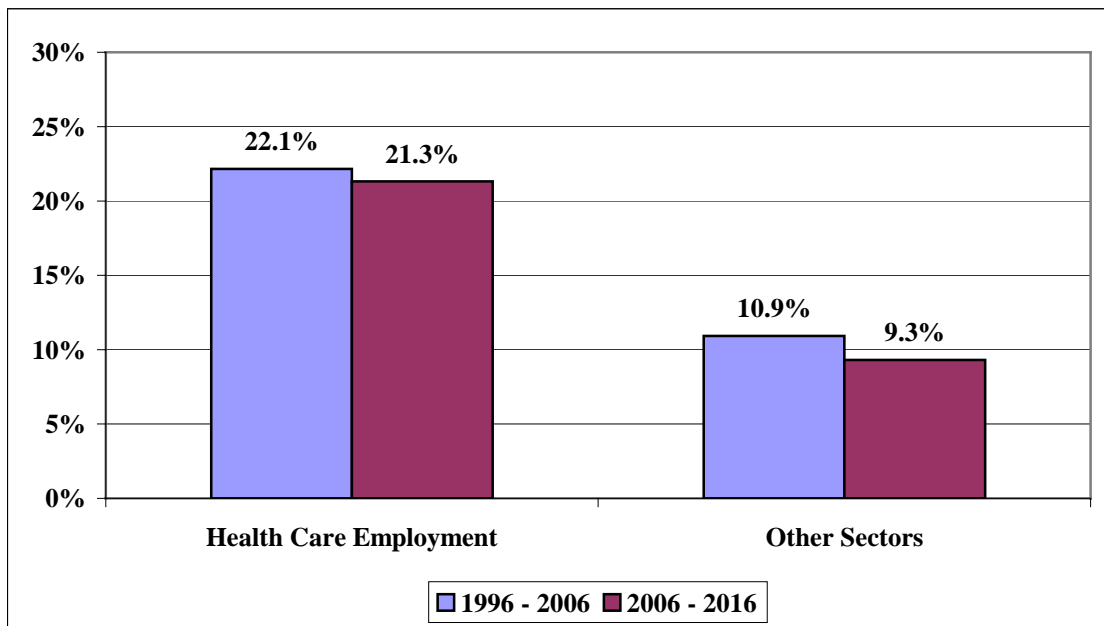
	Number	Percent of Civilian Labor Workforce
Health professions jobs in health care settings	9,093,186	6.0%
Other jobs in health care settings	4,015,914	2.7%
Health professions jobs in other settings	4,490,814	3.0%
Total U.S. Health Care Jobs	17,599,914	11.7%
U.S. Civilian Labor Force Jobs	150,620,000	100.0%

Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016; Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

2. Between 2006 and 2016, employment in the health sector is projected to grow at a higher rate than all other employment sectors.

Health sector employment is projected to grow from over 13 million jobs in 2006 to nearly 16 million jobs by 2016. The health sector is expected to grow by more than 21%, compared to slightly more than 9% for all other employment sectors.

Exhibit 3
Job Growth in the Health Sector Compared to All Other Employment Sectors
1996 – 2006 and Projected 2006 – 2016

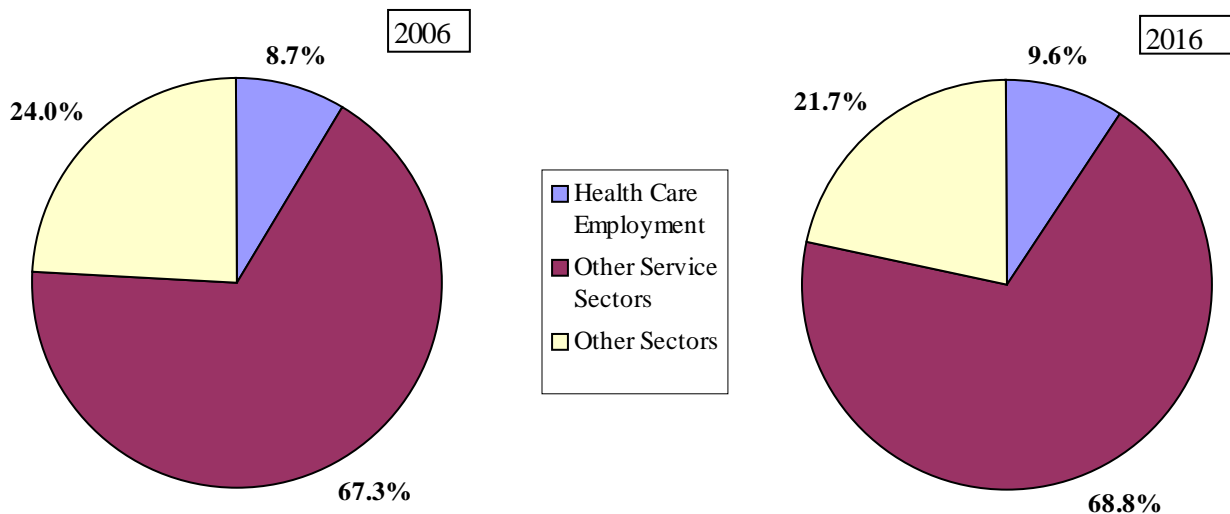


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016; Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

3. One in every 10 jobs in the U.S. is projected to be in the health sector by 2016.

Health sector employment is expected to comprise a larger share of total U.S. employment by 2016 than it has in the past. In 2006, nearly 9% of U.S. jobs were in the health sector. By 2016, that proportion is projected to increase to almost 10% (Exhibit 4).

Exhibit 4
Percentage of Health Sector Jobs to Total Jobs²



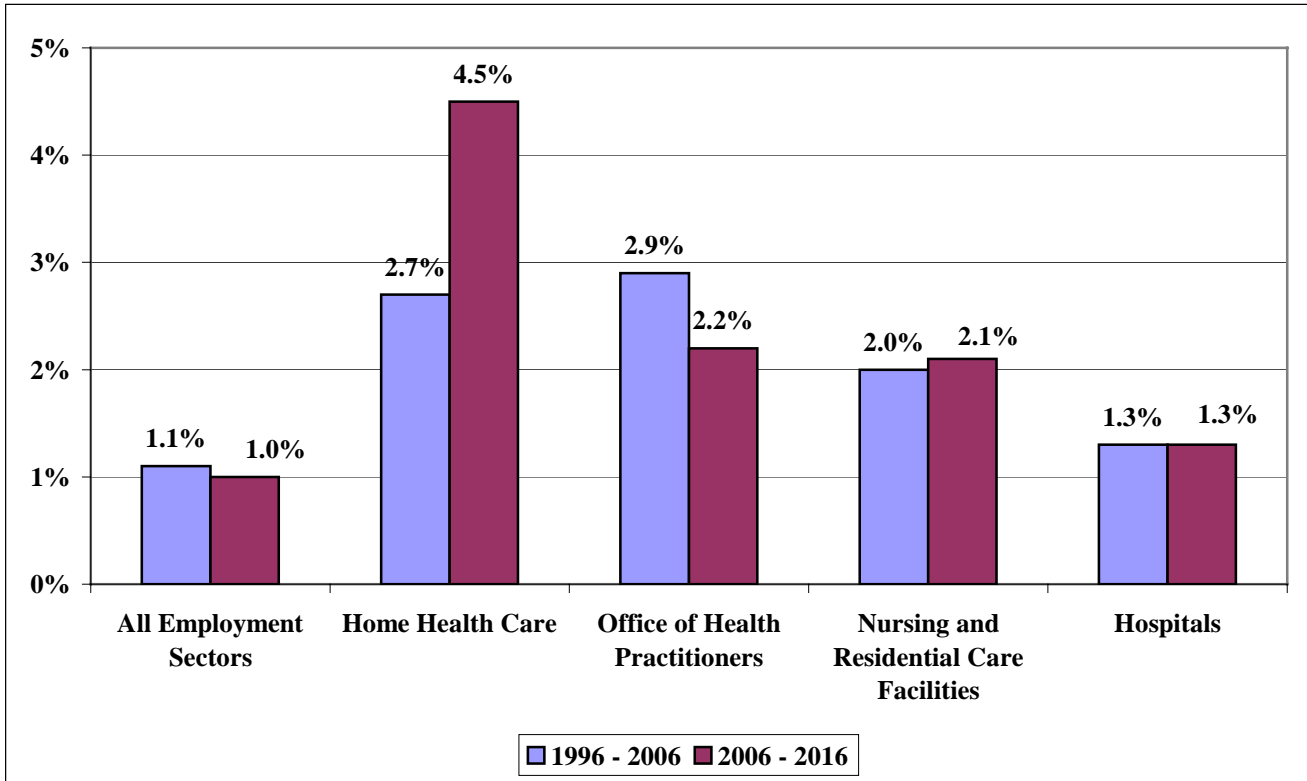
Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016; Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

4. Between 2006 and 2016, the fastest job growth in the health sector is projected for home health care. Hospital employment is projected to grow at a much slower rate.

Home health care is projected to experience the fastest job growth across all health settings, at 4.5% average annual growth. Additionally, both offices of health practitioners and nursing and residential care facilities are projected to have average annual growth of slightly more than 2% each. Hospitals are projected to grow at 1.3% annually during the same period (Exhibit 5).

² Other service sectors include retail and wholesale trade, information technology services, banking, education, government, transportation, and utilities. Other sectors include manufacturing, construction, mining, and agriculture, forestry, fishing, and hunting.

Exhibit 5
Average Annual Growth of Selected Occupational Settings with the Health Care Sector



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016; Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

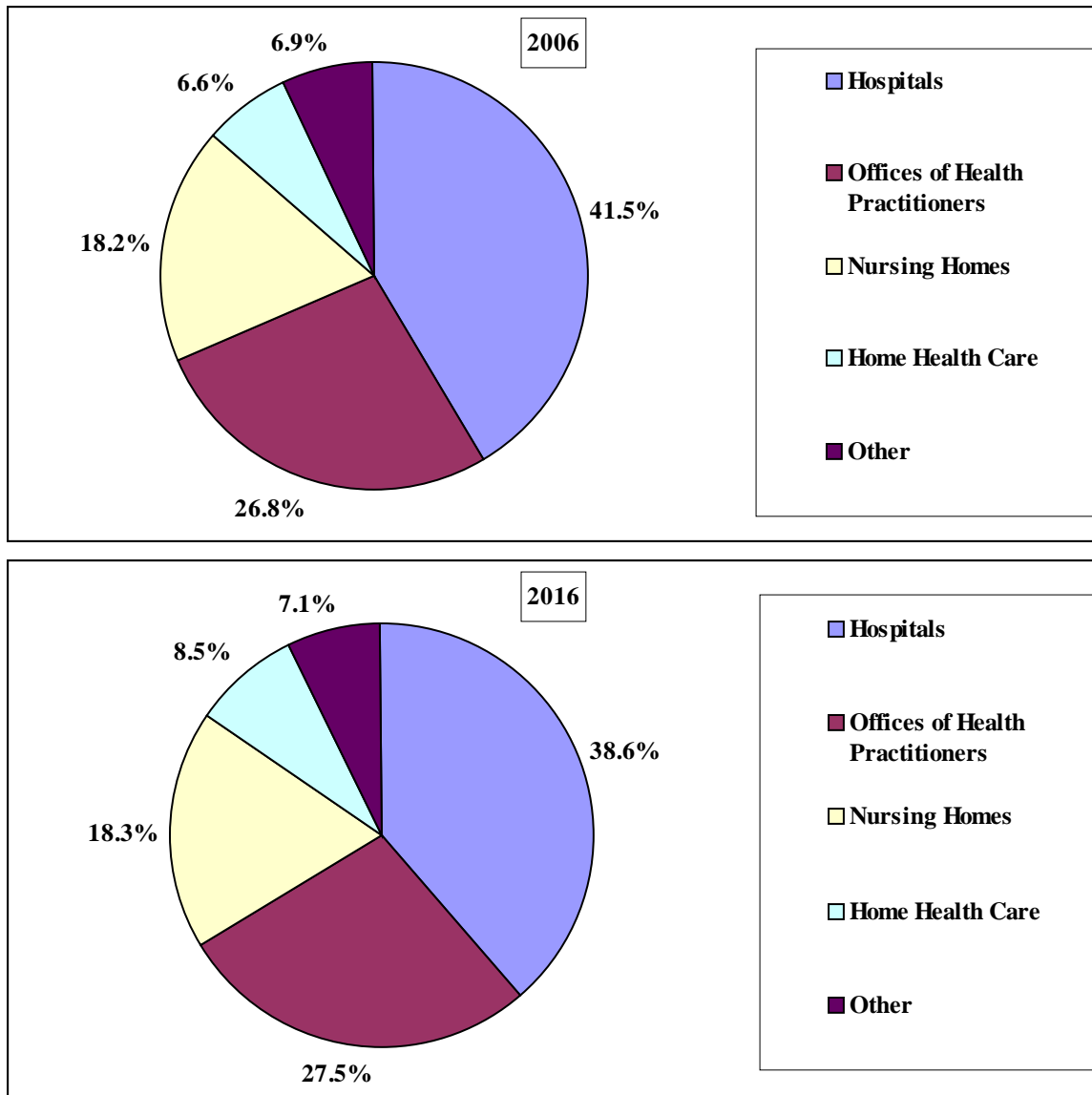
5. Between 2006 and 2016, nearly 5.5 million health workers will be needed to fill new jobs and to replace workers who leave their jobs across all employment sectors.

The total number of health occupations jobs across all employment sectors will increase by nearly 3.2 million between 2006 and 2016 (Appendix 1). In addition, another 2.3 million health workers will be needed to replace individuals who are expected to leave their jobs (e.g., retirements, etc.) over the same period.

6. Between 2006 and 2016, offices of health practitioners are projected to add more than 850,000 new jobs.

Employment in offices of health practitioners is expected to grow by slightly more than 24% between 2006 and 2016, adding more than 850,000 new jobs. This represents more than one-third of the total projected growth in health sector employment (Exhibit 6).

**Exhibit 6
Percent of Jobs by Employment Setting between 2006 and 2016**

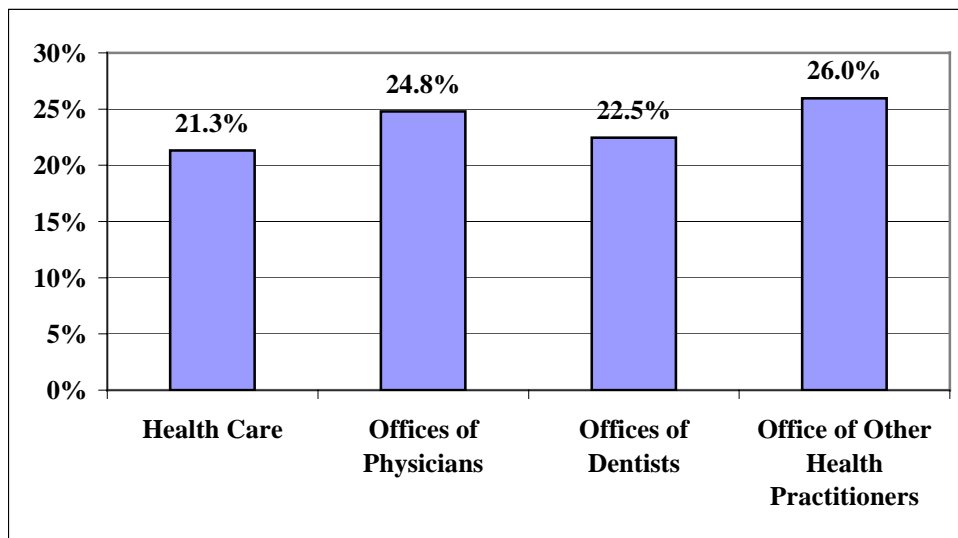


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016; Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

7. The offices of physicians are projected to add nearly 535,000 new jobs between 2006 and 2016.

Offices of physicians are projected to grow by nearly 25% between 2006 and 2016, adding almost 535,000 new jobs. Offices of dentists are expected to increase by more than 175,000 new jobs and offices of other health practitioners are projected to grow by nearly 150,000 new jobs during the same period (Exhibit 7).

**Exhibit 7
Job Growth for Offices of Health Practitioners, 2006 – 2016**



Source: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016.

8. Between 2006 and 2016, more than half of the top 30 occupations projected to grow the fastest in the U.S. are health occupations.

Seventeen of the 30 occupations projected to grow the fastest between 2006 and 2016 are health occupations, including 12 of the top 20³. Some of the health occupations projected to have the biggest percentage increases in new jobs are:

- Personal and home care aides (51%);
- Home health aides (49%);
- Medical assistants (35%);
- Physical therapists assistants (32%); and
- Pharmacy technicians (32%).

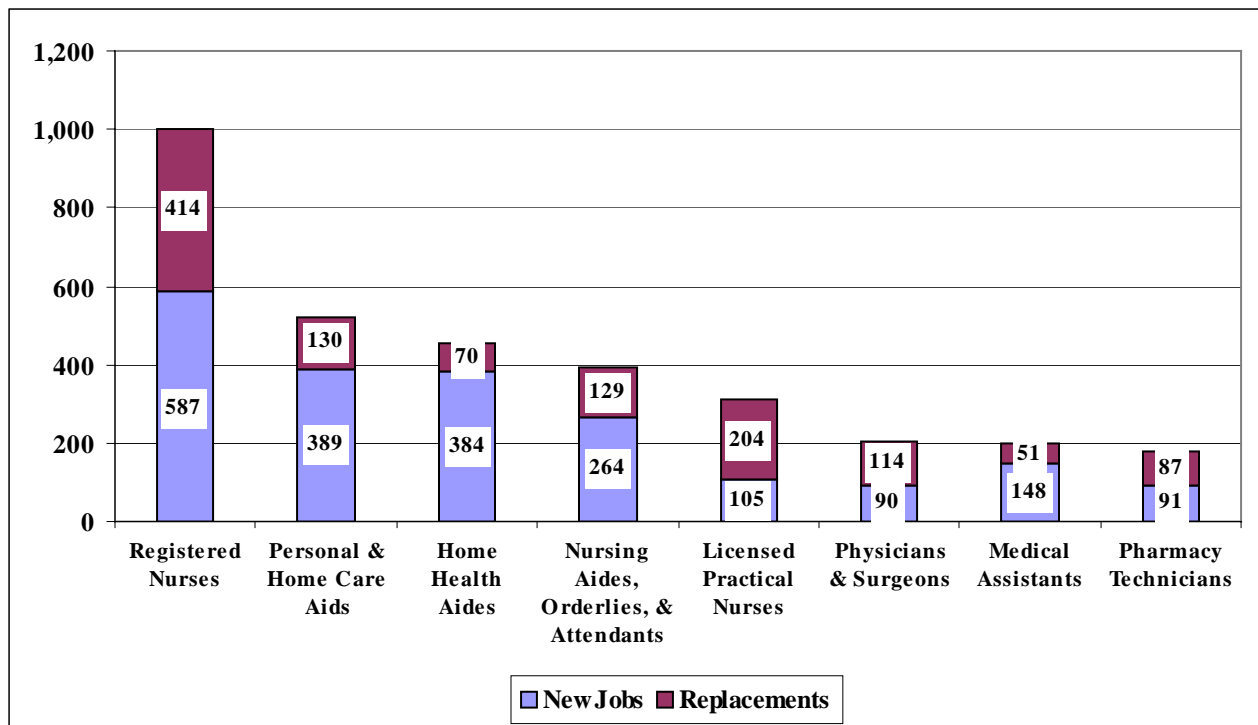
³ Occupational Employment Projections to 2016, Monthly Labor Review, Bureau of Labor Statistics, November 2007.

9. Between 2006 and 2016, a need for more than one million new RNs is projected nationwide.

The need for over one million new RNs is projected between and 2006 and 2016 to fill new and existing jobs, including 587,000 for new jobs and 414, 000 to replace RNs leaving the profession. During the same period, nearly 520,000 personal and home care aides, more than 450,000 home health aides, and almost 400,000 nursing aides, orderlies, and attendants will be needed to fill new and existing jobs. For each of these four occupations, more individuals are projected to be needed to fill newly created jobs than to replace individuals leaving existing jobs.

This trend, however, is not true for LPNs. While BLS projects slightly more than 100,000 LPNs will be needed between 2006 and 2016 for newly created jobs, over 200,000 LPNs will be needed during the same period to replace LPNs leaving the field (Exhibit 8).

**Exhibit 8
Selected Health Occupations with the Largest Projected Need between 2006 and 2016**

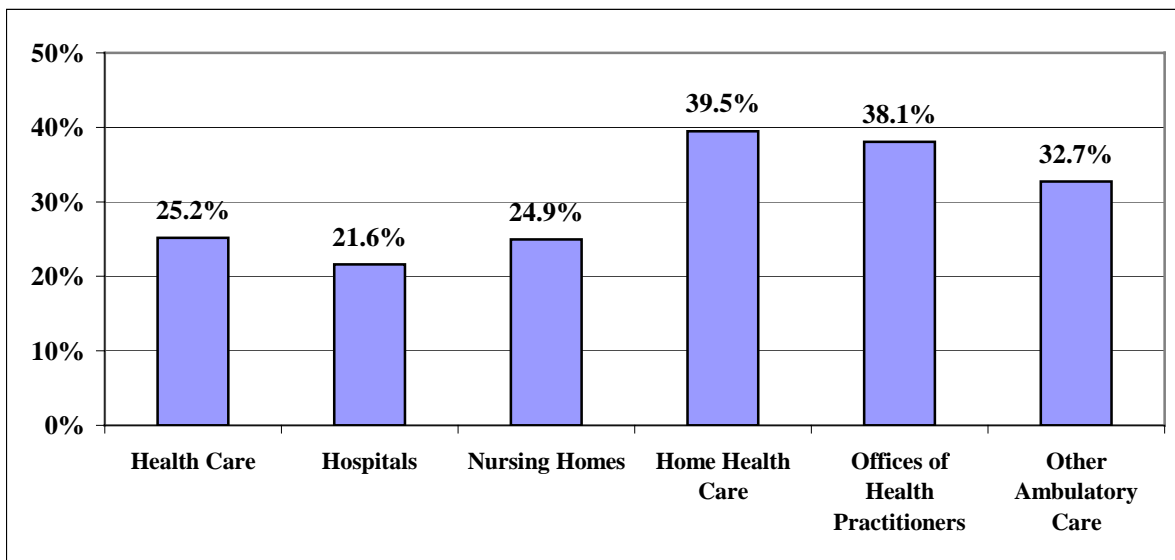


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016.

10. RN job growth will be the largest in home health care and offices of health practitioners.

The need for RNs is projected to grow, with over one million new RNs needed between 2006 and 2016. The largest percentage growth of RNs will occur in home health care and offices of health practitioners. While the growth of RN jobs in hospitals is the lowest among all health care settings, hospitals are still projected to add more than 300,000 RN jobs between 2006 and 2016 (Exhibit 9).

**Exhibit 7
Job Growth for RNs by Health Sector Setting, 2006 - 2016**



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2006 and projected 2016.

CONCLUSION

The health sector is continuing to grow faster than other employment sectors nationally and comprises a larger percentage of total jobs. Many health occupations are among the fastest growing jobs in the country; more than one million RNs are projected to be needed between 2006 and 2016. The health sector, the education sector, and the governmental sector must work together to ensure that enough well-trained workers are available to staff these health professions and jobs to guarantee high quality, appropriate health care to all.

Appendix 1: Employment by occupation, 2006 and projected 2016

[Numbers in thousands of jobs]

Occupation	Employment		Change		Total job openings due to growth and net replacements, 2006 - 2016
	2006	2016	Number	Percent	
Totals	13,584	16,792	3,210		5,474
Registered nurses	2,505	3,092	587	23.4%	1,001
Nursing aides, orderlies, and attendants	1,447	1,711	264	18.2%	393
Home health aides	787	1,171	384	48.7%	454
Personal and home care aides	767	1,156	389	50.6%	519
Licensed practical and licensed vocational nurses	749	854	105	14.0%	309
Medical assistants	417	565	148	35.4%	199
Physicians and surgeons	633	723	90	14.2%	204
Dental assistants	280	362	82	29.2%	130
Medical secretaries	408	477	68	16.7%	133
Pharmacy technicians	285	376	91	32.0%	178
Medical & health services managers	262	305	43	16.4%	92
Pharmacists	243	296	53	21.7%	95
Dental Hygienists	167	217	50	30.1%	82
Healthcare support workers, all other	204	236	32	15.6%	57
Medical and clinical laboratory technicians	151	174	23	15.0%	46
Radiologic technologists and technicians	196	226	30	15.1%	56
Medical and clinical laboratory technologists	167	188	21	12.4%	46
Emergency medical technicians and paramedics	201	240	39	19.2%	62
Physical therapists	173	220	47	27.1%	68
Medical records and health information technicians	170	200	30	17.8%	76
Clinical, counseling, and school psychologists	152	176	24	15.8%	47
Rehabilitation counselors	141	173	32	23.0%	60
Respiratory therapists	102	126	23	22.6%	38
Mental health and substance abuse social workers	122	159	37	29.9%	62
Mental health counselors	100	130	30	30.0%	50
Medical and public health social workers	124	154	30	24.2%	56
Dentists	161	176	15	9.1%	46
Medical transcriptionists	98	112	13	13.5%	26
Occupational therapists	99	122	23	23.1%	37
Massage therapists	118	142	24	20.3%	37
Physician assistants	66	83	18	27.0%	27
Substance abuse and behavioral disorder counselors	83	112	29	34.4%	45
Speech-language pathologists	110	121	12	10.6%	33
Medical scientists, except epidemiologists	87	105	18	20.2%	45
Surgical technologists	86	107	21	24.4%	47
Physical therapist assistants	60	80	20	32.4%	27
Healthcare technologists and technicians, all others	79	91	12	15.0%	18
Health diagnosing and treating practitioners, all others	65	73	8	11.8%	19
Veterinary technologists and technicians	71	100	29	41.0%	51
Veterinary assistants and laboratory animal caretakers	75	86	12	15.7%	21
Environmental scientists and specialists, including health	83	104	21	25.1%	42
Veterinarians	62	84	22	35.0%	34
Environmental engineers	54	68	14	25.4%	30
Cardiovascular technologists and technicians	45	57	12	25.5%	18
Diagnostic medical sonographers	46	54	9	19.1%	15
Healthcare practitioner and technical workers, all other	53	61	8	14.8%	18
Chiropractors	53	60	8	14.4%	13
Dietitians and nutritionists	57	62	5	8.6%	19
Physical therapist aides	46	58	11	24.4%	17
Opticians, dispensing	66	72	6	8.7%	27

Appendix 1: Employment by occupation, 2006 and projected 2016

[Numbers in thousands of jobs]

Occupation	Employment		Change		Total job openings due to growth and net replacements, 2006 - 2016
	2006	2016	Number	Percent	
Totals	13,584	16,792	3,210		5,474
Health educators	62	78	16	26.2%	23
Pharmacy aides	50	45	-6	-11.1%	6
Optometrists	33	36	4	11.3%	9
Medical equipment preparers	45	52	6	14.2%	12
Dental laboratory technicians	53	55	2	3.7%	12
Occupational health and safety specialists	45	49	4	8.1%	12
Environmental science and protection technicians incl. health	37	47	10	27.9%	24
Marriage and family therapists	25	32	7	29.8%	12
Health & safety engineers, except mining	25	28	2	9.6%	9
Psychiatric technicians	62	60	-2	-3.3%	19
Occupational therapist assistants	25	31	6	25.4%	10
Environmental engineering technicians	21	26	5	24.8%	9
Therapists, all other	35	38	3	10.0%	8
Psychiatric aides	62	62	0	-0.1%	6
Dietetic technicians	25	29	4	14.8%	11
Athletic trainers	17	21	4	24.3%	7
Radiation therapists	15	18	4	24.8%	6
Recreational therapists	25	26	1	3.7%	5
Nuclear medicine technologists	20	23	3	14.8%	6
Ophthalmic laboratory technicians	29	31	2	6.6%	7
Forensic science technicians	13	17	4	30.7%	9
Occupational health and safety technicians	10	12	2	14.6%	4
Podiatrists	12	13	1	9.5%	5
Respiratory therapy technicians	19	19	0	0.9%	6
Medical appliance technicians	12	13	1	9.5%	3
Audiologists	12	13	1	9.8%	3
Epidemiologists	5	5	1	13.6%	2
Orthotists and prosthetists	6	6	1	11.8%	1
Occupational therapist aides	8	10	2	21.9%	3