



## Health Care Employment Projections:

An analysis of Bureau of Labor Statistics Settings and Occupational Projections, 2008-2018

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**Bureau of Labor Statistics Occupational Projections,**  
**2008-2018**

**March 2010**

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## **PREFACE**

This report, prepared by the Center for Health Workforce Studies (the Center), provides a summary of labor projections for the period 2008 through 2018 for health care settings and health care occupations. The report is designed to provide information about projected trends to help health industry, educators, policy makers, and other stakeholders better understand which health occupations and professions will be in greatest demand over the next 10 years and how to better allocate resources to meet the need for those health workers.

The Center is part of the School of Public Health, University at Albany, State University of New York and is dedicated to studying the supply, demand, education, distribution, and utilization of the health workforce. This report was prepared by Robert Martiniano, with assistance from Alison Bates and David Armstrong. 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 for the period 2008 through 2018 were released in December 2009. 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, home health care, private practitioner offices, etc.), including those jobs not considered health occupations, such as computer technicians and food service workers. Health occupations employment<sup>1</sup> includes jobs within the health sector, such as registered nurses (RNs) working in hospitals, as well as jobs outside the health sector, such as RNs working in schools or insurance companies.

The BLS projections are national in scope and do not include projections by state or region. New York projections by occupation lag by about one year and should be available in late 2010 on the New York Department of Labor Web site. Factors that influence demand for health services nationally, such as an aging population and economic conditions, 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, etc.). Nevertheless, the BLS projections represent the most comprehensive forecast of future jobs in the U.S.

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<sup>1</sup> Comprises 86 health occupations as identified by the Center for Health Workforce Studies.

## **SUMMARY OF FINDINGS**

Employment in health care settings and in health care occupations comprised more than 12% of total employment in the U.S. in 2008, with more than 18.6 million Americans working in a health setting or in a health occupation. Nearly 40% of employment in 2008 in the health sector was in hospitals, though that proportion will decrease as jobs in other health settings are growing at a faster rate than in hospitals.

While the current economic downturn appears to have slowed job growth in all employment sectors, health care continues to be the fastest growing employment sector in the country. Between 2008 and 2018, the health care sector is projected to grow by nearly 23%, compared to about 9% for all other employment sectors, with over three million jobs created in the health sector between 2008 and 2018. Within health care, jobs in home health care and offices of health practitioners, particularly physician offices, are projected to grow the fastest between 2008 and 2018.

The health occupations projected to add the most new jobs between 2008 and 2018 are RNs; home health aides; personal and home care aides; nursing aides, orderlies, and attendants; medical assistants; and licensed practical nurses (LPNs). Many health occupations will also need more recruits to fill additional vacancies created by retirements and other departures. Over one million new RNs will be needed between 2008 and 2018 to fill new jobs and existing positions that are vacant. The largest percentage job growth for RNs will occur in home health care and offices of health practitioners. While the percentage 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, nearly 275,000 jobs between 2008 and 2018.

Health care job growth appears to have slowed recently in response to the current economic downturn. However, the BLS projections predict growing demand for health workers through 2018. This is, in part, due to an aging population that will increase demand for services and an aging health workforce that will reduce the available supply of workers. In addition, increasing access to health insurance in the U.S. could further increase demand for health services and health workers.

## KEY FINDINGS

1. **Since 2000, employment in the health sector in the U.S. has grown 30%, while employment in all other sectors has grown by about 4%.**

Since 2000, the economy has added 5.3 million jobs, with employment in the health sector increasing by nearly 3.2 million jobs, Approximately 1.3 million jobs were added in ambulatory care settings.

**Exhibit 1  
Growth of U.S. Employment, 2000 - 2008**

	U.S. Employment (In Thousands)					Pct Change 2000 - 2008
	2000	2002	2004	2006	2008	
Total	145,594	144,014	145,612	150,620	150,932	3.7%
Health Care	10,474	11,887	12,407	12,948	13,627	30.1%
Ambulatory Care	4,320	4,634	4,946	5,283	5,661	31.0%
Offices of Health Practitioners	3,099	3,190	3,337	3,508	3,713	19.8%
Home Care	633	680	773	867	958	51.3%
Public and Private Hospitals	4,960	5,148	5,301	5,438	5,667	14.3%
Nursing Care Facilities <sup>2</sup>	1,992	2,105	2,163	2,219	2,299	15.4%

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Employment Outlook 2008 – 2018, Employment Outlook 2006 – 2016, Employment Outlook 2004 – 2014, Employment Outlook 2002 – 2012, Employment Outlook 2000 – 2010, Current Employment Statistics, 1998 – 2008.

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

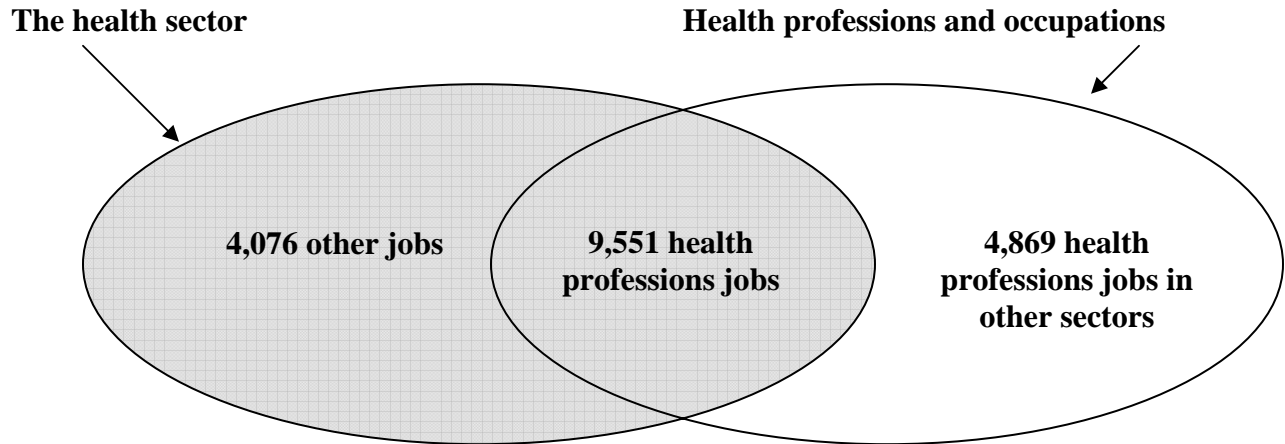
In 2008, there were more than 18.5 million jobs either in the health sector or in health occupations outside of the health sector, accounting for over 12% of the total U.S. workforce.

Of the 18.5 million jobs, slightly more than 13.6 million jobs, or 9.5% of U.S. employment, were in the health sector in 2008, including both health and non health-related occupations. The remaining 4.9 million jobs, or nearly 3% of U.S. employment, were in health occupations outside of the health sector.

<sup>2</sup> Information cited in this report on total health care employment and employment in nursing care facilities includes nursing care facilities and continuing care retirement communities but excludes mental retardation, mental health, and substance abuse facilities and other residential care facilities.



**Exhibit 2**  
**The U.S. Health Workforce, 2008**  
**(in thousands)**



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**Exhibit 3**  
**The U.S. Health Workforce, 2008 (In thousands)**

	<b>(In Thousands)</b>		
	<b>Health Profession Jobs</b>	<b>Other Jobs</b>	<b>Total Jobs</b>
<b>The Health Sector</b>	9,550.7	4,075.9	13,626.6
<b>Other Employment Sectors</b>	4,869.0	132,436.1	137,305.1
<b>All Employment Sectors</b>	14,419.7	136,512.0	150,931.7

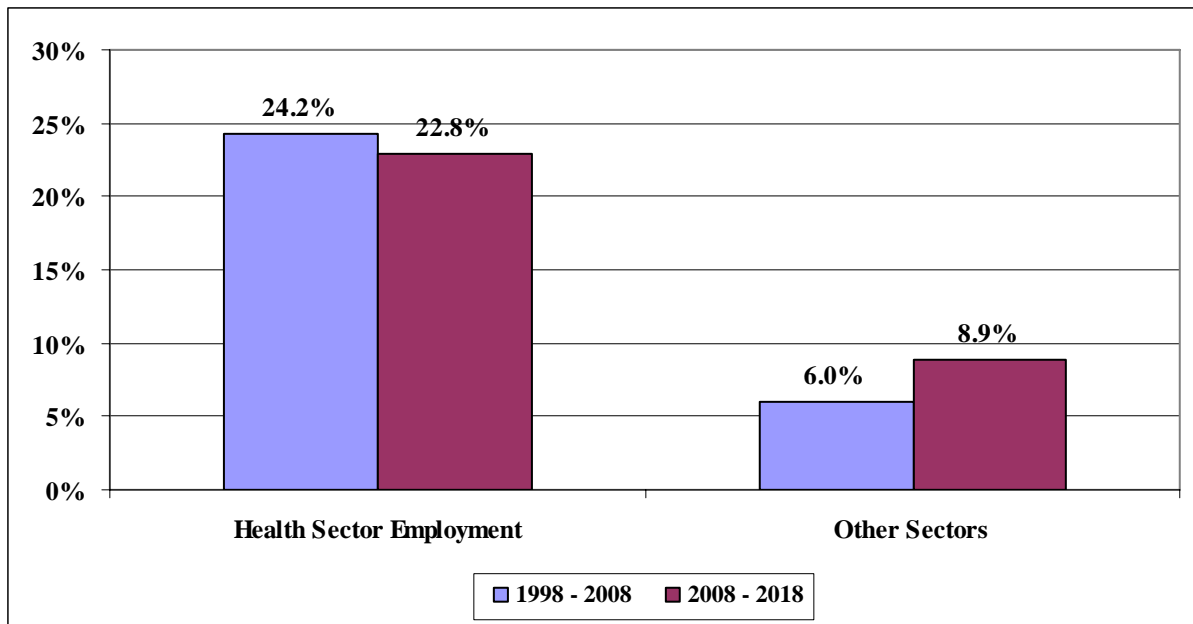
	<b>Number</b>	<b>Percent of Civilian Labor Workforce</b>
Health professions jobs in the health sector	9,550.7	6.3%
Other jobs in the health sector	4,075.9	2.7%
Health professions jobs in other sectors	4,869.0	3.2%
Total U.S. Health Care Jobs	18,495.6	12.3%
U.S. Civilian Labor Force Jobs	150,931.7	100.0%

Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**3. Between 2008 and 2018, employment in the country’s health sector is projected to grow at a significantly higher rate than all other employment sectors.**

Health sector employment is projected to grow from over 13.6 million jobs in 2008 to more than 16.7 million jobs by 2018. The health sector is expected to grow by nearly 23%, compared to about 9% for all other employment sectors.

**Exhibit 4  
Job Growth in the Health Sector Compared to All Other Employment Sectors in the U.S.  
1998 – 2008 and Projected 2008 – 2018**

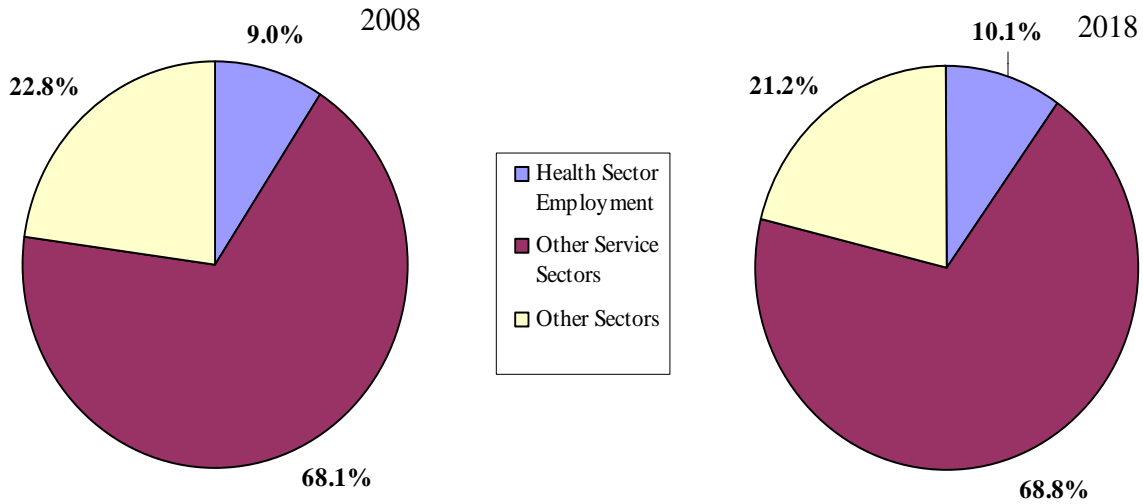


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**4. One in ten jobs in the U.S. is projected to be in the health sector by 2018.**

Health sector employment is expected to comprise a larger share of total U.S. employment by 2018 than it has in the past. In 2008, 9% of U.S. jobs were in the health sector. By 2018, that proportion is projected to be 10%.

**Exhibit 5**  
**Percentage of Health Sector Jobs to Total Jobs in the U.S.<sup>3</sup>**



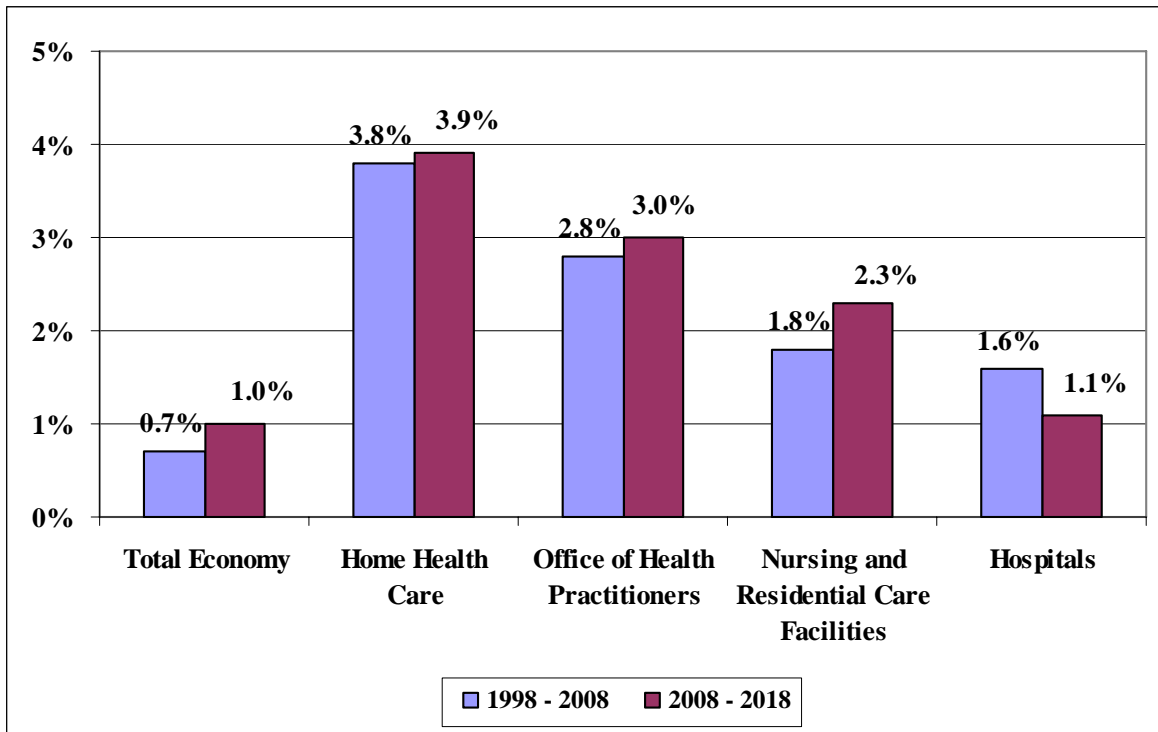
Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**5. Between 2008 and 2018, the fastest job growth in the country’s health sector is projected for home health care. Jobs in offices of health practitioners are also projected to increase more rapidly than in other health settings.**

Home health care is projected to experience the fastest job growth across all health settings, with an average annual growth of nearly 4% between 2008 and 2018. Additionally, jobs in offices of health practitioners are projected to grow by 3% annually and jobs in nursing homes are projected to increase by more than 2% annually between 2008 and 2018. Jobs in hospitals are projected to grow just over 1% annually during the same period.

<sup>3</sup> 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 6**  
**Average Annual Job Growth for Selected Settings within the U.S. Health Sector,**  
**1998 to 2008 and 2008 to 2018**



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

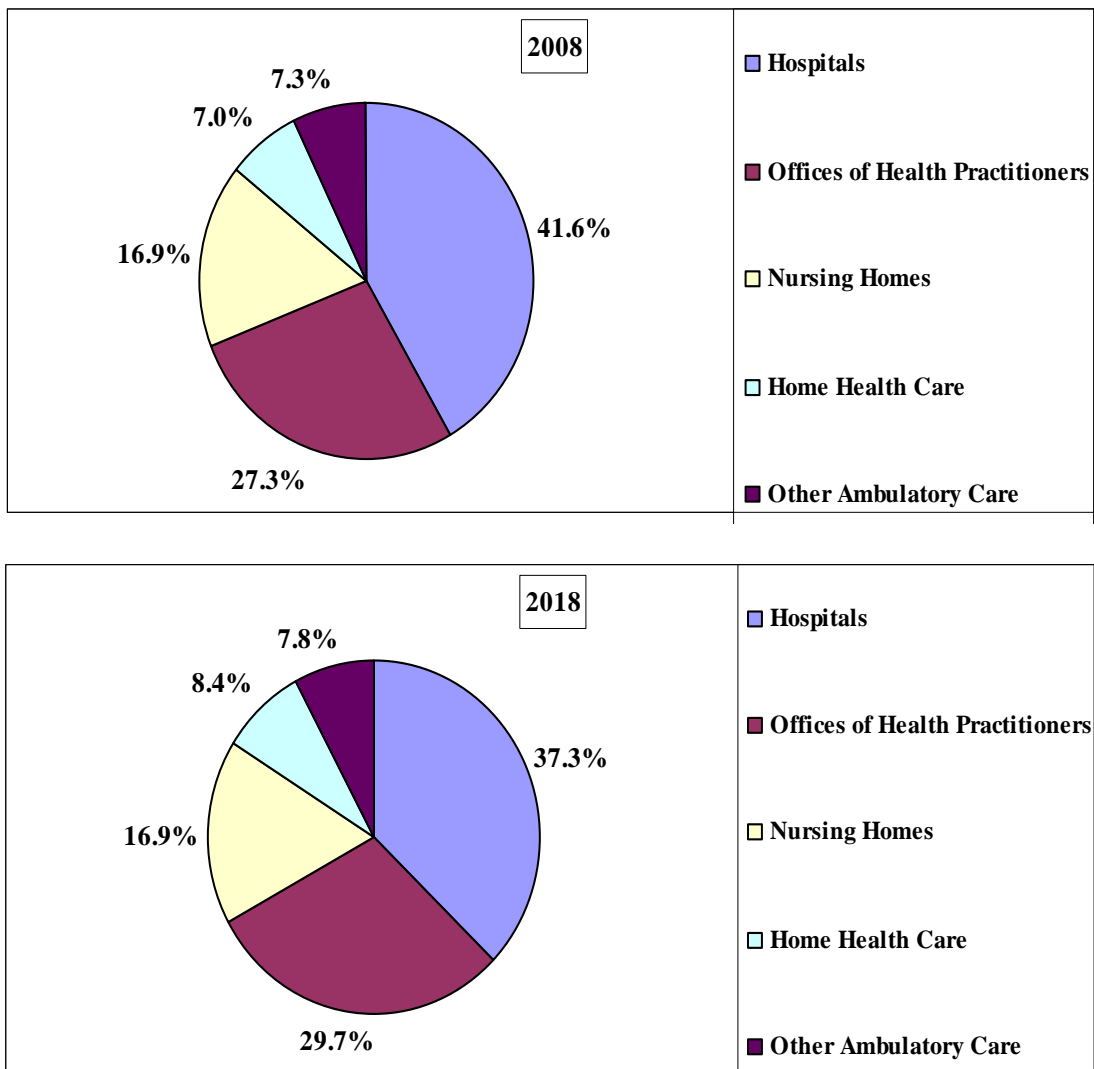
- 6. Between 2008 and 2018, more than 6.1 million workers in health occupations will be needed nationally to fill new jobs and to replace workers who leave health occupation jobs.**

The total number of workers in health occupations in the U.S. will increase by nearly 3.6 million between 2008 and 2018 (Appendix 1). In addition, another 2.5 million workers in health occupations will be needed to replace individuals expected to leave their jobs (e.g., retirements, attrition from the profession, etc.) over the same period.

7. **Between 2008 and 2018, offices of health practitioners in the U.S. are projected to add over 1.3 million new jobs and, by 2018, comprise nearly 30% of jobs in the health sector.**

Employment in offices of health practitioners is expected to grow by more than 34% between 2008 and 2018, adding nearly 1.3 million new jobs. By 2018, jobs in offices of health practitioners will represent about 30% of total health sector jobs. Hospitals are projected to add over 570,000 jobs between 2008 and 2018, and jobs in home health care are estimated to increase by more than 46%, adding more than 441,000 jobs over the same period.

**Exhibit 7  
Percent of Jobs by Setting in the U.S. Health Sector, 2008 and 2018**

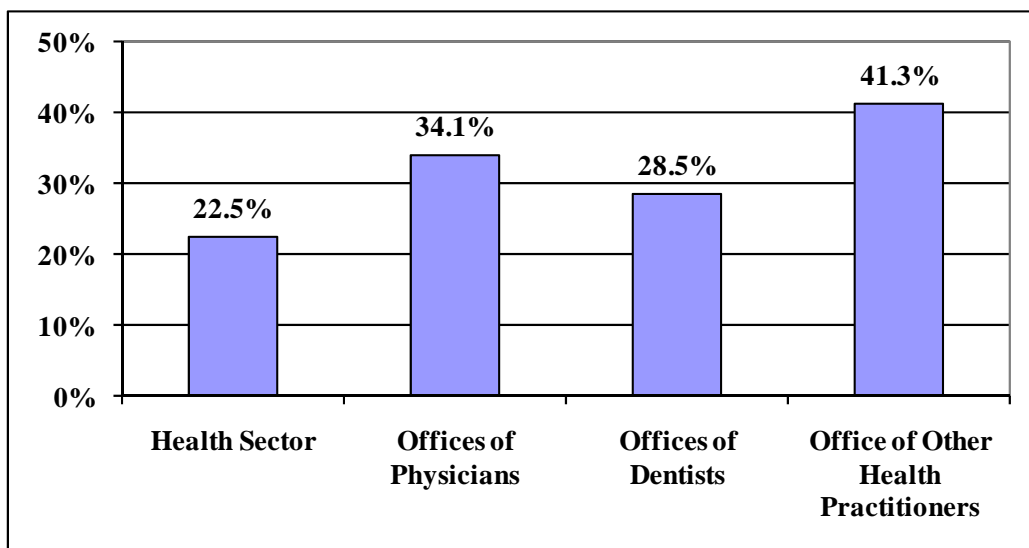


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**8. Offices of physicians are projected to add more than 770,000 new jobs nationally between 2008 and 2018.**

Offices of physicians are projected to grow by slightly more than 34% between 2008 and 2018, adding more than 770,000 new jobs, representing more than 60% of all new jobs in ambulatory care settings. Offices of other health practitioners (e.g., chiropractors, and podiatrists) and offices of dentists are each projected to add more than 200,000 new jobs between 2008 and 2018.

**Exhibit 8  
Job Growth for Offices of Health Practitioners in the U.S. between 2008 and 2018**



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**9. Between 2008 and 2018, over half of the top 30 occupations in the country that are projected to grow the fastest are health occupations.**

Seventeen of the 30 occupations projected to grow the fastest between 2008 and 2018 are health occupations, including 12 of the top 20<sup>3</sup>, including:

- Home health aides (50%);
- Personal and home care aides (46%);
- Medical scientists, excluding epidemiologists (40%);
- Physician assistants (39%);
- Athletic trainers (37%);
- Physical therapists assistants (36%);
- Dental hygienists (36%);
- Veterinary technologists and technicians (36%);

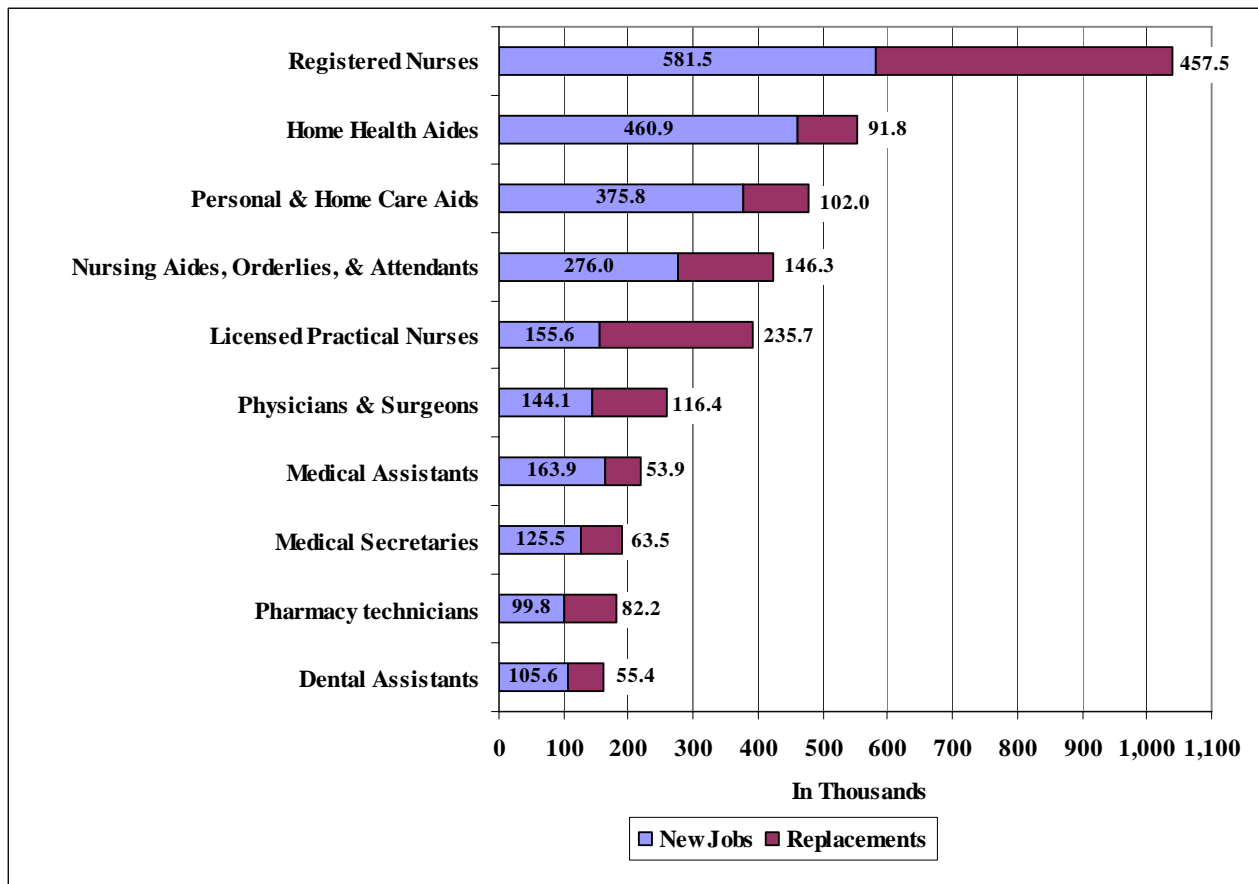
<sup>3</sup> Occupational Employment Projections to 2018, Monthly Labor Review, Bureau of Labor Statistics, November 2009.

- Physical therapist assistants (36%);
- Dental hygienists (36%);
- Veterinary technologists and technicians (36%);
- Dental assistants (36%); and
- Medical assistants (34%).

**10. Over one million new RNs will be needed nationally between 2008 and 2018 to fill new and existing jobs.**

Over one million new RNs are estimated to be needed between 2008 and 2018, including 582,000 for new jobs and 458,000 to replace RNs leaving the profession. During the same period, nearly 553,000 home health aides; about 480,000 personal and home care aides; over 422,000 nursing aides, orderlies, and attendants; and slightly more than 391,000 LPNs will be needed to fill new and existing jobs.

**Exhibit 9  
Selected Health Occupations with Greatest Need for New Workers between 2008 and 2018**

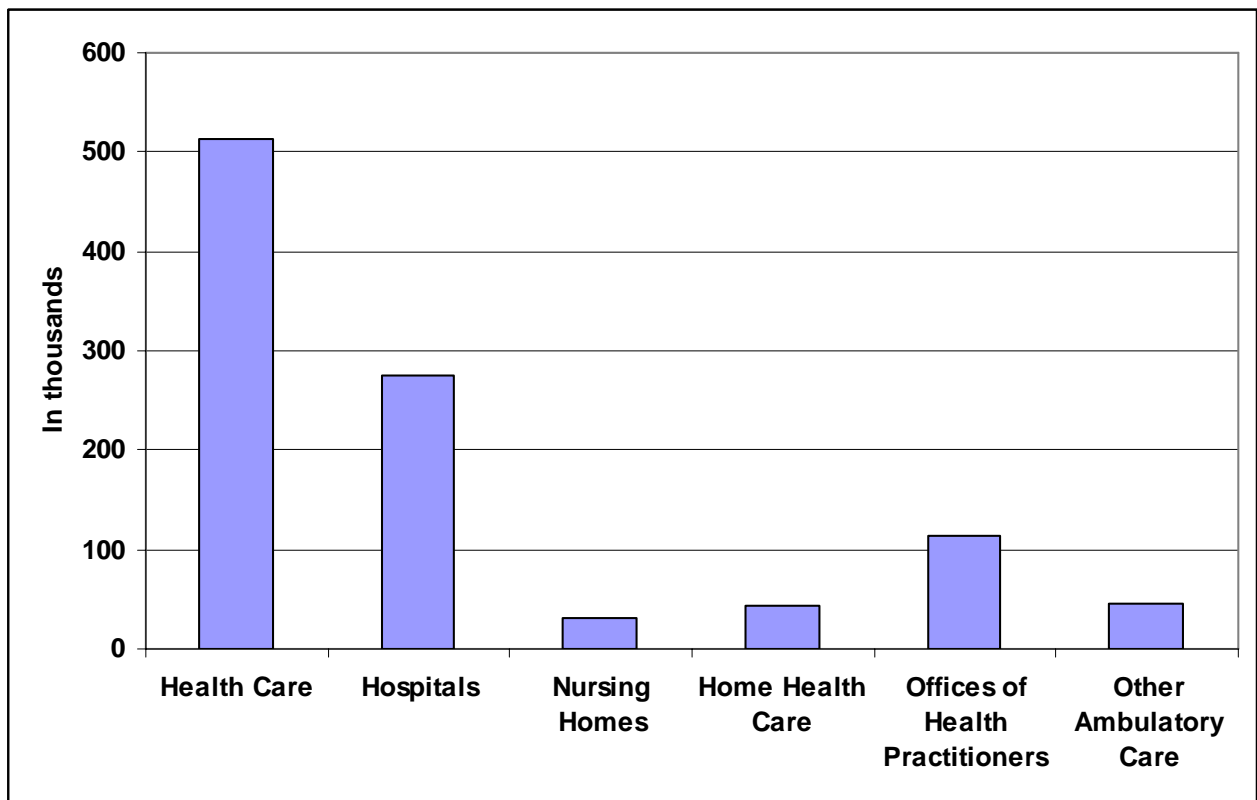


Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.

**11. RN job growth in the U.S. will be the largest in hospitals and offices of health practitioners.**

Demand for RNs is projected to grow, with nearly 600,000 RN jobs created between 2008 and 2018. The largest growth in RNs jobs will occur in hospitals (274,000) and offices of health practitioners (113,000).

**Exhibit 10  
Job Growth for RNs by Health Sector Setting, 2008 - 2018**



Sources: U.S. Department of Labor, Bureau of Labor Statistics, National Employment Matrix, employment by industry, occupation, and percent distribution, 2008 and projected 2018.



## **CONCLUSION**

The health sector continues to grow faster than all other employment sectors in the U.S. and comprises a larger percentage of total jobs. Many health occupations are among the fastest growing jobs nationally; the number of RNs needed between 2008 and 2018 to fill new and existing jobs is projected to be more than one million.

Health care job growth appears to have slowed recently in response to the current economic downturn. However, the BLS projections predict growing demand for health workers through 2018. This is, in part, due to an aging population that will increase demand for services and an aging health workforce that will reduce the available supply of workers. In addition, increasing access to health insurance in the U.S. could further increase demand for health services and health workers.

Appendix 1: Health Care Employment by Occupation, 2008 and Projected 2018 (In Thousands of Jobs)						Total job openings due to growth and net replacements, 2008 - 2018
Occupation	Matrix Code	Employment		Change		
		2008	2018	Number	Percent	
		14,419.7	18,010.1	3,590.4	24.90%	
Registered nurses	29-1111	2,618.7	3,200.2	581.5	22.21%	1,039.0
Home health aides	31-1011	921.7	1,382.6	460.9	50.01%	552.7
Personal and home care aides	39-9021	817.2	1,193.0	375.8	45.99%	477.8
Nursing aides, orderlies, and attendants	31-1012	1,469.8	1,745.8	276.0	18.78%	422.3
Licensed practical and licensed vocational nurses	29-2061	753.6	909.2	155.6	20.65%	391.3
Physicians and surgeons	29-1060	661.4	805.5	144.1	21.79%	260.5
Medical assistants	31-9092	483.6	647.5	163.9	33.89%	217.8
Medical secretaries	43-6013	471.1	596.6	125.5	26.64%	189.0
Pharmacy technicians	29-2052	326.3	426.0	99.8	30.59%	182.0
Dental assistants	31-9091	295.3	400.9	105.6	35.76%	161.0
Pharmacists	29-1051	269.9	315.8	45.9	17.01%	105.8
Medical and health services managers	11-9111	283.5	328.8	45.4	16.01%	99.4
Dental hygienists	29-2021	174.1	237.0	62.9	36.13%	98.4
Physical therapists	29-1123	185.5	241.7	56.2	30.30%	78.6
Medical records and health information technicians	29-2071	172.5	207.6	35.1	20.35%	70.3
Radiologic technologists and technicians	29-2034	214.7	251.7	37.0	17.23%	68.0
Medical scientists, except epidemiologists	19-1042	109.4	153.6	44.2	40.40%	66.2
Medical and public health social workers	21-1022	138.7	169.8	31.1	22.42%	65.9
Emergency medical technicians and paramedics	29-2041	210.7	229.7	19.0	9.02%	62.0
Mental health and substance abuse social workers	21-1023	137.3	164.1	26.8	19.52%	61.3
Clinical, counseling, and school psychologists	19-3031	152.0	168.8	16.8	11.05%	59.9
All other health care support workers	31-9099	200.6	235	34.3	17.12%	56.7
Medical and clinical laboratory technicians	29-2012	155.6	180.7	25.0	16.07%	54.6
Medical and clinical laboratory technologists	29-2011	172.4	193.0	20.5	11.89%	53.3
Dentists, general	29-1021	120.2	138.6	18.4	15.31%	51.8
Rehabilitation counselors	21-1015	129.5	154.1	24.5	18.92%	50.7
Mental health counselors	21-1014	113.3	140.4	27.2	24.01%	50.1
Veterinary technologists and technicians	29-2056	79.6	108.1	28.5	35.80%	48.5
Environmental scientists and specialists, including health	19-2041	85.9	109.8	23.9	27.82%	48.4
Surgical technologists	29-2055	91.5	114.7	23.2	25.36%	46.3
Occupational therapists	29-1122	104.5	131.3	26.8	25.65%	45.8
Speech-language pathologists	29-1127	119.3	141.4	22.1	18.52%	43.8
Physician assistants	29-1071	74.8	103.9	29.2	39.04%	42.8
Respiratory therapists	29-1126	105.9	128.1	22.1	20.87%	41.4
Massage therapists	31-9011	122.4	145.6	23.2	18.95%	39.5
Substance abuse and behavioral disorder counselors	21-1011	86.1	104.2	18.1	21.02%	35.5
Healthcare technologists and technicians, all other	29-2099	81.8	97.1	15.3	18.70%	32.0
Physical therapist assistants	31-2021	63.8	85.0	21.2	33.23%	30.5
Veterinarians	29-1131	59.7	79.4	19.7	33.00%	30.2
Healthcare practitioners and technical workers, all other	29-9099	59.0	68.4	9.4	15.93%	29.1
Environmental engineers	17-2081	54.3	70.9	16.6	30.57%	27.9
Health educators	21-1091	66.2	78.2	12.0	18.13%	26.0
Dietitians and nutritionists	29-1031	60.3	65.8	5.6	9.29%	25.7
Veterinary assistants and laboratory animal caretakers	31-9096	75.2	92.4	17.1	22.74%	25.5
Environmental science and protection technicians, including health	19-4091	35.0	45.2	10.1	28.86%	25.2
Occupational health and safety specialists	29-9011	55.8	62.0	6.2	11.11%	24.9
Medical transcriptionists	31-9094	105.2	116.9	11.7	11.12%	23.5
Physical therapist aides	31-2022	46.1	62.8	16.7	36.23%	23.4
Medical equipment repairers	49-9062	41.4	52.6	11.3	27.29%	23.2
Opticians, dispensing	29-2081	59.8	67.8	8.0	13.38%	20.2
Optometrists	29-1041	34.8	43.2	8.5	24.43%	20.1
Cardiovascular technologists and technicians	29-2031	49.5	61.4	11.9	24.04%	19.1
Chiropractors	29-1011	49.1	58.7	9.6	19.55%	18.2
Psychiatric technicians	29-2053	57.1	59.5	2.4	4.20%	16.8
Diagnostic medical sonographers	29-2032	50.3	59.5	9.2	18.29%	16.5
Health diagnosing and treating practitioners, all other	29-1199	49.0	55.4	6.4	13.06%	15.3
Dental laboratory technicians	51-9081	46.0	52.4	6.4	13.91%	15.3
Ophthalmic laboratory technicians	51-9083	35.2	40.4	5.2	14.77%	12.0
Occupational therapist assistants	31-2011	26.6	34.6	7.9	29.70%	11.8
Recreational therapists	29-1125	23.3	26.7	3.4	14.59%	11.6
Athletic trainers	29-9091	16.3	22.4	6.0	36.81%	11.5
Medical equipment preparers	31-9093	46.8	52.8	6.0	12.82%	11.2
Environmental engineering technicians	17-3025	21.2	27.5	6.4	30.19%	10.4
Therapists, all other	29-1129	32.2	35.9	3.7	11.49%	10.2

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Occupation	Matrix Code	Employment		Change		
		2008	2018	Number	Percent	
		14,419.7	18,010.1	3,590.4	24.90%	
Dietetic technicians	29-2051	25.2	28.7	3.5	13.89%	9.9
Psychiatric aides	31-1013	62.5	66.1	3.6	5.76%	9.8
Marriage and family therapists	21-1013	27.3	31.3	3.9	14.29%	9.5
Health and safety engineers, except mining safety engineers and inspectors	17-2111	25.7	28.3	2.6	10.12%	9.2
Forensic science technicians	19-4092	12.8	15.3	2.5	19.53%	8.0
Radiation therapists	29-1124	15.2	19.4	4.1	26.97%	6.9
Psychologists, all other	19-3039	15.9	18.3	2.3	14.47%	6.8
Nuclear medicine technologists	29-2033	21.8	25.4	3.6	16.51%	6.7
Ambulance drivers and attendants, except emergency medical technicians	53-3011	22.2	24.5	2.3	10.36%	6.2
Pharmacy aides	31-9095	54.9	51.5	-3.5	-6.38%	6.1
Audiologists	29-1121	12.8	16.0	3.2	25.00%	5.8
Occupational health and safety technicians	29-9012	10.9	12.5	1.6	14.68%	5.2
Respiratory therapy technicians	29-2054	16.5	16.4	-0.2	-1.21%	4.2
Medical appliance technicians	51-9082	13.9	15.4	1.5	10.79%	4.2
Orthodontists	29-1023	7.7	9.2	1.5	19.48%	3.6
Occupational therapist aides	31-2012	7.8	10.2	2.4	30.77%	3.5
Podiatrists	29-1081	12.2	13.3	1.1	9.02%	3.2
Oral and maxillofacial surgeons	29-1022	6.7	7.7	1.0	14.93%	2.9
Orthotists and prosthetists	29-2091	5.9	6.8	0.9	15.25%	2.1
Dentists, all other specialistst	29-1029	6.9	7.9	1.0	14.49%	1.9
Epidemiologists	19-1041	4.8	5.5	0.7	14.58%	1.7
Prosthodontists	29-1024	0.5	0.7	0.1	20.00%	0.3