



# **MASSACHUSETTS HEALTHCARE CHARTBOOK**

**2013**



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For more information about the Vision Project, please visit: [www.mass.edu/visionproject](http://www.mass.edu/visionproject). For more information about the Nursing and Allied Health Initiative, please visit: [www.mass.edu/nursing](http://www.mass.edu/nursing).

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## Acknowledgements

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# **MASSACHUSETTS HEALTHCARE CHARTBOOK 2013**

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## GLOSSARY

Sector - part of the economy characterized by similar industries

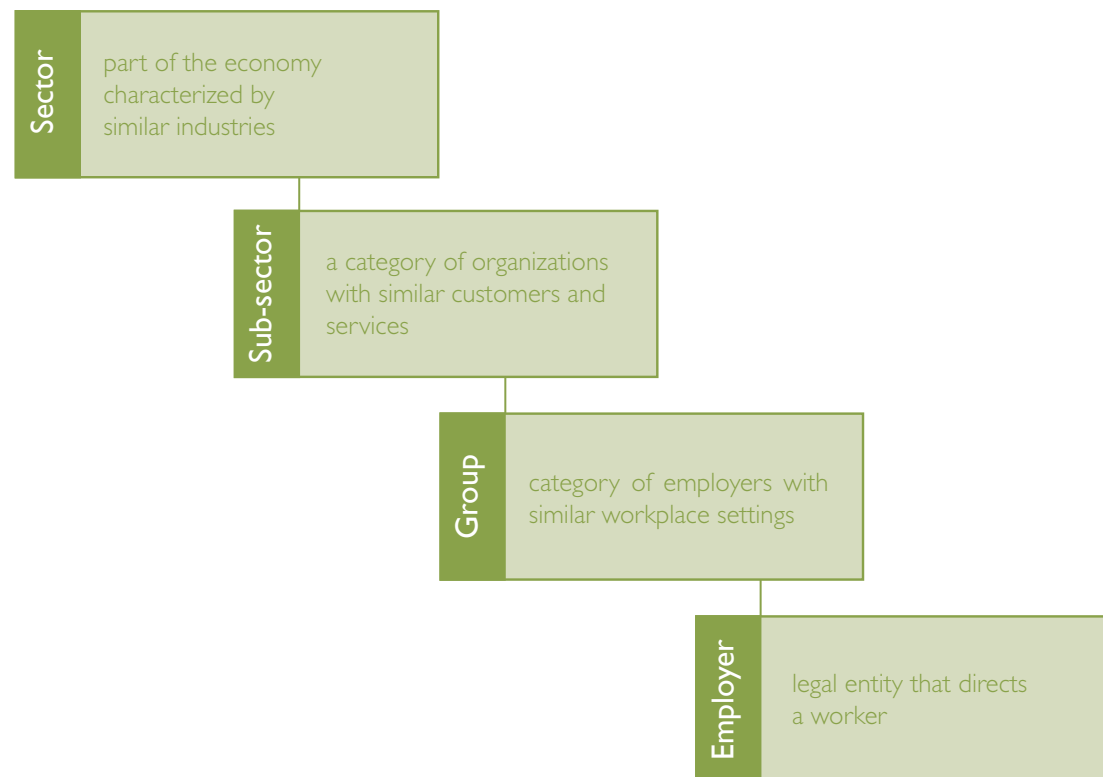
Sub-sector - a category of organizations with similar customers and services

Group - category of employers with similar workplace settings

Employer - legal entity that directs a worker

Occupation - a job or profession

Occupational Group - a category of professions characterized by similar responsibilities and qualifications



## INTRODUCTION

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The purpose of this updated edition of the Massachusetts Healthcare Chartbook is to inform workforce development professionals, educators, employers, and jobseekers about the status and recent history of Healthcare careers and the Healthcare and Social Assistance Sector in the Commonwealth.

In 2007 when the first Healthcare Chartbook was published, the Healthcare and Social Assistance Sector was the largest employer in the state, employing 15% of the entire workforce. The most remarkable characteristic of the Healthcare and Social Assistance Sector in the past five years is its robustness. As other sectors have lost thousands of jobs, the Healthcare and Social Assistance Sector has continued to grow, adding more than 40,000 workers. The Healthcare and Social Assistance Sector currently employs over 16% of all workers in the state.

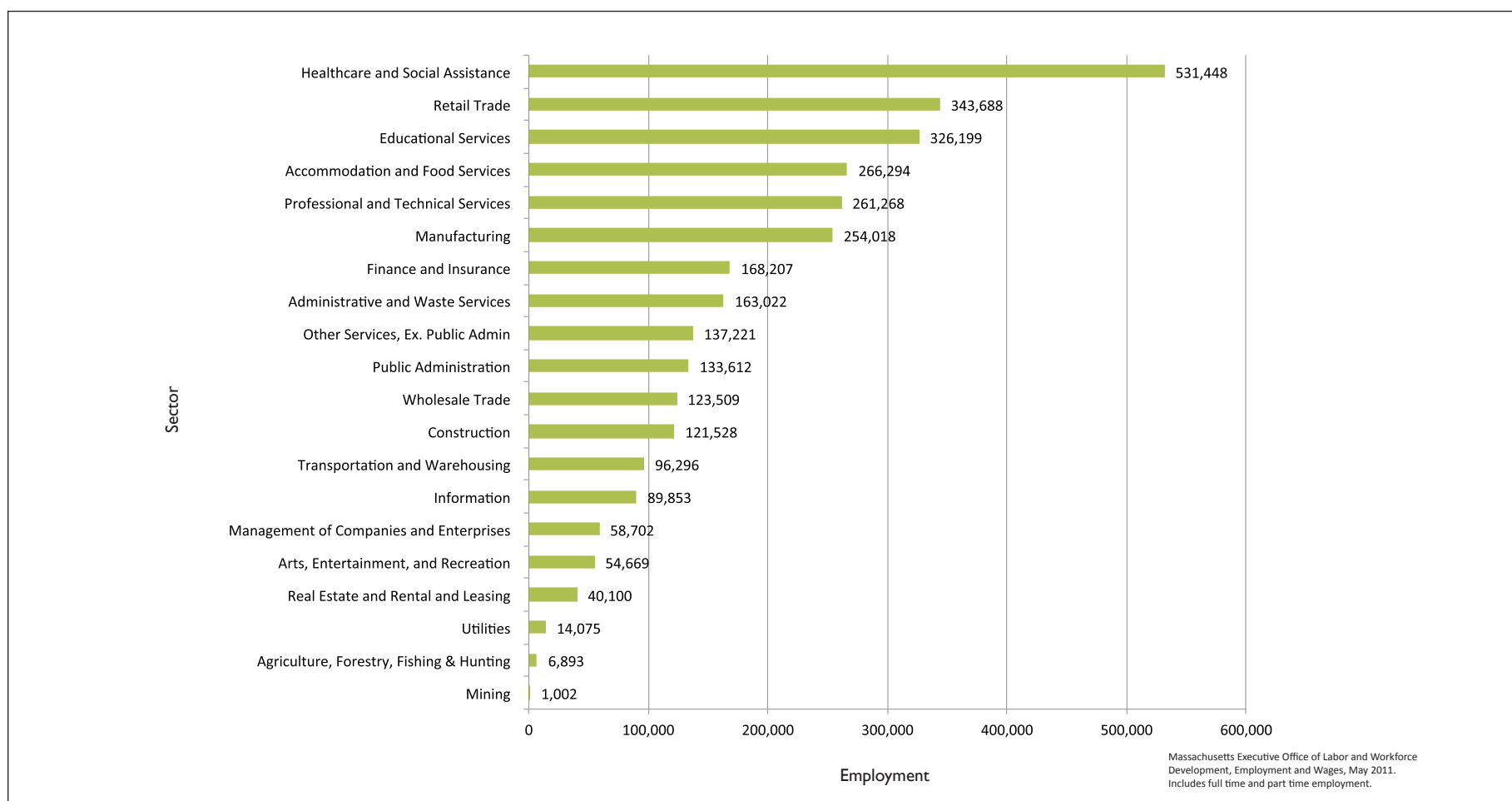
The Healthcare and Social Assistance Sector employs workers in a variety of roles, including clinical and non-clinical occupations. Just over half of the workers in the Healthcare and Social Assistance Sector are in Healthcare Practitioner and Technical and Healthcare Support occupations. An additional 14% are in Community and Social Services and Personal Care. The remainder, 34%, are in non-direct roles such as management, finance, education, and facility management.

We anticipate that the size and structure of the Healthcare and Social Assistance Sector will change as the field transitions toward greater reliance on community-based care. It is too early to predict the nature of those changes.

The first part of this Chartbook provides an overview of the Healthcare and Social Assistance Sector with the goal of documenting recent changes in the field and the current staffing patterns in the Sector. The second part of the Chartbook focuses on Healthcare Occupations and the employment of individuals at a variety of educational levels.

## CHART 1. NUMBER OF WORKERS EMPLOYED BY SECTOR, 2011

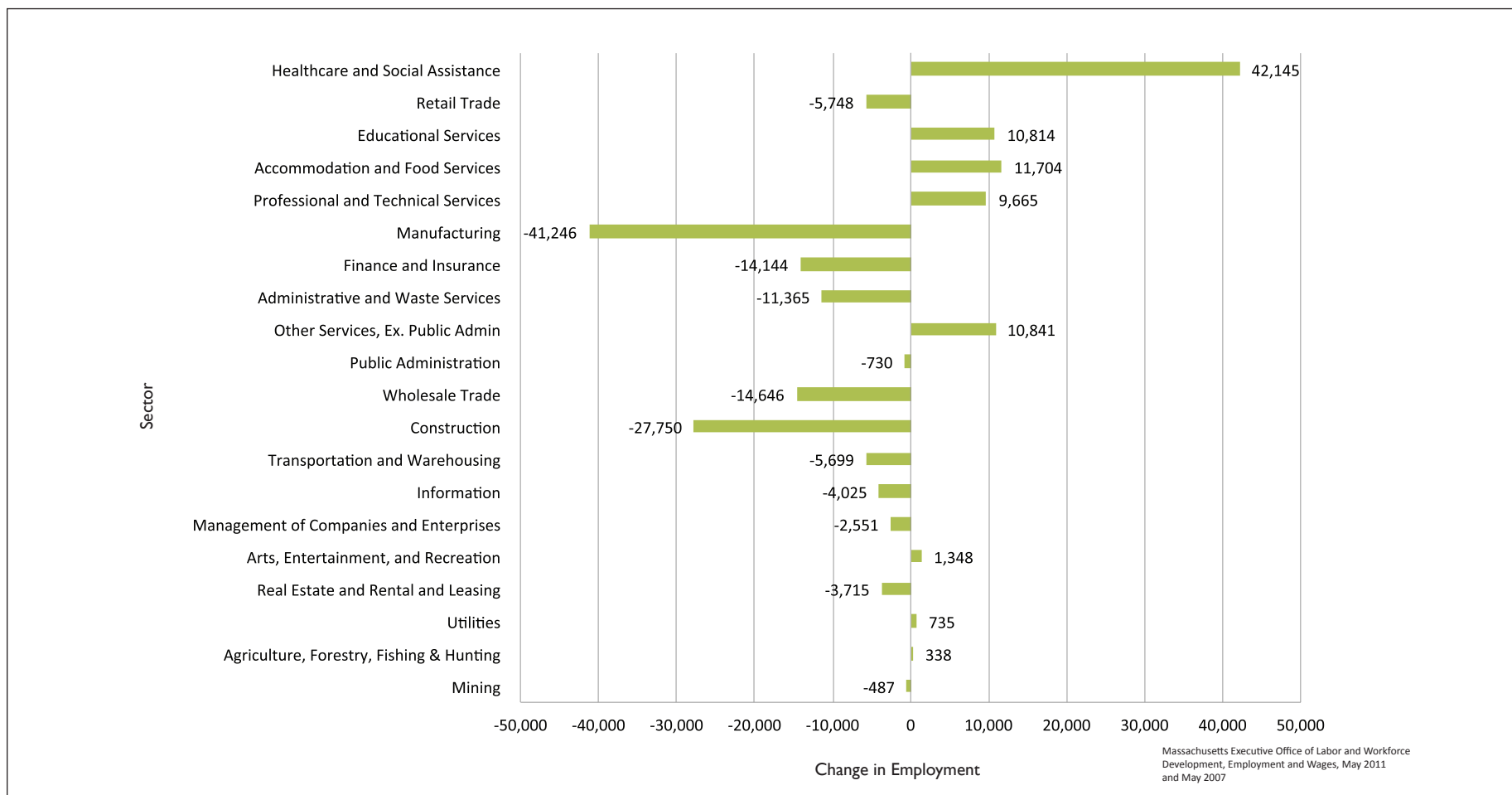
Healthcare and Social Assistance has been the state's largest industry since 1995. In 2011, the sector employed 531,448 workers, 50% more than the next largest sector, Retail Trade. Of a total of 3,191,064 workers in Massachusetts, more than 16% are employed in the Healthcare and Social Assistance Sector.





## CHART 2. CHANGE IN EMPLOYMENT BY SECTOR, 2007-2011

Since 2007, total employment in Massachusetts decreased from 3,236,120 to 3,191,604. The Manufacturing and Construction Sectors, in particular, lost large numbers of jobs while the Healthcare and Social Assistance Sector continued to grow, from 489,303 to 531,448 workers.



## CHART 3. WHAT IS INCLUDED IN THE HEALTHCARE AND SOCIAL ASSISTANCE SECTOR

In addition to healthcare delivery sites such as hospitals and doctors' offices, the Healthcare and Social Assistance Sector includes nursing and residential care and a range of social services including child care. The Healthcare and Social Assistance Sector is made up of four sub-sectors.

- The Ambulatory Care Sub-sector includes organizations that provide outpatient services: doctors' and dentists' offices, outpatient centers, home care services, and community health centers.
- Hospitals provide medical, diagnostic, and treatment services to inpatients or outpatients requiring specialized services. This sub-sector includes large general hospitals, small community hospitals, and specialized hospitals that provide services for specific medical conditions or populations.
- Nursing and Residential Care Facilities provide residential care to populations including the elderly, the mentally ill, those with substance use problems, or those requiring rehabilitative care.
- The Social Assistance Sub-sector provides an array of social services directly to clients. Those include shelters, child care, individual and family services, and vocational rehabilitation.

Ambulatory Care (Outpatient Care)			Hospitals (Inpatient Care)		
Groups	<ul style="list-style-type: none"><li>• Doctors’ Offices</li><li>• Dentists’ Offices</li><li>• Home Care Services</li><li>• Outpatient Care Centers</li></ul>		Groups	<ul style="list-style-type: none"><li>• General Hospitals</li><li>• Other Hospitals</li><li>• Psychiatric Hospitals</li></ul>	
	<ul style="list-style-type: none"><li>• Other Health Practitioners</li><li>• Other Ambulatory Care Services</li><li>• Medical Laboratories</li><li>• Community Health Centers</li></ul>				
Nursing and Residential Care Facilities (Long-term Inpatient Care)			Social Assistance (Social Services)		
Groups	<ul style="list-style-type: none"><li>• Nursing Homes</li><li>• Residential Mental Health Facilities</li><li>• Community Residential Care Facilities</li><li>• Other Residential Care Facilities</li></ul>		Groups	<ul style="list-style-type: none"><li>• Individual and Family Services</li><li>• Child Daycare Services</li><li>• Vocational Rehabilitation Services</li><li>• Emergency and Other Relief Services</li></ul>	

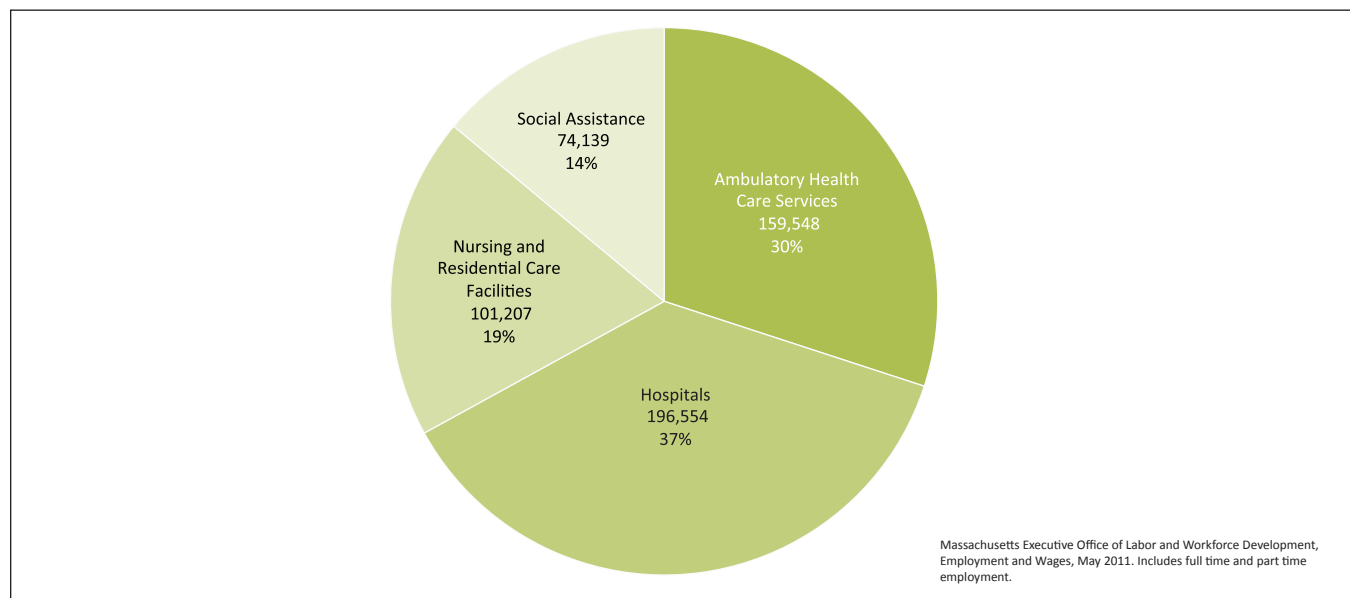
Massachusetts Executive Office of Labor and Workforce Development, Employment and Wages, May 2011. Includes full time and part time employment.

## CHART 4. PROPORTION OF TOTAL HEALTHCARE AND SOCIAL ASSISTANCE WORKFORCE EMPLOYED BY SUB-SECTOR, 2011

This shows the distribution of employment by sub-sector within the Healthcare and Social Assistance Sector.

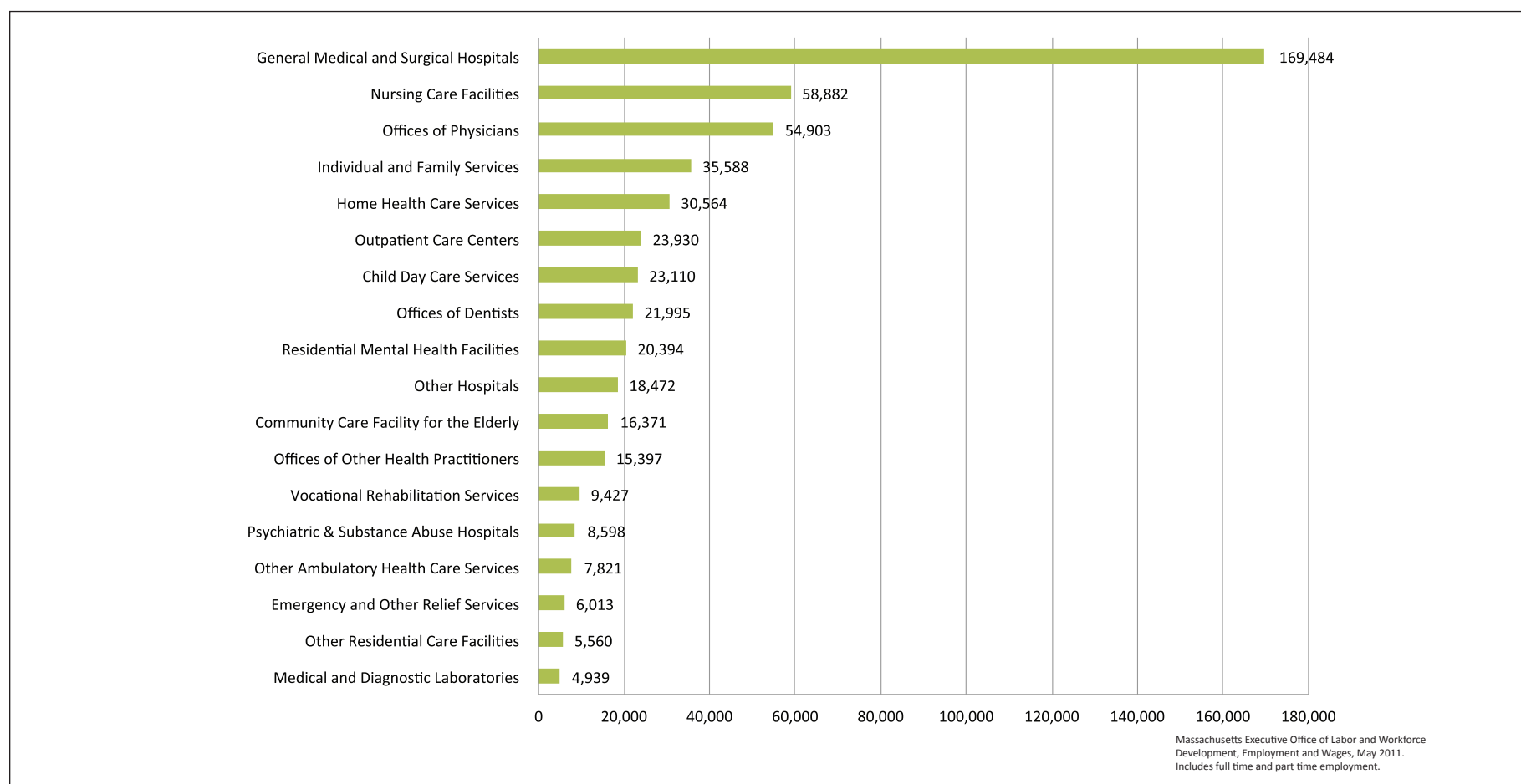
- Hospitals employ 196,554 people, 37% of the workers in the Healthcare and Social Assistance Sector and just over 6% of the state's total workforce.
- The Ambulatory Health Care Services Sub-sector accounts for 159,548 jobs, 30% of the state's total workforce.
- Nursing and Residential Care Facilities provide an additional 101,207 jobs, 19% of the state's total workforce.
- Social Assistance, the smallest sub-sector, employs 74,139 workers, 14% of the total Massachusetts workforce.

Although the field has seen considerable growth, this distribution has remained stable over the last 20 years.



## CHART 5. HEALTHCARE AND SOCIAL ASSISTANCE SECTOR GROUP-LEVEL EMPLOYMENT, 2011

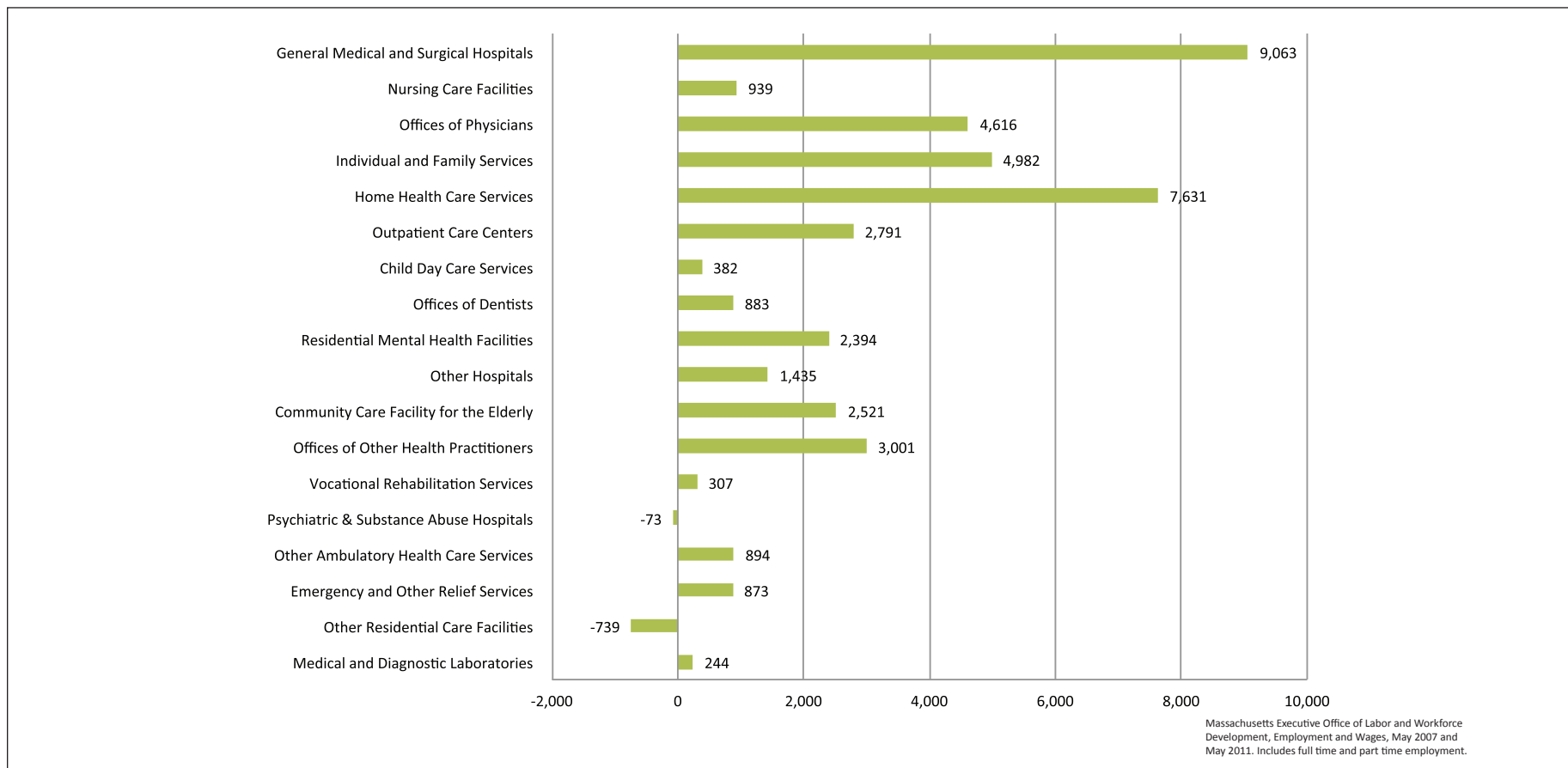
Within the Healthcare and Social Assistance Sector, employees work in a variety of settings, known as groups. General medical and surgical hospitals employ the largest number of workers, with almost three times as many workers as the second largest category, nursing care facilities and 32% of all the workers in the Healthcare and Social Assistance Sector.



## CHART 6. HEALTHCARE AND SOCIAL ASSISTANCE SECTOR CHANGES IN GROUP-LEVEL EMPLOYMENT, 2007-2011

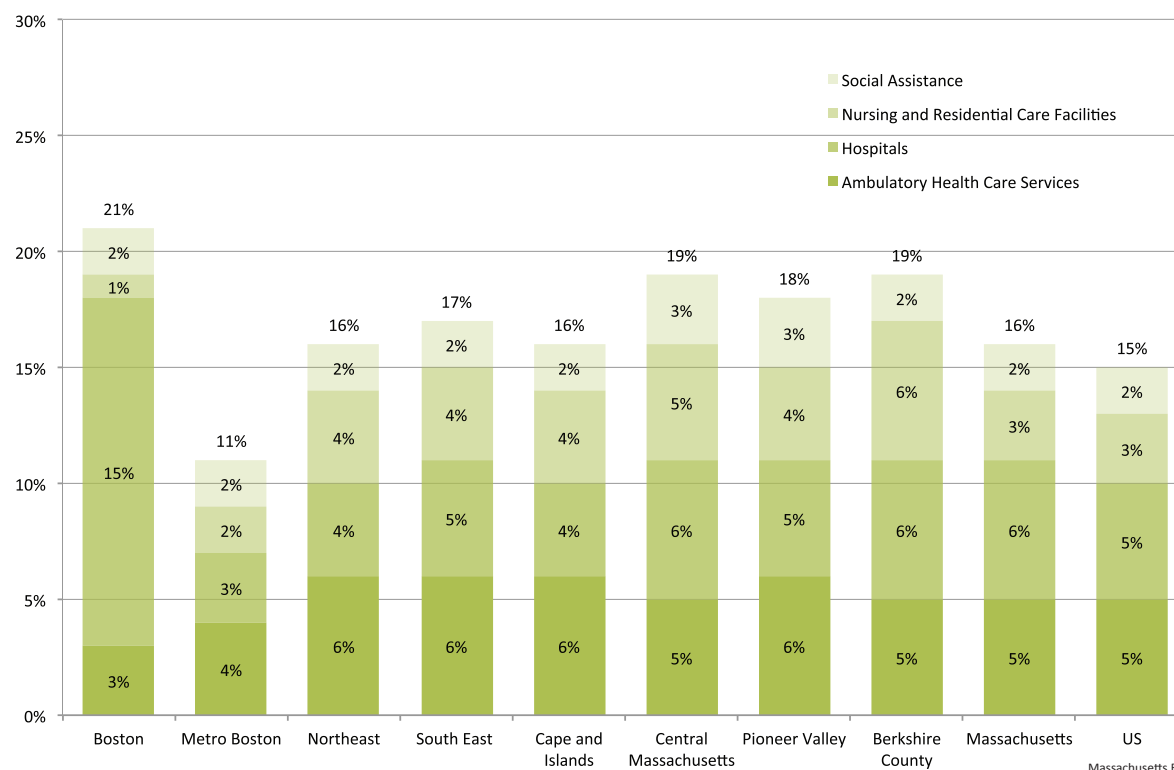
Although the Home Health Care Services group is not one of the largest employers, it did see the highest rate of growth in the 2007 to 2011 period, adding more than 7,000 workers, representing an increase of one third over 2007 employment.

General medical and surgical hospitals grew by 5%, adding the largest number of workers, 9,063.



## CHART 7. HEALTHCARE AND SOCIAL ASSISTANCE SUB-SECTORS EMPLOYMENT AS A SHARE OF TOTAL REGIONAL EMPLOYMENT, 2011

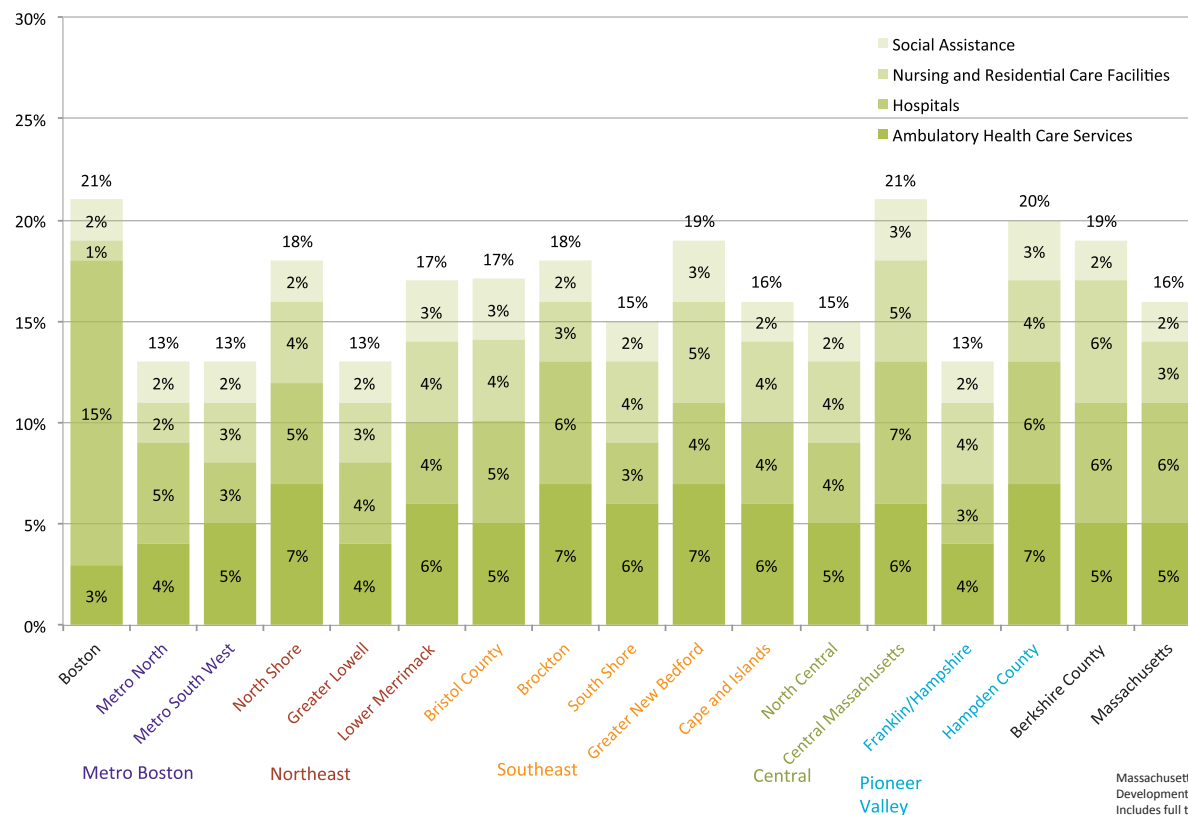
This chart shows employment in the Healthcare and Social Assistance Sub-sectors as a share of total regional employment, compared to the state and the nation. In Boston, the total percentage of employment in Healthcare and Social Assistance is larger than in the state or nation. In addition, a much larger share of Boston workers (15%) is employed in hospitals than in any other region of the state. Massachusetts generally employs a slightly larger percentage of its workforce in hospitals than in other Healthcare and Social Assistance Sub-sectors, compared to the United States as a whole.



Massachusetts Executive Office of Labor and Workforce Development, Employment and Wages, May 2011. Includes full time and part time employment.

## CHART 8. HEALTHCARE AND SOCIAL ASSISTANCE SUB-SECTORS EMPLOYMENT AS A SHARE OF TOTAL WORKFORCE INVESTMENT AREA EMPLOYMENT, 2011

The distribution of employment between the four sub-sectors varies widely by Workforce Investment Area. In Boston, hospitals make up the largest portion of healthcare sector employment, employing 15% of all Boston workers. Berkshire County has a larger portion of their workforce in the nursing and residential care sub-sector than do other parts of the state.



## SHARE OF EMPLOYEES FROM MAJOR OCCUPATIONAL GROUPS WORKING IN THE HEALTHCARE AND SOCIAL ASSISTANCE SECTOR AND SHARE OF HEALTHCARE OCCUPATIONS WORKING IN OTHER SECTORS

The Healthcare and Social Assistance Sector employs workers from almost every occupation. Occupations are combined into occupational groups. Most individuals in healthcare occupations work in the Healthcare and Social Assistance Sector. For example, 79% of Healthcare Practitioner and Technical workers are in the Healthcare and Social Assistance Sector. However, 3% are in Professional and Technical Services and 9% are in Public Administration.

Individuals from a range of occupational groups are also represented in the Sector. For example, 11% of all Management workers in the state are in the Healthcare and Social Assistance Sector and 3% of workers in Computer and Mathematical occupations are employed in the Healthcare and Social Assistance Sector.



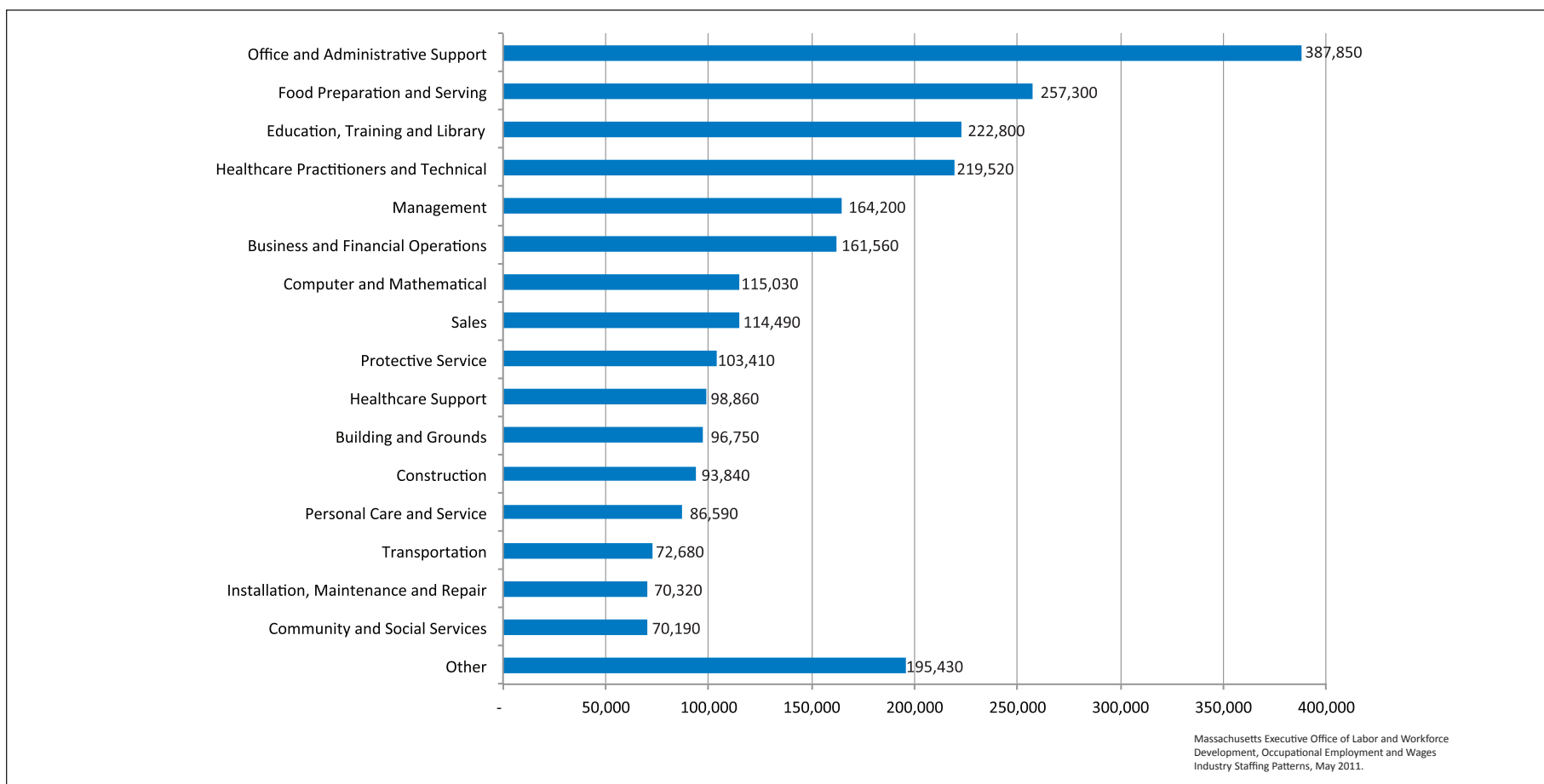
**CHART 9. SHARE OF EMPLOYEES FROM MAJOR OCCUPATIONAL GROUPS WORKING IN THE HEALTHCARE AND SOCIAL ASSISTANCE SECTOR AND SHARE OF HEALTHCARE OCCUPATIONS WORKING IN OTHER SECTORS, 2011**

	Occupational Groups											
		All Occupations	Healthcare Practitioner & Technical	Healthcare Support	Community & Social Services	Management	Computer & Mathematical	Education	Food Prep & Serving	Building and Grounds	Personal Care & Service	Administrative
Sectors	% of this occupation in:											
	Healthcare and Social Assistance	16%	79%	86%	65%	11%	3%	9%	6%	11%	31%	15%
	Professional and Technical Services		3%	1%	1%							
	Administrative and Waste Services		1%	4%	1%							
	Educational Services		4%	2%	13%							
	Other Services, Ex. Public Administration		0%	2%	4%							
	Public Administration		9%	3%	16%							
	Other		4%	2%	0%							
	Total		100%	100%	100%							

Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment and Wages Industry Staffing Patterns, May 2011.

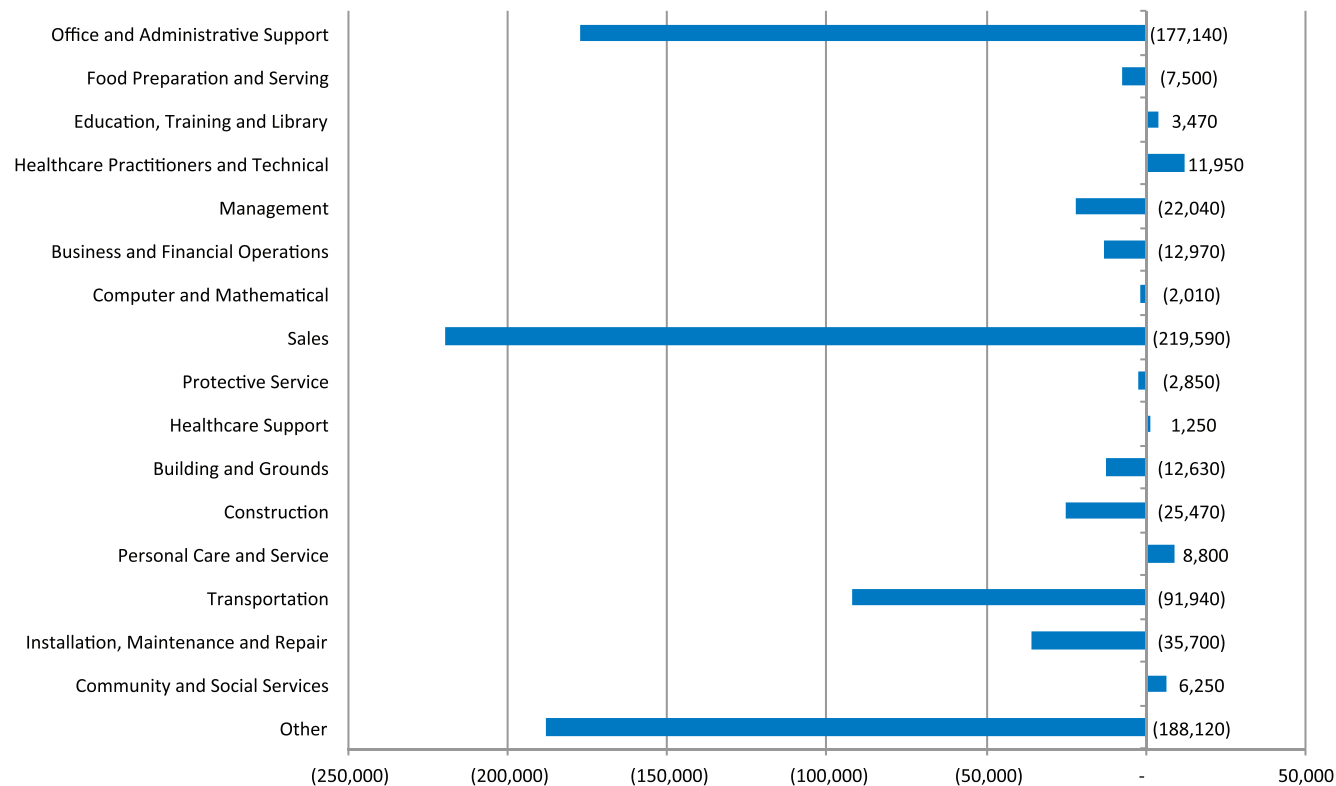
## CHART 10. EMPLOYMENT BY OCCUPATIONAL GROUP IN ALL SECTORS, 2011

Statewide, healthcare occupations are not the largest category of employment. Combined, healthcare occupations - Healthcare Practitioners and Technical occupations, Healthcare Support occupations, and Personal Care and Service occupations - employ 404,970 workers.



## CHART 11. CHANGES IN EMPLOYMENT BY OCCUPATIONAL GROUP IN ALL SECTORS, 2007-2011

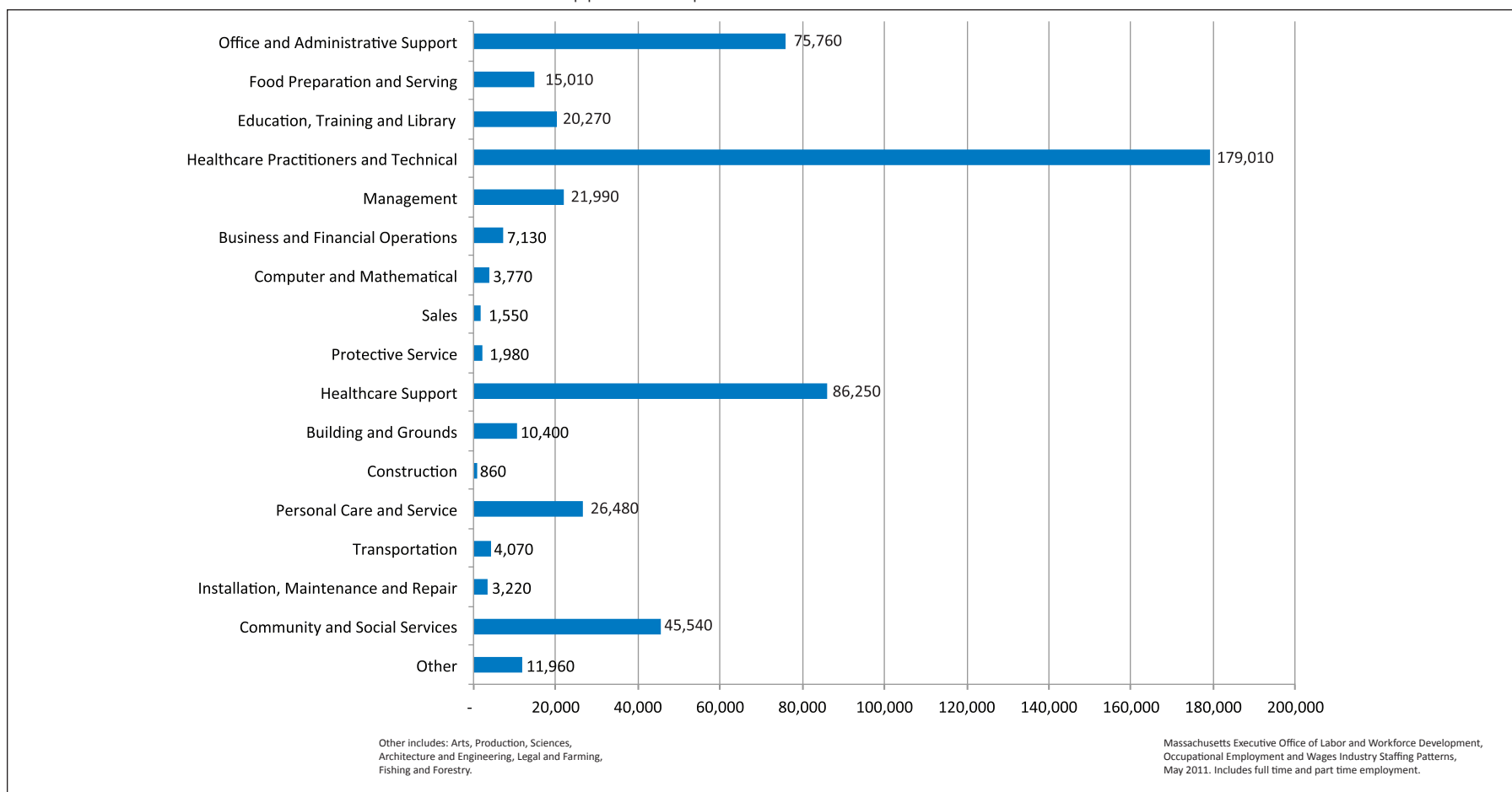
While most occupational groups lost employment, Healthcare Practitioners and Technical occupations, Healthcare Support, and Personal Care and Service occupations all added workers.



Massachusetts Executive Office of Labor and Workforce Development,  
Occupational Employment and Wages Industry Staffing Patterns,  
May 2011. Includes full time and part time employment.

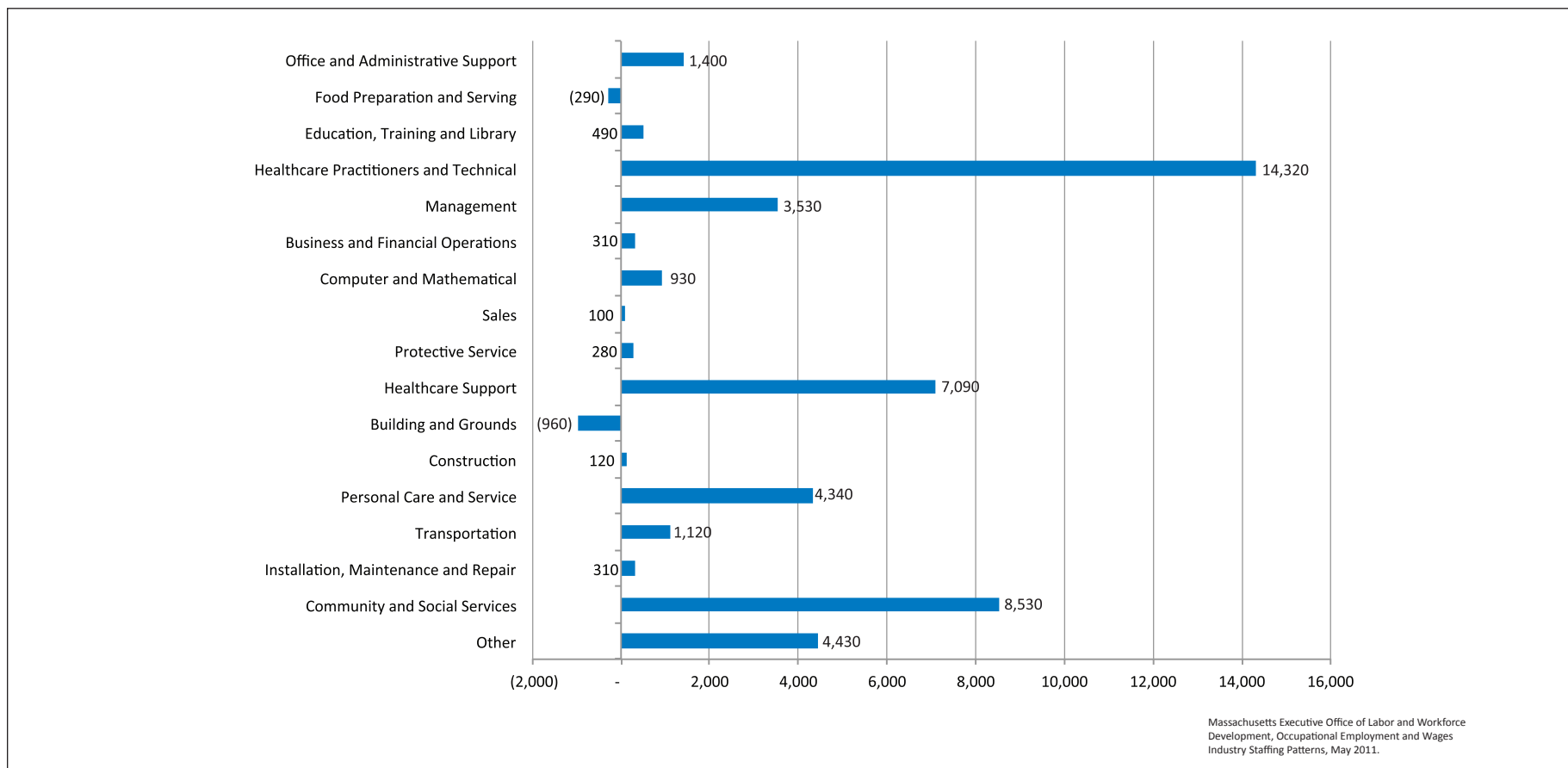
## CHART 12. EMPLOYMENT BY OCCUPATIONAL GROUP IN THE HEALTHCARE AND SOCIAL ASSISTANCE SECTOR, 2011

Almost all occupational groups are represented in the Healthcare and Social Assistance Sector. The largest number of workers in Massachusetts is in Office and Administrative Support occupations. Within the Healthcare and Social Assistance Sector that group is third, following Healthcare Practitioners and Technical Services and Healthcare Support occupations.



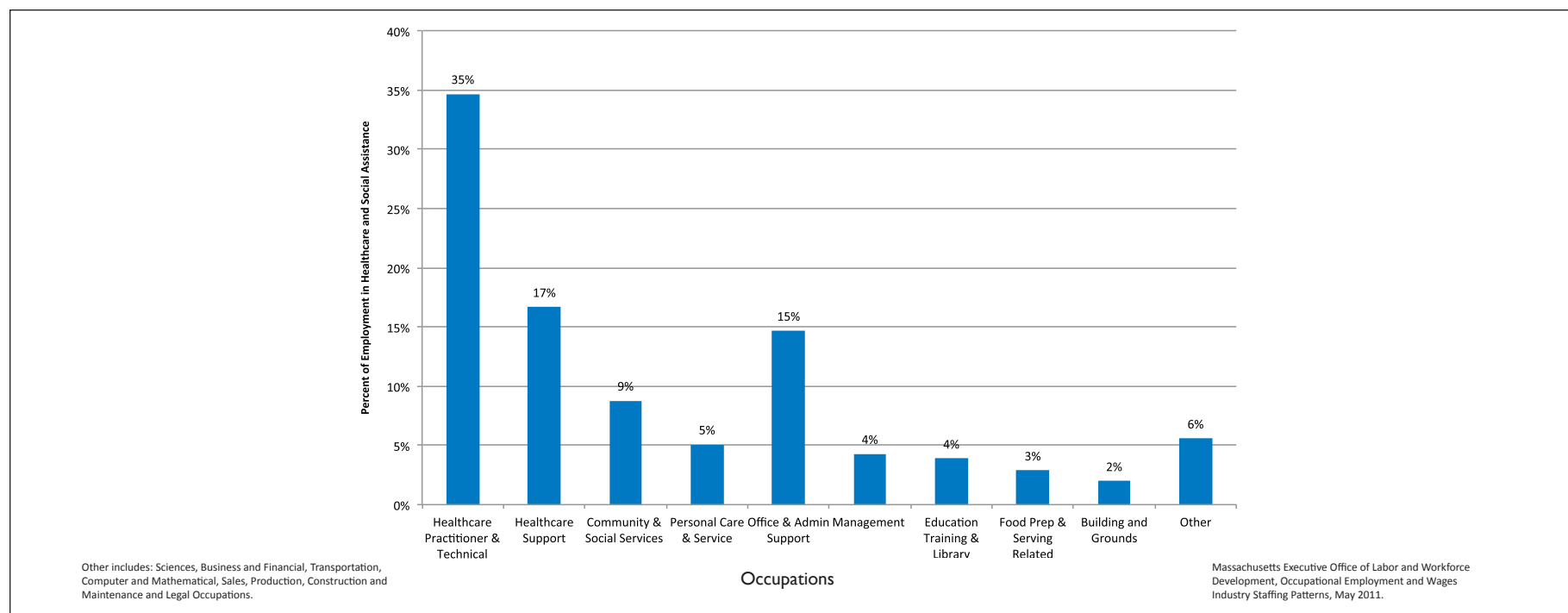
## CHART 13. CHANGES IN EMPLOYMENT BY OCCUPATIONAL GROUP WITHIN THE HEALTHCARE AND SOCIAL ASSISTANCE SECTOR, 2007-2011

Within the Healthcare and Social Assistance Sector, employment increased in almost every occupational group. For some occupations that saw a decrease in employment since 2007, employment increased within the Healthcare and Social Assistance Sector. For example, the total number of Office and Administrative Support workers decreased by 177,140 overall, but employment in this occupation within the Healthcare and Social Assistance Sector increased by 1,400.



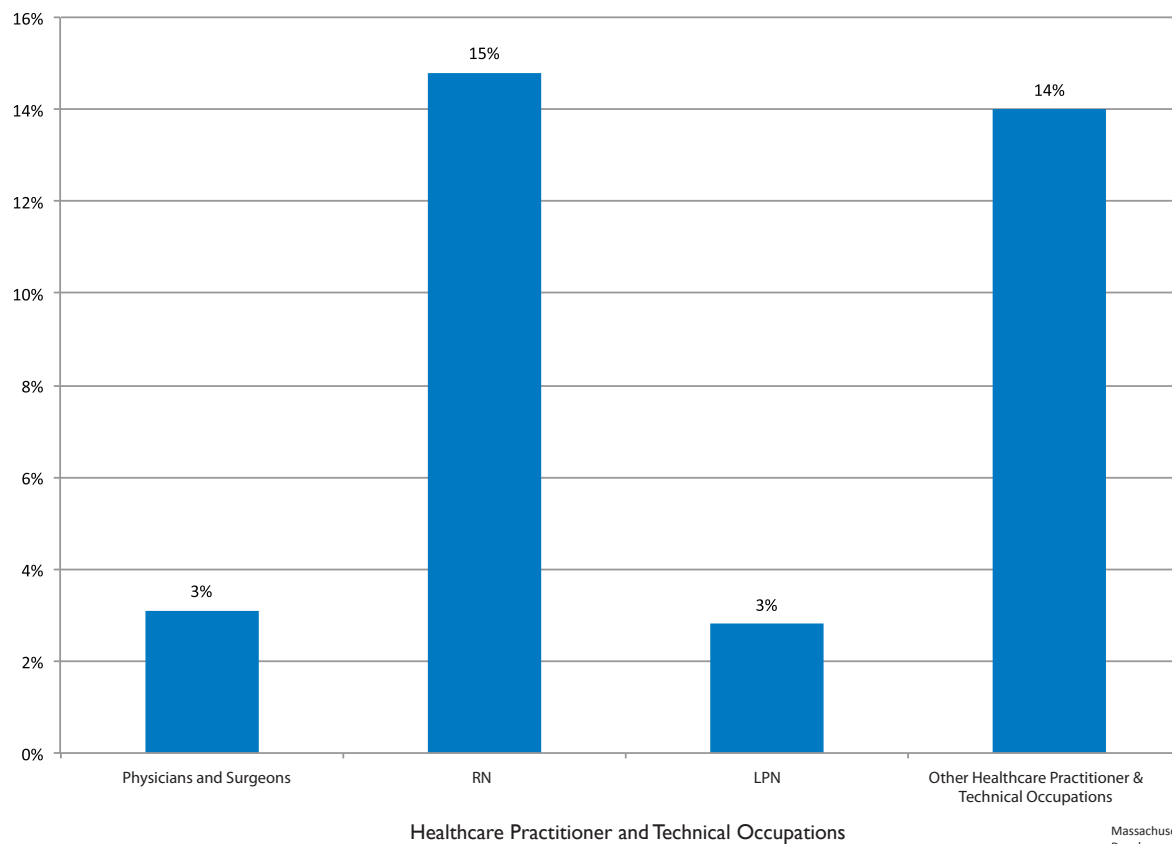
## CHART 14. EMPLOYEES IN HEALTHCARE AND SOCIAL ASSISTANCE SECTOR BY OCCUPATIONAL GROUP BY PERCENT, 2011

The Healthcare and Social Assistance Sector employs many different types of workers in many different capacities. About half of the people who work in the sector perform healthcare jobs or belong to “healthcare occupations”, whether professional (requiring at least an associate’s degree) or healthcare support workers (requiring a certificate of completion of a job-training program). Healthcare professionals include registered nurses (RNs), licensed practical nurses (LPNs), physicians, surgeons, diagnostic medical sonographers and respiratory therapists while the healthcare support worker group comprises occupations such as certified nurses’ assistants (CNAs), home health aides, medical assistants, and dental assistants. The other half of the healthcare industry is comprised of non-healthcare occupations, such as administrative workers, managers, daycare teachers, social service workers, and food preparation workers.



## CHART 15. HEALTHCARE PRACTITIONER AND TECHNICAL EMPLOYEES IN HEALTHCARE AND SOCIAL ASSISTANCE SECTOR BY OCCUPATIONAL GROUP

Focusing on the Healthcare Practitioner and Technical occupations, we see that Registered Nurses (RNs) make up the single largest occupational group in the Healthcare and Social Assistance Sector. Healthcare Practitioners and Technical occupations include occupations such as Physical and Recreational Therapists, Laboratory Technicians and Radiologic Technicians.

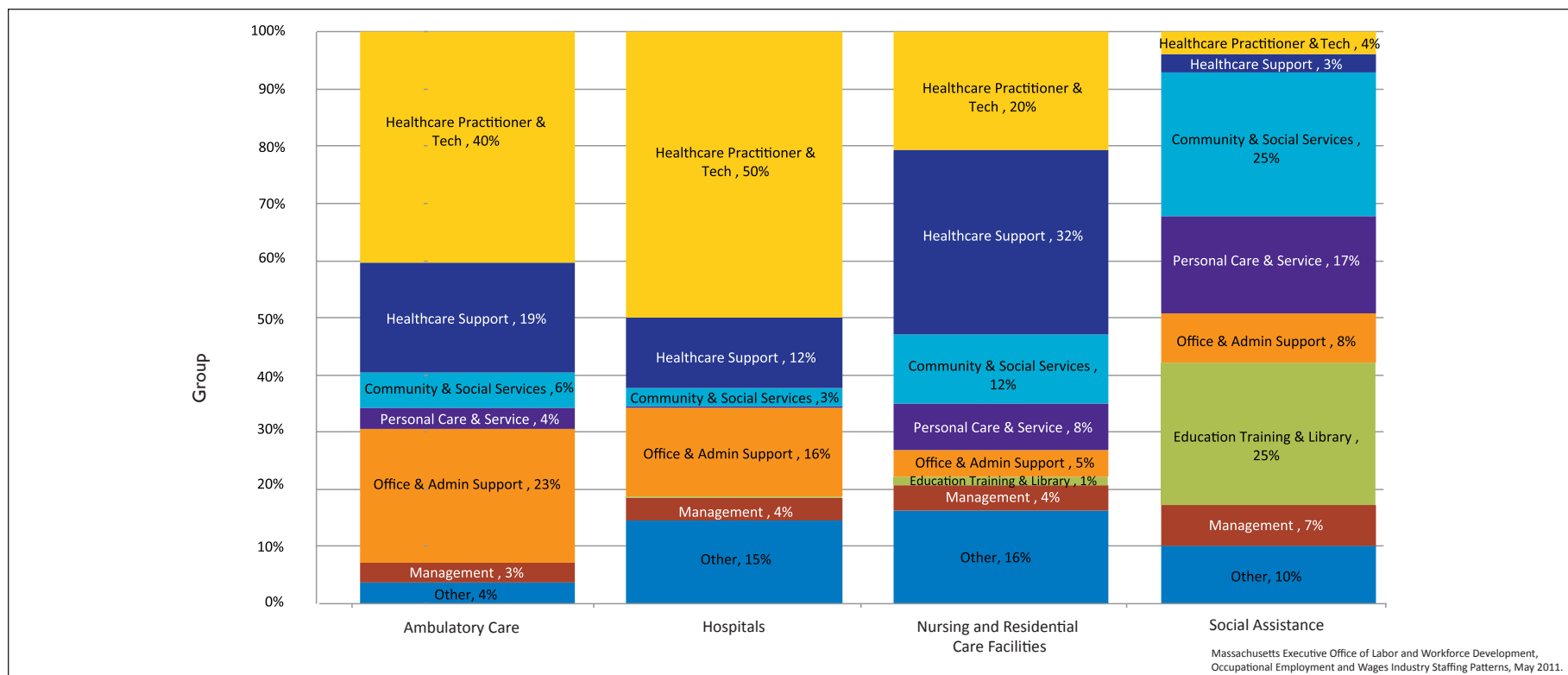


Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment and Wages Industry Staffing Patterns, May 2011.

## CHART 16. DISTRIBUTION OF TYPE OF WORK BY HEALTHCARE AND SOCIAL ASSISTANCE SUB-SECTOR, 2011

The following chart shows the distribution of specific healthcare occupations in the Healthcare and Social Assistance Sub-sectors.

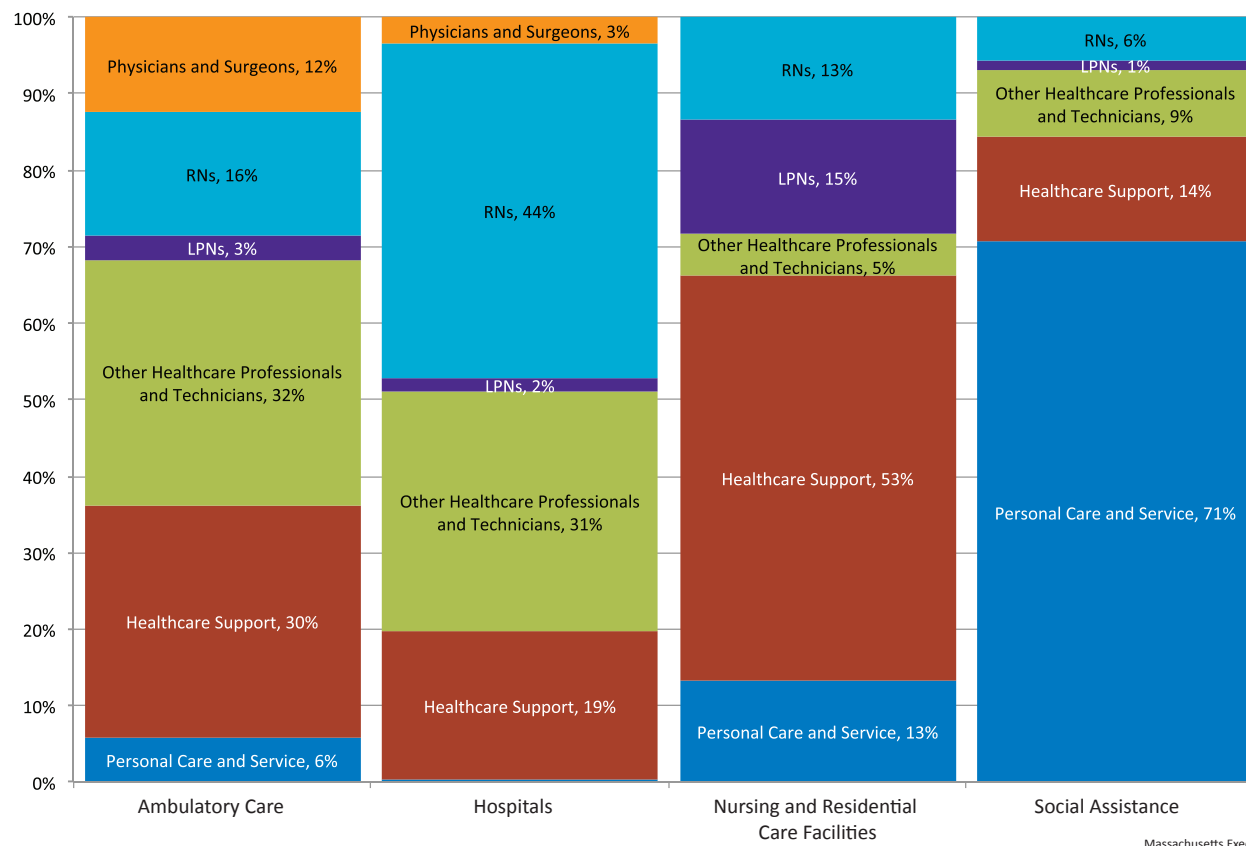
The distribution of employees is dramatically different across sub-sectors. In the Ambulatory Care, Hospital and Nursing and Residential Care Sub-sectors, Healthcare Practitioner and Healthcare Support staff make up over 50% of the workers. In the Social Assistance Sub-sector, they make up less than 10% of workers. Organizations in the Hospitals and Ambulatory Care Sub-sectors employ a larger percentage of Healthcare Practitioners and Technical Workers while the Nursing Care Sub-sector employs a larger percentage of Healthcare Support workers.





## CHART 17. DISTRIBUTION OF HEALTHCARE AND PERSONAL CARE OCCUPATIONS BY HEALTHCARE AND SOCIAL ASSISTANCE SUB-SECTOR, 2011

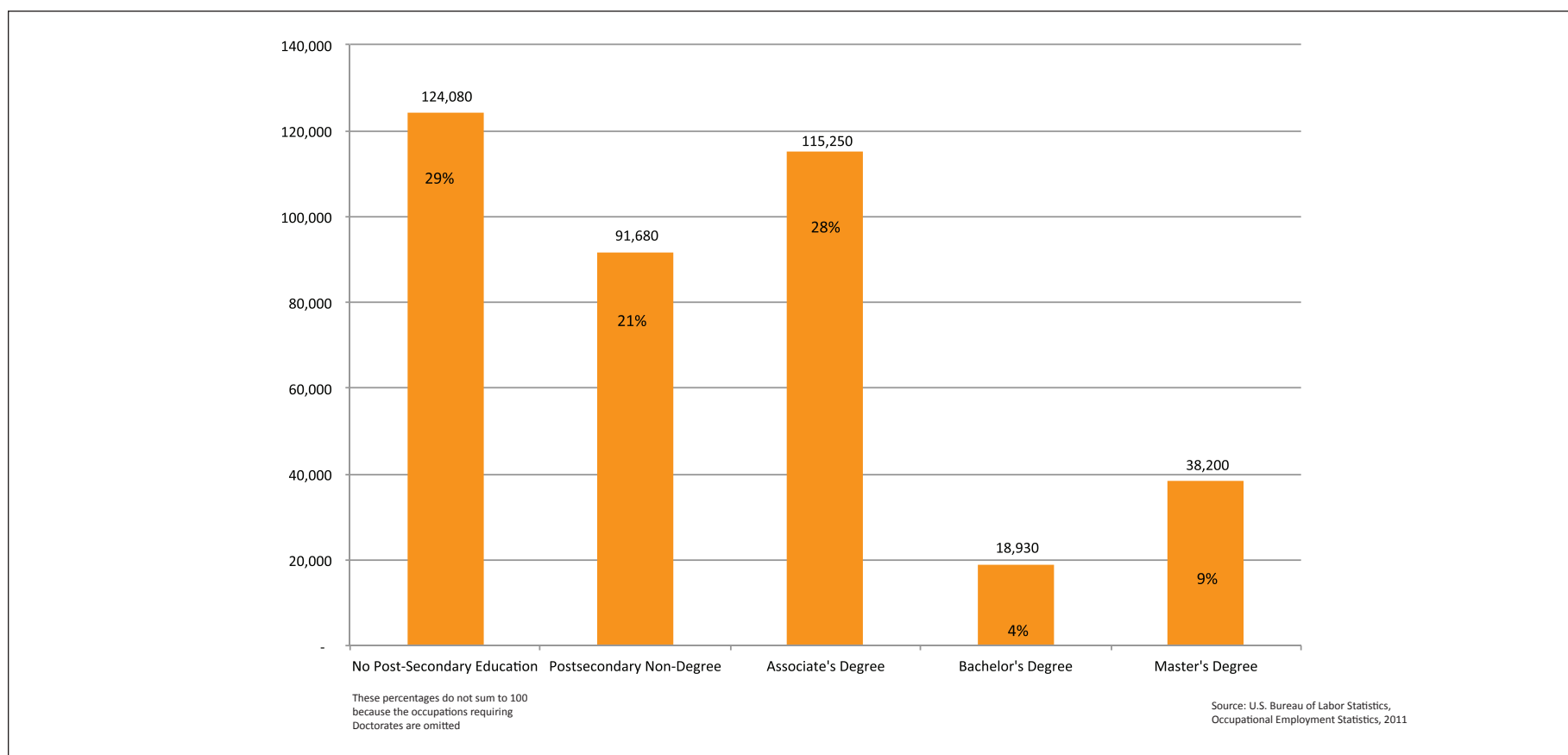
The sub-sectors also vary widely in their employment of Healthcare Practitioner and Support staff. For example, 12% of the workers in Ambulatory Care settings are physicians. The fraction of the staffs in the Nursing and Residential Care and Social Assistance Sub-sectors who are physicians is negligible.



Massachusetts Executive Office of Labor and Workforce Development, Occupational Employment and Wages Industry Staffing Patterns, May 2011.

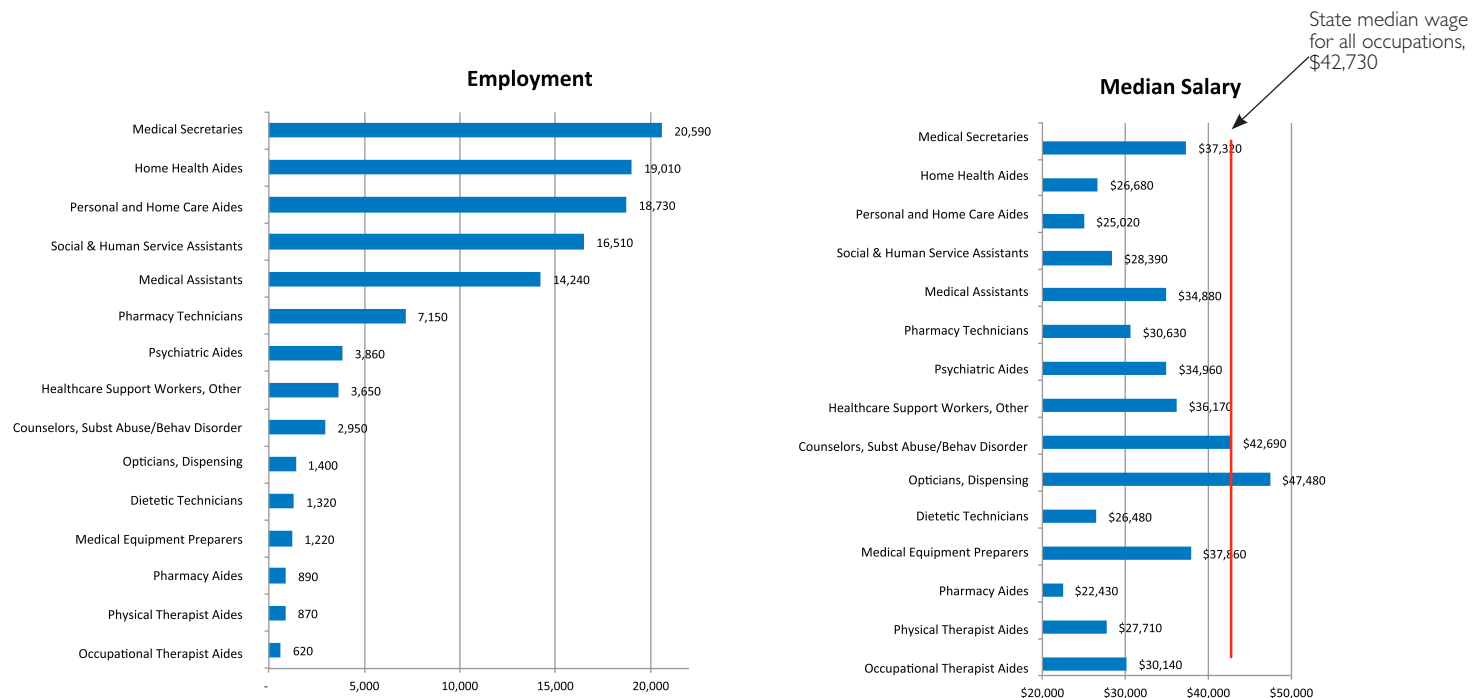
## CHART 18. EMPLOYMENT OF HEALTHCARE AND SOCIAL ASSISTANCE WORKERS BY MINIMUM REQUIRED EDUCATION

The Bureau of Labor Statistics (BLS) provides information about education and training requirements for many occupations. BLS assigns the typical education level required to enter an occupation. Many workers will have a higher educational level at entry. Some will attain additional educational credentials while they are employed in the occupation. Here, we show the number of Massachusetts workers in occupations that have been identified as requiring that level of education as a minimum entry requirement.



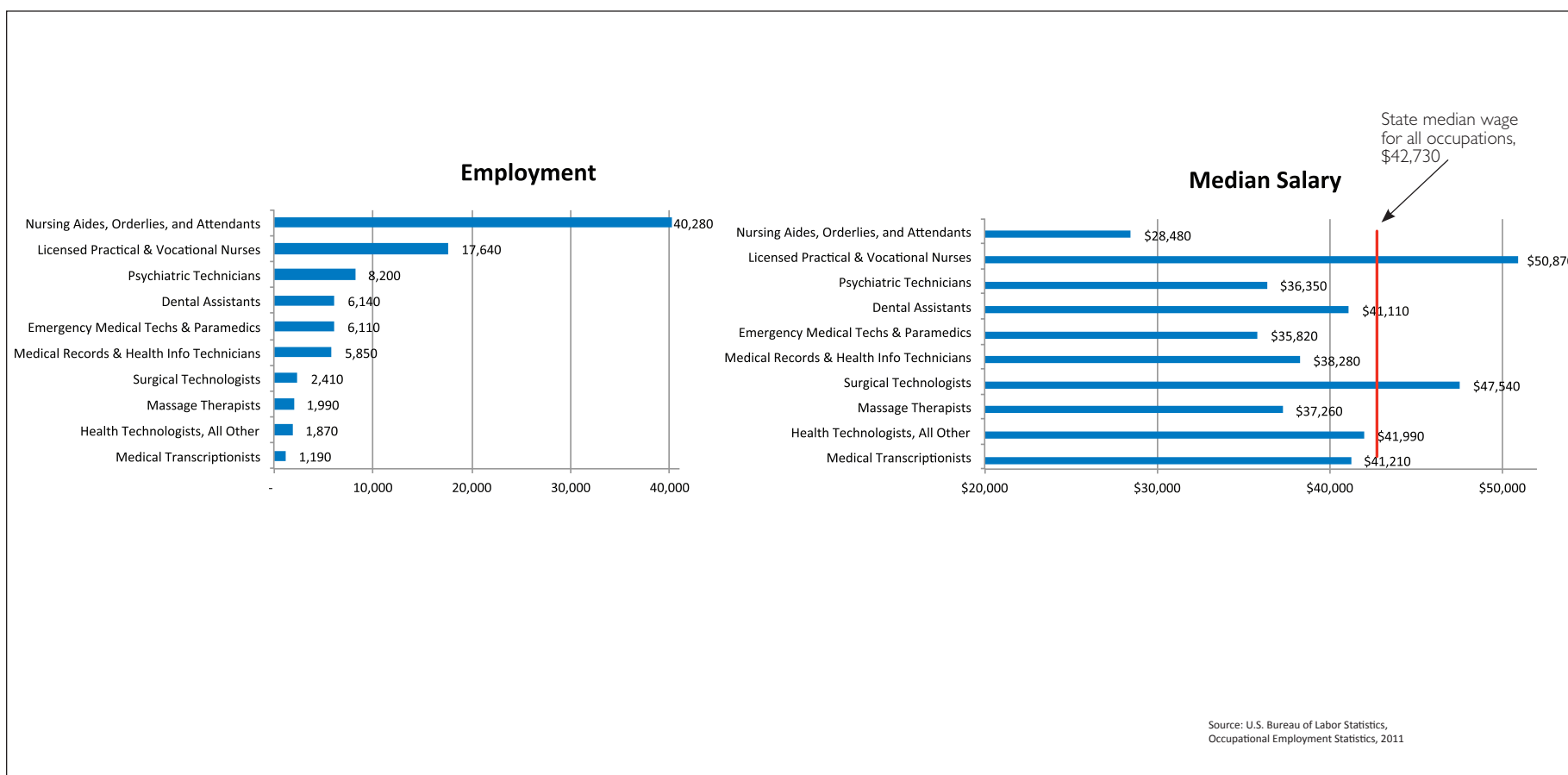
## CHART 19. EMPLOYMENT AND MEDIAN SALARY FOR OCCUPATIONS TYPICALLY NOT REQUIRING POST-SECONDARY EDUCATION

The Bureau of Labor Statistics reports that there are many occupations that do not formally require any education beyond high school. However, our analysis of the workforce in Massachusetts shows that many of the workers have some post-secondary education. The majority of these occupations pay less than the state median wage.

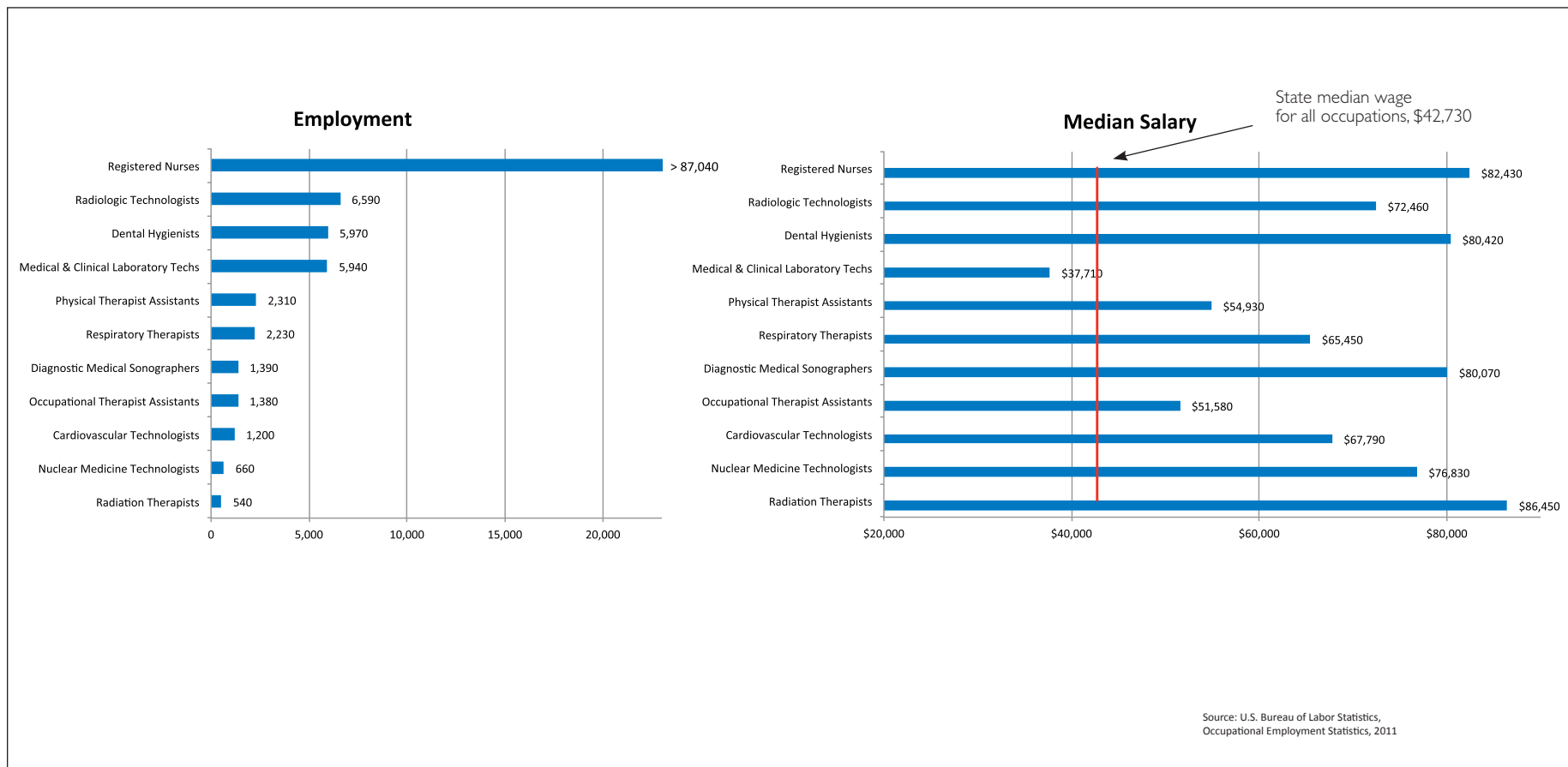


Source: U.S. Bureau of Labor Statistics,  
Occupational Employment Statistics, 2011

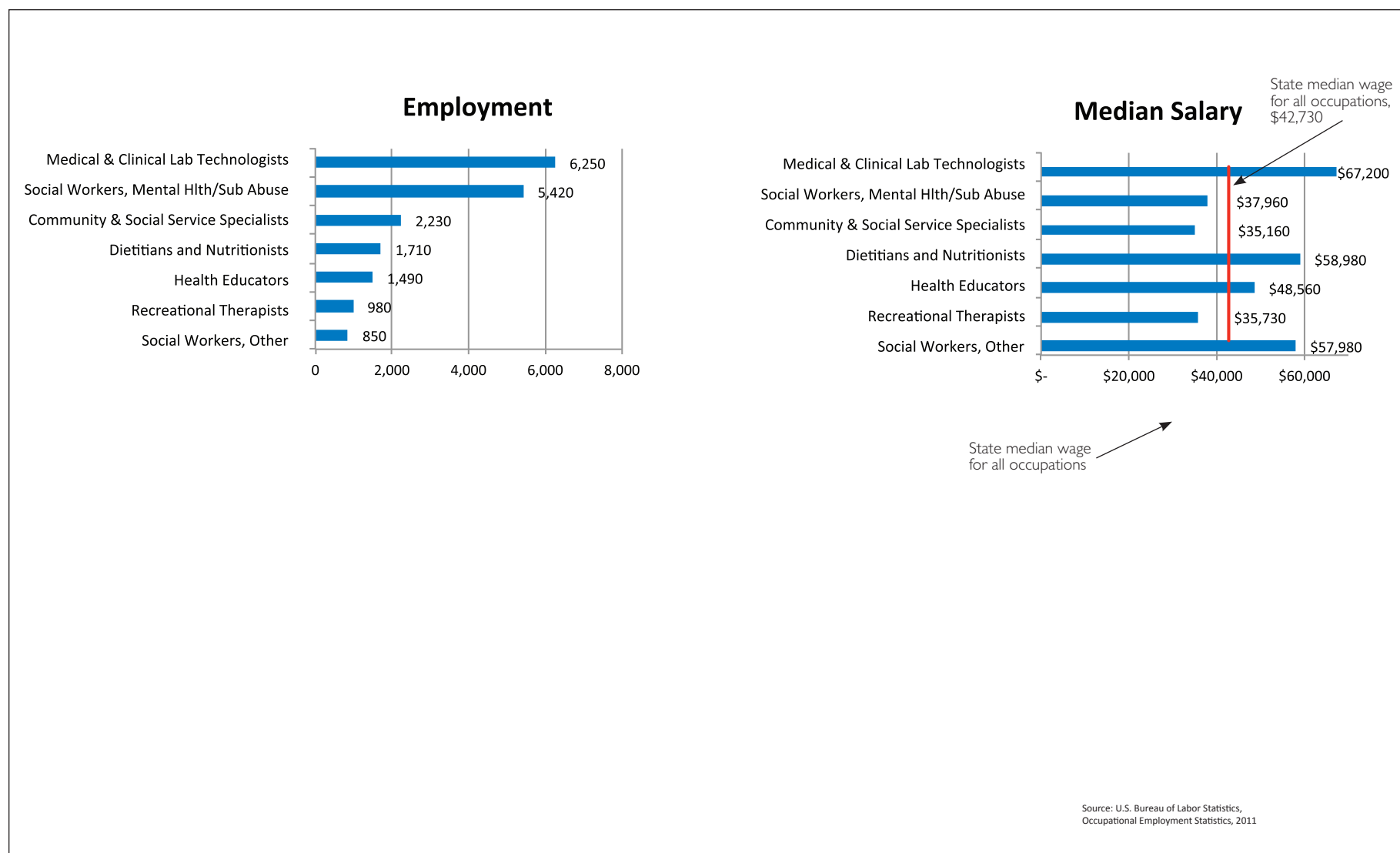
## CHART 20. EMPLOYMENT AND MEDIAN SALARY FOR OCCUPATIONS REQUIRING A CERTIFICATE



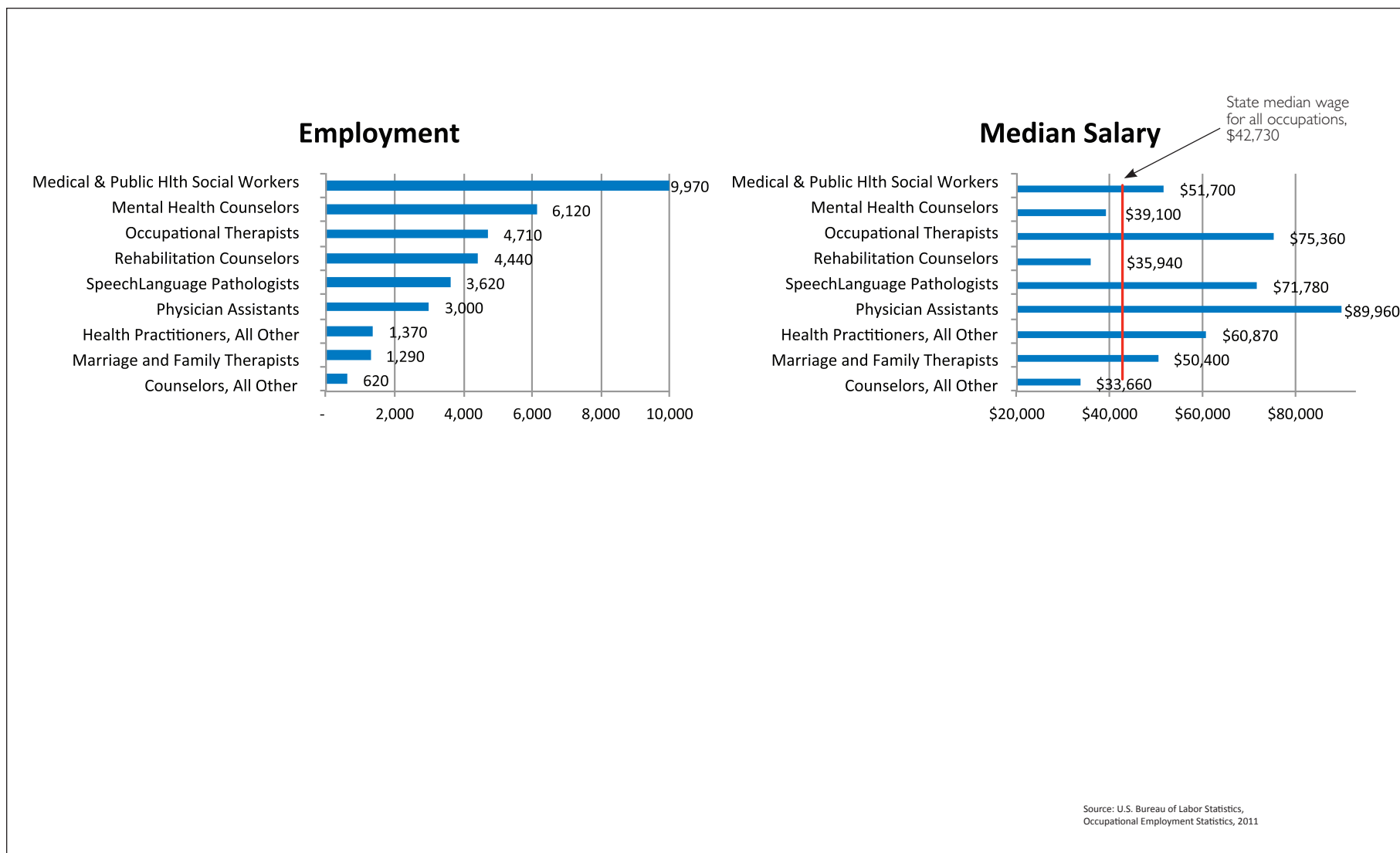
## CHART 21. EMPLOYMENT AND MEDIAN SALARY FOR OCCUPATIONS REQUIRING AN ASSOCIATE'S DEGREE



## CHART 22. EMPLOYMENT AND MEDIAN SALARY FOR OCCUPATIONS REQUIRING A BACHELOR'S DEGREE



## CHART 23. EMPLOYMENT AND MEDIAN SALARY FOR OCCUPATIONS REQUIRING A MASTER'S DEGREE



For more information:

<http://www.hwic.org>

<http://masspulse.org>

<https://masscis.intocareers.org>

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<http://westernmasshealthcareers.org>