

## *Executive Summary*

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This study responds to the general question, “What is the supply and demand for various allied health personnel in Tennessee and in the nation in 2010?” The study provides an update to the trends described in the first three editions of this book, published in 1993, 2000, and 2004. This edition is important because of changes in national health care policy, with passage of legislation for health reform, and further changes in Tennessee, including continuing modifications to TennCare, first implemented in 1994. Some of these changes will have significant effects on the demand for certain health care professionals.

As this study has been underway, many changes have occurred. The economy has taken a downturn and employment figures have been slow to recover. Health care reform passed as the United States economy and society can no longer sustain the cost of the way health care is organized and delivered.

At the national level, according to the Bureau of Labor Statistics (BLS) Occupational Employment Projections to 2018 (November 2009), employment among health care practitioners, a subgroup of the professional and related category is expected to increase by 21 percent, resulting in a projected 1.6 million health care jobs over the next ten years. Among service occupation subgroups, the largest number of new jobs will occur in health care support occupations. This subgroup is expected to increase by 29 percent, with more than 1.1 million new jobs, largely due to an expanding elderly population that will require more care. The health care and social assistance industry—which includes public and private hospitals, nursing and residential care facilities, and individual and family services—is expected to create 26 percent of all new jobs in the United States economy—or 4 million new jobs—with a growth rate of 24 percent. An increased demand for health care services, an aging population, and technological advances in the medical field will lead to increased demand for individuals trained for health care occupations in each of these subgroups. Medical advances also contribute to higher survival rates and longer lives—sometimes with more health issues—so growth in health care occupations will remain strong.

As states have faced decreasing resources for higher education, expensive and limited enrollment programs, such as allied health, are under consideration for closure. Program closures would affect the progress that has been made to address the need for qualified professionals. The number of degrees awarded in allied health and health sciences areas for the ten-year period from 1997 to 2007 shows significant increases in comparison with data from the late 1990s.

Although regional data for the professions are not included in this edition, there has been a significant investment in allied health in all of the SREB (Southern Regional Education Board) states. Data reported by the SREB indicates a significant increase in the number of allied health and health science graduates from 1997 to 2007. In the U.S., the number of baccalaureate allied health graduates has increased by 18.9 percent, and the SREB states have experienced a 21.4 percent increase. Tennessee has experienced a 29.2 percent increase during the same period.

Tennessee has seen an increase in associates degrees awarded in allied health of 84.6 percent during the 1997–2007 period. Private schools began to offer allied health programming within the last five years adding to the increase in the number of graduates at both the baccalaureate and associate degree level. These increases have reduced the demand in some occupational areas but have only slightly addressed the fast-growing demand in others. Associate degrees awarded in the allied health and health sciences have increased 48.4 percent nationally and 53.4 percent in SREB states. This report details the occupational areas of greatest demand statewide, which are summarized below.

The Joint Annual Report (JAR) of hospital vacancy data for selected occupations appears in Appendix D. Data is organized by county and by Tennessee Hospital Association districts.

This report provides national, state, and local data and information intended to assist institutions and the higher education system in making responsible decisions about programming in the allied health field. The report also serves as a career-counseling guide for use in high schools and health care institutions.

*Allied Health in Tennessee: A Supply and Demand Study 2010* shows that recent academic programming initiatives have addressed

some of the critical programming needs in allied health care areas that existed in 1993. For example, the shortage of physical therapists trained in Tennessee has significantly decreased. With some occupations, students are now being educated at a rate that balances annual demand, yet regional shortages still exist.

According to recent data from the Tennessee Department of Labor and Workforce Development's "The Source," allied health professions in which the supply of state graduates does not meet current annual demand includes:

- respiratory therapy;
- health information administration;
- health information technology;
- nursing assisting;
- medical imaging (diagnostic medical sonography, nuclear medicine technology, radiation therapy, and diagnostic radiologic technology);
- physical therapy assisting;
- occupational therapy assisting;
- laboratory services (medical technologist, medical laboratory technician);
- dental hygiene;
- physician assisting; and
- recreation therapy (based on the United States Department of Labor, Bureau of Labor Statistics data).

Nationally, the highest employment projections within allied health from 2008–2018 according to the BLS projections include:

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|------------------------|-----------------------|
| • Dietetics/Nutrition  | • Dental Hygiene      |
| • Physician Assisting  | • Dental Assisting    |
| • Occupational Therapy | • Radiology           |
| • Physical Therapy     | • Surgical Technology |
| • Respiratory Therapy  | • Nursing Assistant   |
| • Medical Technology   | • Medical Assistant   |

Hospitals employ 60 percent of the allied health workforce. The JAR of hospital vacancy rates for selected allied health fields include statewide shortages greater than 4 percent in 2008 for the following fields (only six fields are included in JAR data):

- Medical Technology
- Physical Therapy
- Occupational Therapy
- Respiratory Therapy

Population ratios are broad measures of provider densities for selected occupations. Fields that are under-represented in Tennessee as compared to the national ratios include:

- Athletic Training
- Dental Hygiene
- Dental Assisting
- Occupational Therapy
- Occupational Therapy Assisting
- Epidemiology
- Physician Assisting
- Dietetics/Nutrition
- Speech Language Pathology

More work is needed to address programmatic needs in these areas of allied health. It is important to note that local demands may change within a short period of time and may not always reflect state workforce data.

According to a 2005 report from the University of California San Francisco's Center for Health Professions, allied health occupations represent 60 percent of all health occupations. More than 60 percent of United States health care workers are classified under allied health in more than 200 occupational categories (Health Professions Network, "What Is Allied Health? What's in It for Me?" at [www.healthpronet.org/students/index.html](http://www.healthpronet.org/students/index.html)). In the previous editions of this study, 26 occupations were grouped into three of the occupational clusters as identified by the National Health Care Skills Standards Project: therapeutic, diagnostic, and information services (Far West Laboratory, 1995, 2001). The other cluster, environmental services, was not included.

For this study, changes have been made to reflect the groupings of specific occupations as identified in the Tennessee Programs of Study, Health Science from the Tennessee Department of Education and the Tennessee Board of Regents (<http://pathways.tbr.edu/programs.php?cluster=8>). These groupings also reflect career technical education categories from the Tennessee Department of Labor and Workforce Development ([www.state.tn.us/labor-wfd/Publications/EmploymentSecurity/CareerCluster/Health.pdf](http://www.state.tn.us/labor-wfd/Publications/EmploymentSecurity/CareerCluster/Health.pdf)). This year, physician assistants and epidemiologists have been included in the study.

