

Be
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*The Healthcare
Industry*





Healthcare Careers

Healthcare is the largest and fastest-growing industry in the United States, where over 10 million workers are employed in more than 200 careers. In South Carolina, nearly 120,000 people are employed in the healthcare industry.

In the next 25 years, the number of people aged 65 or over in South Carolina is expected to double. The explosion of technology in healthcare and unprecedented aging population contribute to the national healthcare workforce shortage.

The current and projected healthcare workforce shortage is creating a healthcare crisis across the nation. Healthcare employment growth between 2006-2016 is projected to be 26 percent. A recent study commissioned by the American Hospital Association pointed out current vacancy rates that include 15 percent for imaging technicians, 13 percent for registered nurses, and 14 percent for pharmacists.

Healthcare careers offer opportunities across the board. While the number of physicians is growing, the jobs with high demand are those that play supporting roles in delivering healthcare. They include physician assistants, dental hygienists, home health aides, and nurses, among others.

People in healthcare careers must have a caring nature, and they need to understand science and how living things work. People in healthcare careers must pay close attention to getting the details right because so much is riding on what they do.

“The healthcare worker crisis is pervasive. The crisis cannot be overcome without collaboration with our local schools, technical colleges, and universities. Our students need to be exposed to health careers early in their education. Business must provide a structure to develop awareness, exploration, and preparation opportunities for students interested in health careers so that the healthcare industry becomes the ‘Employer of Choice.’ Through firsthand experience, students may find that the healthcare environment is a good fit. Armed with this knowledge, their educational experience becomes more relevant.”

—Val Richardson
Workforce Development Manager
Palmetto Health

How far you go in the healthcare field and how much you earn are up to you.



Photo provided by Sisters of Charity Providence Hospitals and University of South Carolina Cardiovascular Department.

What is the Health Science Career Cluster?

The health science career cluster orients students to careers that promote health and wellness, as well as diagnose and treat injuries and disease. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information. Work locations are varied and may be in hospitals, medical or dental offices, laboratories, medivac units, sports arenas, space centers, or within the community.

The Five Career Majors for Healthcare

The health science career cluster is divided into five majors, which are

- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services
- Biotechnology Research and Development

Therapeutic Services

Overview

Careers in the therapeutic services major are focused primarily on changing the health status of the patient over time. Health professionals in this major work directly with patients; they may provide care, treatment, counseling and health education information.

Sample Occupations

Athletic Trainer
Certified Nurse Assistant
Dental Hygienist
Occupational Therapist
Paramedic
Pharmacist
Physical Therapist
Physician
Registered Nurse
Respiratory Therapist
Surgical Technician

Credentials

Many therapeutic careers include levels of therapists, technicians and assistants. Some careers, like nurse practitioner or physical therapist, require a master's degree. Other careers, like physician or dentist, require a doctoral degree.

Most therapeutic careers require certification, registration or licensure by a national professional organization or by the state in which these health professionals practice.

Employment Outlook

Based on an aging population, increased use of technology, and a retiring workforce, the demand for healthcare workers will remain high through 2020. As the role of therapeutic careers changes, professionals in this major will find increased opportunities to work independently. Additionally, an increasing number of career opportunities are becoming available outside of the traditional hospital setting.

Dental Hygienist

Dental hygienists perform a crucial role in modern dental care. They are licensed practitioners who often are the first line of care, in fact. Many of their duties — including routine cleaning and other preventive measures — had been performed by dentists in the past. Now the hygienists perform those crucial tasks and support dentists in providing professional care to more patients, adding to the overall quality of dental care and to the productivity of their office.

Dental hygienists work in private practices, public health clinics, hospitals, prisons and public schools. The outlook for this field is excellent and it's considered one of the fastest-growing occupations. Flexible work hours and part-time work opportunities also are often available.

Educational Requirements

Dental hygienists typically are required to have at least a two-year associate's degree.

Related Occupations

Related occupations include dental assistant, dental hygiene educator, dental product sales representative and infection control consultants for dental offices.

Physical Therapists

Physical therapists evaluate and treat patients whose physical abilities have been impaired by injury, illness, or deformity. Conditions requiring treatment by a physical therapist are those which affect the patient's muscles, nerves, joints and/or bones. The patient may have been in a serious car accident, have a life-long disability, or be an athlete recovering from an injury.

The goal of treatment is to increase strength, improve performance, decrease pain, adjust to the effects of a disability, and to regain as much normal activity as possible.

Methods of therapy include exercise, massage, heat, water, light, electricity, and education. Physical therapists teach patients and/or families exercise programs, use of assistive devices (crutches, wheelchairs, artificial limbs, braces), self-help techniques, proper body mechanics and prevention of getting re-injured.

Physical therapists advance their careers by earning a master's degree leading to opportunities in teaching, research, or administrative positions.

Educational requirements

Doctor of Physical Therapy degree

Careers Related To Physical Therapy

Physical Therapist Assistant—

two-year associate's degree

Physical Therapist Aide—

The physical therapy assistant and aide work under the supervision of the physical therapist.

Primary Care Physicians

Primary care physicians usually see the patient first, manage their complaints, refer the patient to a specialist if needed, and provide continuing care for the patient. Physicians who provide this type of continuing patient care include: general and family practitioners, internists, pediatricians, and obstetricians/gynecologists.

The physician performs activities to prevent, diagnose, cure, and alleviate sickness, diseases, or injury. The physician also provides medical orders and guidance to nurses and other members of the healthcare team.

Physicians are extensively prepared with the skill and knowledge needed to meet the changing health needs of society. Their work is scientific and includes

observation, as well as clinical and laboratory skills in the medical care of patients.

Physicians work in a variety of clinical areas, including rural and urban settings. Some physicians combine medical practice and research or teaching in medical schools and teaching hospitals.

Educational requirements

Four-year bachelor's degree (pre-med college work), four-year Medical Doctor or Doctor of Osteopathy degree and three or more years of post-graduate residency training

Careers Related to Medicine

Physician's Assistant four-year degree in Physician Assisting

Physician assistants work under the supervision of the physician.

Registered Nurses

Registered nurses are key members of the healthcare team who plan, implement, and evaluate patient care. Nurses have the greatest responsibility for a patient's health and well-being. Nurses put into action the medical plan prescribed by doctors and rely on their own problem-solving and decision-making skills in providing nursing care to patients. Nurses interact with doctors and supervise ancillary healthcare providers.

Nursing focuses on teaching good health practices to patients of all ages, their families, and others, in order to promote and maintain good health. Nurses use "high-tech" knowledge and advanced technology and equipment. Nursing offers the opportunity to work one-on-one with patients.

Nurses advance their career by earning a graduate degree leading to opportunities in management, teaching and advanced clinical specialties. Clinical specialties include certified RN anesthetist, nurse midwife, and nurse practitioner.

Educational requirements

Four-year bachelor's degree

Two-year associate's degree

Both programs prepare you to take the state licensure examination required to practice as a registered nurse.

Other Options Related to Nursing

Licensed Practical Nurse—

diploma program

Certified Nursing Assistant—

certificate program

Respiratory Care Practitioners

Respiratory care practitioners treat and care for patients with cardio-pulmonary (heart-lung) problems that interfere with normal breathing. The therapist's work is vital to the health of the patient whether the treatments are temporary, emergency, or long-term. The patient may be a premature baby whose lungs are not fully developed, an older person who has been fighting lung disease for years, or someone recovering from a heart operation.

Under medical direction, respiratory care practitioners provide treatment ranging from control and prevention of illnesses such as asthma to emergency care of heart failure or shock. They work with special medications and sophisticated equipment to help patients breathe easier. Respiratory care practitioners advance their careers with additional education and by moving from providing general patient care to specialized intensive care. They also become supervisors, managers, or educators.

Educational requirements:

Two-year associate's degree in

Respiratory Therapy

The associate's degree program prepares you to take the state licensing examination required to practice as a respiratory care practitioner.



Diagnostic Services

Overview

Careers in the diagnostic services major use tests and evaluations that aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions.

Credentials

Most diagnostic careers require an associate or bachelor of science degree. Most states require certification, registration or licensure by a national professional organization. Many diagnostic careers require a specialty certification in addition to an existing credential.

Sample Occupations

Geneticist
Medical Lab Technologist
Nuclear Medicine Technologist
Pathologist
Phlebotomist
Radiologic Technologist

Employment Outlook

Based on an aging population and a retiring workforce, the demand for healthcare workers will remain high through 2020. As technology advances, the need for additional training for diagnostic careers will increase. An increasing number of career opportunities are becoming available outside of the traditional laboratory setting.

Medical Lab Technologists

Medical lab technologists work in laboratories conducting a wide range of tests, which play an important role in detection and treatment of diseases and disorders. This “detective” work is important for diagnosing diseases. The tests or procedures performed range from simple to complex and often involve the use of microscopes, chemicals, computers and a variety of complex, state-of-the-art laboratory instruments.

Areas of specialization include

Hematology (human blood)
Serology (antibodies in the blood)
Microbiology
(microscopic forms of disease)
Chemistry
Blood Transfusions
Microscopy (use of the microscope)

Educational requirements

Four-year bachelor’s degree

Medical technologists must also pass a certification examination.

Other Options Related To Medical Technology

Medical Laboratory Technician—
two-year associate degree
Medical Laboratory Assistant—
one-year certificate

Medical laboratory assistants/ technicians work under the supervision of the medical technologists.

Radiologic Technologists

Radiologic technologists use complex technology and methods to produce images of bones and internal parts of the body. Under the direction of a physician, the technologist uses radiation and other imaging systems to detect and/or treat diseases, injuries and deformities.

Technologists prepare and position the patient for procedures, set-up and control the various x-ray equipment, control dark-room procedures, and evaluate the quality of the resulting film or image.

The radiologic technologist also uses proper radiation protection devices and techniques that safeguard both the patient and the technologist from possible radiation hazards.

Areas of specialization include

Radiography
Diagnostic Sonography (ultrasound)
Heart Catheterization
Fluoroscopy Examinations
Computerized Tomography
(CAT scans)
Magnetic Resonance Imaging
Radiation Therapy
Mammography
Nuclear Medicine

Educational requirements

Two-year associate’s degree

“Nowadays, it’s harder to find more job security than in the field of healthcare. An aging population requires more healthcare and trained, skilled workers to provide it. The shortage will only get worse. The industry as a whole, and hospitals especially, need to partner more with schools to encourage students, beginning in the eighth or ninth grades, to expose our youngsters to the great career opportunities that healthcare can provide for many years to come. Experiences such as school visits, site visits, job shadowing and internships would be a great way to start.”

— Mary Lynn Kinley
Fairfield Memorial Hospital

Solid Core

Careers in healthcare require a solid academic foundation. Below are the core courses you will need in order to succeed.

Science: Biology, chemistry, and the other sciences underlie the day-to-day delivery of quality healthcare.

Math: Healthcare careers require a solid foundation in math. In critical procedures such as surgery, numbers can make the difference between life and death.

English: Healthcare delivery is a team effort. Communications mastery is necessary to coordinate the effort and make it work.

Social Studies/History: Healthcare has both a past and a geography. In order to understand healthcare, you must understand social studies as well.

Foreign Language: Advances in medical science occur worldwide and are reported in all languages. The best healers cross language barriers with ease.

Health Informatics

Overview

Careers in the health informatics major include various levels of healthcare related employment. This major includes health-care administrators who manage healthcare agencies, people who are responsible for managing all of the patient data and information, financial information, and computer applications related to healthcare processes and procedures.

Sample Occupations

Admitting Clerk
Data Analyst
Healthcare Administrator
Health Information Coder
Medical Biller
Medical Information Technologist
Medical Librarian
Medical Records
Reimbursement Specialist
Transcriptionist

Credentials

Some health informatics careers require an associate or bachelor's degree in computer science; however, many of these careers simply require on-the-job training and/or certification.

Employment Outlook

Based on an increasing reliance on electronic information, the demand for these workers will remain high through 2020. Many career opportunities are available throughout the healthcare system.

Medical Records

Medical records professionals have the knowledge and skills to process, analyze and distribute healthcare information needed by the patients and healthcare facility. A medical record serves as a means of communication among all members of the healthcare team including doctors, nurses, technicians and others.

Information from medical records is also used in tracking disease patterns, providing information for health research, evaluating the quality of care, and evaluating insurance claims. Data from medical records assists healthcare facilities in evaluating the types of services they should offer and project future patient volume and treatment needs.

Educational requirements

Vary from on-the-job training to a four-year bachelor's degree.

Other Options Related To Medical Records

Health Information Administrator—
four-year bachelor's degree or
post-graduate certificate
Medical Records Technicians—
two-year associate's degree
Medical Records Clerk, Coder,
and Medical Transcriptionist—
high school diploma
plus brief technical training

“Being a male nurse in a profession dominated by women has been very rewarding, and at times as a male I almost feel like I am a pioneer exploring new territory. Because the field of nursing is so broad, there are many avenues of career fields from which one can choose.”

*—David Blackmon, RN, BSN
Fairfield Memorial Hospital*

Support Services

Overview

Careers in the support services major provide a therapeutic environment for the delivery of healthcare. Support services offers a full range of career opportunities from entry-level to management, including technical and professional careers.

Sample Occupations

Biomedical/Clinical Engineer
Central Services Technician
Dietary Technician
Environmental Services Technician
Hospital Maintenance Engineer
Materials Management Technician

Credentials

Support services careers have workers at varying levels of education. Some may require an associate or bachelor of science degree. Most offer extensive on-the-job training, and there is opportunity to gain job-related experience to advance in a support services career.

Employment Outlook

Job growth is projected for careers in this major as the healthcare industry expands. The demand for entry-level workers, qualified managers and supervisors will provide numerous job opportunities.

Dietary Technicians

Dietary technicians perform the initial patient screen that determines the nutritional status of patients. They are specialists in food service management whose work can include menu planning, procurement of food and supplies, and employee supervision. The demand is growing rapidly as hospitals, long-term care and assisted living facilities and schools, seek qualified, caring dietary technicians. A dietary technician typically works as a member of the food service or healthcare team under the supervision of a registered dietitian.

Educational requirements

Two-year associate's degree

Critical Needs Areas in the Midlands

Home Health Worker
Medical Lab Technology
Medical Social Worker
Nursing
Occupational Therapy
Pharmacy
Physical Therapy
Radiology
Respiratory Therapy
Surgical Technology

As reported by Lexington Medical Center, Palmetto Health, Sisters of Charity Providence Hospitals and Fairfield Memorial Hospital.



Photo provided by Fairfield Memorial Hospital.

Biotechnology Research and Development

Overview

Careers in the biotechnology research and development major involve bioscience research and development as it applies to human health. These scientists study diseases to discover new treatments or invent medical devices used to directly assist patients or to improve the accuracy of diagnostic tests.

Sample Occupations

Bioinformatics Specialist
Biostatistician
Microbiologist
Molecular Biologist
Pharmacist
Research Assistant
Biotechnology Laboratory Technician—
certificate program

Credentials

Most entry-level careers in biotechnology research and development require a master's degree. Few certifications or licensures are required for these careers.

Employment Outlook

Based on advancements in biotechnology, the need for skilled professionals in this major will grow rapidly. Most career opportunities in this major are available in universities, research institutions, government agencies, specialty laboratory facilities and major health organizations.

Pharmacy

Pharmacists are experts on medicines and their use in diagnosing, curing, treating, preventing or easing the symptoms of disease and health problems. As a resource of information for doctors, nurses, and patients about medications and their use, pharmacists must remain aware of the latest developments in drug therapy. It is vital that pharmacists understand the chemical make-up of medications available.

Pharmacists work in a variety of clinical settings, where they prepare and dispense prescribed medications, including injections and intravenous solutions. They advise the medical staff on the proper selection and use of the medicine and the effects they might have on the patient. Pharmacists evaluate the quality of drugs and ensure that overdoses have not been prescribed or that toxic effects will not result from combining ingredients.

Educational requirements

Six-year pharmacy degree. Pharmacists must also pass a state licensure examination.

Careers Related To Pharmacy

Pharmacy Technician—
one-year certificate program
Pharmacy Aide/Clerk—
high school diploma plus two-three months on-the-job training or completion of a pharmacy technician program
Pharmacy technicians, aides, and clerks work under the supervision of the pharmacist.



Healthcare Career Average Salaries in South Carolina

Occupation	Average Salary
Athletic Trainer	\$43,790
Audiologist	\$64,910
Chiropractor.....	\$69,790
Dental Assistant	\$31,410
Dental Hygienist	\$51,360
Dentist	\$138,290
Emergency Medical Technician	\$29,980
Home Health Aide.....	\$18,580
Licensed Practical Nurse	\$35,860
Medical Assistant.....	\$26,740
Medical Records Technician	\$27,350
Medical Technologist.....	\$35,460
Nuclear Medical Technologist.....	\$61,810
Occupational Therapist	\$59,760
Optician.....	\$30,230
Pharmacist	\$98,540
Physical Therapist	\$70,810
Physical Therapist Assistant	\$46,170
Physician	\$155,330
Physician Assistant	\$73,450
Radiation Therapist.....	\$63,060
Radiologic Technologist.....	\$48,010
Registered Nurse	\$55,820
Respiratory Therapist.....	\$45,460
Veterinarian	\$75,060

Education majors will also vary depending on your career ladder plan.

Salary figures do not include potential overtime or benefits package.

Source: U.S. Dept. of Labor, South Carolina Wage Estimates, www.bls.gov.

For the most up-to-date salary information, visit www.bls.gov.

Resources



www.mebasc.com

American Careers
www.carcom.com

American Dental Association
www.ada.org

American Medical Association
www.ama-assn.org

American Nurses Credentialing Center
www.nursecredentialing.org

Association of American Medical Colleges
www.aamc.org

Health Occupations Students of America
www.schosa.org www.hosa.org

Keirsey Temperament Sorter
www.keirsey.com

Kuder Career Planning Systems
www.sc.kuder.com

Midlands Technical College
www.midlandstech.edu

National Consortium of Health Science and Technology Education
www.nchste.org

South Carolina Department of Education
www.ed.sc.gov/agency/offices/cate/health_sciences

South Carolina Hospital Association
www.scha.org
www.besomethingamazing.com

South Carolina Occupational Information System
www.scois.org

South Carolina Technical Colleges
www.scteched.tec.sc.us

States' Career Clusters
www.careerclusters.org

U.S. Bureau of Health Professions
www.bhpr.hrsa.gov

U.S. Bureau of Labor Statistics
www.bls.gov

Midlands Education and Business Alliance does not discriminate on the basis of race, color, national origin, sex or disability in admission to or employment in its programs and activities.

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