North Carolina Health Careers
[1990-]

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North Carolina
HEALTH CAREERS

2004-2006

Now in its seventh edition, this manual is valued highly for its thoroughness, accuracy, and wide range of helpful information for North Carolinians investigating career options in the health sciences.

AHEC

Featuring...
90 Career Descriptions, Educational Programs, Financial Aid Information, Academic Requirements, Employment Information, Salary Ranges, Health Care Trends, and much more...
North Carolina Area Health Education Centers (AHECs) are located across the state and provide community-based education for health care professionals. There are nine centers in the NC AHEC Program and each serves a multi-county region. The AHEC mission is to meet the primary health care needs of North Carolina by improving the supply, distribution, and quality of health care professionals.

AHECs are vitally important in the education and careers of health care workers. An AHEC might help a student interested in health occupations find enrichment activities and educational programs before high school graduation. Once the student enters a college or university, AHEC provides support for community-based student training. Health professionals working in North Carolina depend on their AHECs for continuing education and access to first-rate library and information services. AHECs even offer off-campus educational programs in smaller communities so health care professionals can continue to work while they earn advanced degrees.

To help you as you consider your career in health care, each AHEC has a director for Health Careers and Workforce Diversity activities. This director develops programs and activities targeting students and others interested in pursuing a profession in health care. Production and distribution of this health careers manual is only one of the activities of the AHEC Health Careers staff. AHECs offer enrichment programs, student counseling, volunteer and mentoring activity coordination, and access to an expansive library of health career educational resources. For more information on these programs, we urge you to contact your regional AHEC Health Careers Workforce Diversity director.

Based at the University of North Carolina at Chapel Hill, the North Carolina AHEC Program is affiliated with all the health science schools in the state. The AHEC Program provides continuing education opportunities and information services to health professionals through nine regional centers. For more information about the program, contact the AHEC nearest you.
North Carolina AHEC Program

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North Carolina Health Careers Website
www.nchealthcareers.com

This edition of the NC Health Careers Manual may also be accessed on the World Wide Web. If you need help locating or navigating through our Website, consult your librarian or media center specialist.
Acknowledgments

The North Carolina AHEC Program is pleased to present the seventh edition of North Carolina Health Careers. In this edition, you will find the latest information about educational requirements for health careers, North Carolina schools that offer health care programs, updated information for entering health professions, and much more.

This manual is, however, only one of the many resources available to you through the NC AHEC Program. If you are considering a career in health care, I encourage you to contact the AHEC regional center that serves your county. The director of Health Careers and Workforce Diversity at that site can help arrange a visit to a health care facility or introduce you to a working professional in your field of interest. If you are a teacher or counselor and would like to plan an educational program or request additional copies of this book, please contact your AHEC.

On behalf of the NC AHEC Program, I would like to thank the directors and staff of the nine AHEC centers for their efforts in distributing this publication. With their help, as well as the help of the NC Department of Public Instruction and the NC Community College System, we are able to offer this much needed resource to key agencies and individuals who share our goal of better informing North Carolina students of health career opportunities.

I must also thank the National Health Council for permission to use as a resource the career descriptions from their publication 300 Ways to Put Your Talent to Work in the Health Field and the US Department of Labor for information found in their Occupational Outlook Handbook.

The financial aid section was contributed by College Foundation of North Carolina (CFNC). The information and tools available to students through CFNC create a comprehensive resource for students which makes planning, applying, and paying for college easier than it has ever been.

Finally, to the dozens of expert readers, photographers, and the many professionals who appear in our photos—thank you.

Thomas J. Bacon, DrPH
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Contributing photographers include Dan Crawford, Carol Douglas, Phyllis Farlow, McKenzie & Dickerson, Maurice Noble, Joe Rubino, Dan Sears, and Anne-Marie Sullivan.
This manual covers 90 health occupations, grouping related careers under 18 separate sections. Each career page provides the following information:

- Career Title
- Photo
- Job Description

Areas of Specialization

Work Environment

High School Preparation

Academic Requirements

Salary Range

- Educational Programs available in North Carolina

We suggest you browse through the manual to get an overview of the many health professions available in North Carolina. Read the career pages that interest you to get an idea of what it takes to enter those fields, and the colleges and universities offering the education you will need. In the back of the manual you’ll find more information such as:

- Educational Programs & Locating Maps (addresses, degrees offered, contact information)
- Financial Aid Information
- Contact Information for: North Carolina Hospitals, Health Professional Associations

Your education and career planning is an ongoing process. For the young and older adult population, it is important to assess personal goals and professional growth regularly. The worker in transition has different needs from the young adult student looking to launch a first career, and they each face a different set of issues.

The NC Health Careers Manual is a great place to start if you are looking for a job in health care, but keep in mind as you read through that there are other health professions, as well as resources and educational institutions outside of this state.

If you are in middle or high school, check out "Vital Signs for Navigating Your Future" and the "From High School to Health Care: Helping You Find Your Way" section. If you are changing careers or updating your skills for a new workplace, you can use this book to find out more about careers which interest you and what the next steps are in becoming a health professional.

Good luck, and remember...
Education is life long!
One way to find out if a health career may be for you is by participating in the "Exploring" program of the Boy Scouts of America (BSA).

"Exploring" is a program of the young adult (boys and girls) division of BSA, designed to help community organizations serve the career aspirations of young people.

One of the activities it undertakes each year is the establishment of Medical Explorer Posts throughout the state and country. These posts comprise a variety of joint projects involving medical schools, hospitals, nursing homes, and other health institutions. As an Explorer, you get to work closely with professionals in their work environments, assisting and/or accompanying them in their tasks. You can gain invaluable hands-on experience which is not only fun, but also challenging, exciting, and worthwhile. For more information about Medical Explorer Posts, contact your local BSA council.
Questions & Answers

Q: Health care professionals – are there more than just doctors and nurses?
A: Yes! The health care professionals you are probably most familiar with are doctors and nurses. But there are many other kinds of health care professionals, such as pharmacists, medical technologists, dentists, psychologists, and medical illustrators, to name but a few. Even in a well known health care field like nursing, there are many specialty areas that may be new to you. This guide will give you an overview of many different specialties.

Q: What are the positive aspects of a career in health care?
A: There are many. Currently and in the foreseeable future, the demand for health care professionals is growing, so job availability and mobility are very good. Helping others is the big “plus” – most of us like to feel that we can have an impact on the lives of others. Health care professionals contribute to the quality of our lives, help us when we are sick, troubled, or injured, and work to improve our communities.

Q: What about the negative aspects of health care? Hard work, long hours, catching a disease?
A: Health care professionals do work hard. They are dedicated people who take their responsibilities seriously – they have to, because they are caring for people’s lives. Health care has some risks, but even where they exist there are many precautions taken to keep risk to a minimum. In fact, safety is a very important part of your training as a health care professional.

Q: How can a health care professional help protect the environment?
A: Several health fields are directly connected with environmental protection. Environmental health specialists, for example, are employed in all of North Carolina’s public health departments to test water and soil, and inspect restaurants and swimming pools. Environmental scientists, occupational health and safety specialists, and research scientists study ways that our natural and work environments affect health.

Q: I’ve been out of school awhile but want to change directions, and there are several health careers that interest me. Is it too late?
A: No, it’s certainly not too late. Many adults become “career-changers,” moving to new career paths because their interests have changed or they need new opportunities to get ahead in life. Use this manual to select some options, and contact the educational programs and professional associations listed to find out what you need to do to enter a program. You may need to take some preliminary courses, but the chances are you could begin your new educational program without too much “backtracking.” Some educational programs have evening or weekend classes for people who want to go back to school while they work. Some even have day care programs for parents who come back to school.

Q: I’m in middle school. Should I be thinking about a health career now?
A: It’s a great time to start. As you browse through this guide, you’ll see that a good academic background is important. A well-rounded course load is recommended, including the math and science courses your school offers. Even if you change your mind later about entering a health career, it’s never a bad idea to learn as much as you can about science and math. To get a feel for what it’s like to work in a health care setting, look into volunteer opportunities as well as health careers shadowing programs. Contact your AHEC or speak to your school counselor right away to help you plan accordingly.

Q: I’m not comfortable around sick people. How could I be a health care professional?
A: There are health care occupations that do not involve a lot of personal contact. Research scientists, medical illustrators, scientific writers, optical laboratory mechanics, health physicists, and biostatisticians are examples of these. If you choose a career that does involve direct interaction, your training will prepare you for contact with sick or injured people. The satisfaction of using your special knowledge to help them will override your initial discomfort. After all, it’s the unknown that is scary, so the more you know about what you are doing, the more comfortable and confident you will feel.
Vital Signs for Navigating Your Future

Build your confidence and expand your options by researching the health professions that interest you. Here are some ideas to get you started.

1. Talk to people who are working in a health profession. Ask them why they chose this field, what they do, and how they like their work.

2. Volunteer in a nursing home, doctor's office, hospital, or on a faculty member's research project at a local college or university.

3. Read more about careers in the health profession you are interested in on the Internet or at your local library.

4. Read professional magazines and publications in the field that interests you.

5. Find out what events you can attend in the community and on local community college and university campuses. Some community colleges and universities have organizations for students interested in different health professions. Campus organizations often sponsor lectures, workshops, other educational programs, and opportunities to volunteer in a health profession.

6. Attend meetings of regional, state, or national professional organizations where professionals and students in the field present papers and discuss important issues. Student volunteers are often recruited to help at these meetings in return for free registration. The journals and newsletters of these organizations include calendars of such events.

7. Get more information from government agencies such as the Health Resources and Services Administration and the US Department of Health and Human Services which publish a variety of interesting profiles and other information about health careers.

8. Write or call some of the national professional organizations.

9. Take an introductory course in the field in which you are interested.

10. Contact your local Area Health Education Center to get more information on different health careers.
YOU PROBABLY HEAR A LOT ABOUT HEALTH CARE in the news or even in family conversations. Access to well-trained providers is important to communities and the cost of that care is a huge concern to everyone. Once you understand what's going on in the health care industry, you can predict where the jobs will be when you are ready. There are several issues that impact North Carolina's health professionals, and many of these are national trends, as well.

The Health Care Professional
Recent statistics show health care workers are in demand. So, what does it take to get these good jobs? The typical health care professional has on-the-job experience, a compatible educational background, and a willingness to participate in ongoing education. They are prepared to put in long hours when a crisis occurs, which can be quite often. Health care providers who work with patients are compassionate, service-oriented, and empathetic. Flexibility and good judgment are also crucial characteristics for the health care worker.

Financial strains and managed care are redefining the job responsibilities of some health professionals. It's common now for health care providers to develop multiple skills and work with interdisciplinary treatment teams to provide the best care at the most efficient cost. In addition, physician assistants and nurse practitioners are taking more responsibility for patient care and extending physician resources. Multi-skilled workers and midlevel practitioners can expect a booming job market.

The Patient
The population in North Carolina is changing dramatically. People are living longer, sometimes well into their 80s and 90s. Our state is also a popular place for retirement. The elderly population is typically a group with greater than average health care needs. As their numbers increase, so does the demand for health services—especially for home health care, nursing, and personal care. Registered nurses, certified nursing assistants, physical therapists, occupational therapists, social workers, and other health professionals trained in geriatrics are needed to meet this demand.

Our state's rising Latino population is another major demographic trend affecting health care in the 21st century. Many hospitals, health departments, and individual practitioners are struggling now to overcome language barriers with their Spanish-speaking patients and are hiring medical translators to improve communication. In your career as a health professional, your familiarity with Spanish and other cultures and languages will increase your value to your employer, your community, and most importantly, to your patients.

Patients are also becoming more informed consumers of health care. With greater use of the Internet and other sources of media, like television and magazines, patients know more about illnesses and treatments than ever before. It is not uncommon for a patient to go to a medical provider with a diagnosis and treatment plan in mind. Sometimes the patient is right in their research, and sometimes the information they have is misleading. Health care professionals must work with the patient to assess their needs and provide the best treatment plan possible.

Alternative and Complementary Medicine
Patients are taking more and more personal responsibility for their health. Along with this development, less traditional health care methods are becoming more popular with patients and more widely used among health care professionals. Alternative and complementary medicine may be used in addition to traditional treatments. Patients may investigate a variety of treatments such as acupuncture, stress management, homeopathic remedies, or massage therapy.

New Technology
Advances in technology change health care for the patient, the provider, and the industry. Technology puts information at the fingertips of practitioners and
patients, improves treatment options, and changes the way practitioners are educated. Thanks to special TeleHealth computer terminals, some patients receive care without having to leave their homes, regardless of their distance from a hospital.

Advances in medical technology continue to improve the survival rate of severely ill and injured patients who need extensive therapy. New technologies often lower the cost of treatment and diagnosis, and also enable identification and treatment of conditions not previously treatable.

**Insurance and Health Care Financing**

In North Carolina, we have access to some of the best health care in the nation. We also have many people who have no insurance or can’t afford to pay for the care that’s available. Health care is expensive for everyone and controlling cost in the industry is important.

According to the latest data from the U.S. Census Bureau, 43.6 million U.S. residents lacked health care insurance coverage in 2002. This number represents 15.2 percent of all Americans. Surprising to some, young adults, ages 18-24, were the most likely to be uninsured. Because individuals in this age range tend to be healthy, they are less likely to purchase health insurance or seek out jobs that offer health insurance coverage.

With the growing financial problems of high malpractice insurance and the rising costs of health care and prescription drugs, the United States must face a challenge with no clear or agreeable solution in the near future. Currently, there is a large debate among state and national legislatures on the subject of a nationalized health care plan, also referred to as universal health care. Universal health care would designate a single entity (probably the federal government) to function as the primary purchaser of health care services. All individuals would be covered under the health care system, regardless of income. However, legislatures have not agreed that a universal health care plan is the most effective solution for the nation.

In the meantime, there are growing trends to provide services on an outpatient, ambulatory basis; to limit unnecessary or low priority services; and to emphasize preventative care that reduces the eventual cost of untreated conditions. As insurance agencies, health maintenance organizations, and government programs like Medicare and Medicaid strive to manage the cost of health care, jobs for medical coding specialists and health service administrators become more prevalent.

**HIPAA**

Recent personal privacy legislation affected every health care practice and patient in the United States. The Health Insurance Portability and Accountability Act (HIPAA) provides federal government standards and requirements for maintaining and transmitting health information. It defines and protects any information that identifies a patient. All health care and insurance providers must comply with HIPAA which requires them to protect the confidentiality of a patient’s health information. For example, your medical records cannot be released to anyone without written permission.

**20 Fastest Growing Health Occupations in North Carolina**

Cardiovascular Technologist
Certified Nursing Assistant
Clinical Laboratory Scientist
Dentist
Health Information Technician
Medical Assistant
Medical Coding Specialist

Medical Laboratory Technician
Medical Scientist
Mental Health Technician
Pharmacist
Physician Assistant
Psychological Associate
Radiation Technologist

Registered Nurse
Respiratory Care Practitioner
Speech-Language Pathologist
Speech-Language Pathology Assistant
Substance Abuse Counselor
Surgical Technologist
Si puedes leer este párrafo demostrarás que tienes las habilidades bilingües necesarias para tener éxito como profesional en el área de la salud. El ser bilingüe te ayudará a responder a las necesidades de los pacientes que hablen inglés y español, por lo tanto, serás un profesional de mucho valor no solo para tus pacientes, sino para tus empleadores, compañeros de trabajo y para tu comunidad.

If you speak only English, then consider learning another language and work to improve your cultural competence. Begin by exploring your own community and the beliefs and traditions that impact people and their health. North Carolina’s population is changing, and you will want to prepare yourself to become the best health care provider you can be.

“'You certainly can’t provide therapy with an interpreter, so if you don’t speak the language, you can’t offer treatment.”’
- Psychotherapist and Clinical Social Worker

The Facts

Our state has experienced an extraordinary growth in foreign-born populations in the last two decades. Newcomers are from different backgrounds: from refugees and asylum-seekers, to migrants driven by employment opportunities in key industries. In NC public schools, there are more than 150 languages spoken in the classrooms (NC DPI).

Latinos are the fastest growing population in North Carolina. Raleigh, Charlotte, and Greensboro are among the top five cities in the US with the highest growth of Latino population since 1980 (US Census Bureau 2000). Although the Latino population represents only about 5% of NC’s total population, it is expected that by 2018, one out of four NC high school graduates will be of Latino descent (WICHE). These trends create a need for future professionals in many fields, especially in service industries like health care, education, and government.

“There may be some nuance to a problem – say a child is not eating normally – and five adults are all trying to explain. I don’t get it, and the family knows I don’t understand. I can’t figure out what they are trying to tell me. It’s frustrating for everyone.”
- Pediatrician

Job Availability and Trends

Title VI of the Civil Rights Act of 1964 has provisions to ensure that language is not a barrier to accessing federally-funded programs such as services provided by public hospitals and health care agencies. According to Title VI, each state has an obligation to provide patients with health care that is linguistically and culturally appropriate. When you become a health care professional, communicating with patients and considering all the factors that affect their health will be an important part of your job.

Your Future in Health Care

Careers in health care will continue to be in demand over the next twenty years. Regardless of financial markets, we know the population in North Carolina is growing and people are living longer. There are jobs in the health care industry to suit a variety of personal
“Reawakening and further developing my high school Spanish has been one of the most gratifying things I’ve done to enhance my practice of medicine. Working to become proficient in another language has helped me better understand the difficulties facing those trying to learn English.

“I always encourage Spanish-speaking students to maintain their Spanish language skills, believing that there will be many opportunities for those fluent in both languages in the coming years. I encourage those planning careers in health care to learn Spanish, because there are many opportunities to use this language in patient care in the US.”

-Wayne A. Hale, MD, MS

interests, and there are lots of careers other than medicine or nursing. Going into a health field doesn’t necessarily mean you’re headed for medical school; there are educational programs for well-respected, highly-demanded, and exciting careers that can meet anyone’s needs.

A four-year university program may be right for you. If something closer to home suits you better, the NC Community College System offers many educational programs that allow you to live at home, save money, and prepare for a career in about two years. Some students who complete community college programs go on to take additional courses to advance their careers, moving up the ladder in education and career responsibility.

Financial Aid
As North Carolina’s population becomes more diverse, so does the student body of many colleges and universities across the state. Admission to programs becomes more competitive each year, while institutions of higher education look for students who can bring more diversity to their campus. Financial aid has become more competitive as well, because funders are seeking diverse recipients. There are several financial aid organizations that provide loans, scholarships, and grants to minority and underrepresented students, who in many cases are native speakers of a language other than English.

The following are national and statewide organizations that provide college and financial aid information for Latino students:

- www.thencshp.org
  The North Carolina Latino College Fund
- www.hacu.net
  The Latino Association of Colleges and Universities
- www.hsf.net
  The Latino Scholarship Fund
- www.LatinoFund.org
  The Latino College Fund
- www.elpueblo.org
  El Pueblo, Inc.
- www.saf-unite.org
  Student Action with Farmworkers

The College Foundation of North Carolina (www.CFNC.org) provides students, parents and educators with a wide range of information, varying from scholarships, to loans, grants and saving options. For those students and parents whose native language is Spanish, www.CFNC.org en Español provides comprehensive information about how the college-planning process works, including academic planning, college and career search and financial aid information. The CFNC also has a call center and printed publications (in English and Spanish) available.

“The greatest reward is the relief of anxiety people feel when I walk into the room and address them in their native language.”

-Medical Interpreter

www.nchealthcareers.com
Community College Experience

How many community colleges are there in North Carolina?
Fifty-eight community colleges and one specialized technology center serve all 100 counties in NC.

How much does it cost to attend a community college?
Tuition for full-time students is about $550 per semester, plus fees, books, transportation, and living expenses.

Is financial aid available for students?
Yes! Contact your local community college financial aid office. Counselors there will assist you in identifying all types of aid available to you depending on your financial situation. The College Foundation of North Carolina website (www.cfnc.org) is another great place to explore your options for paying for your education. Visit their site, and check out the information they provide in the financial aid section of this manual.

What education does a community college provide?
Community colleges provide technical preparation in many fields. Currently, there are 50 health science programs offered by the NC Community College System. Currently, there are about 780,000 students in the community college system.

NC community colleges also offer a number of programs that enable students to enroll in courses while they are still in high school. This allows exceptional high school students to get a head start on their higher education.

Will community college credits transfer to four-year university programs?
Community colleges are a great first step on the pathway to higher education. Many community colleges have articulation agreements with nearby four-year institutions, meaning if you work closely with your community college guidance counselor on your academic plan, your credits should transfer to the four-year college, and you should experience a seamless transition. Studies show that students who transfer from community colleges do as well, if not better, than students who begin their academic careers at four-year colleges. Contact your local community college for more details.

I just need a few classes to upgrade my skills to get a new job or get a promotion at work.

What does a community college have to offer me?
Community colleges offer excellent instruction, low tuition, and flexible scheduling. Nearly 50 percent of community college students work full time, so naturally the colleges offer courses at times that are convenient for those students. An added bonus is that community colleges employ a great deal of adjunct professors—professionals who bring real world experience to the classroom.

If I’m a student at a community college, where do I live?
Many community colleges are located close to students’ homes, so students usually live off-campus and commute to the college they attend. As online learning develops, some students find they can complete courses or programs without commuting to campus.

How can I enrich my educational experience with student involvement activities?
There are many student organizations that you can join at community colleges. They range from clubs and volunteer organizations to professional associations and are a great way to meet people and be active in the community.
How many colleges and universities are there in North Carolina?
The University of North Carolina system has 16 campuses – Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, NC A&T State University, NC Central University, NC School of the Arts, NC State University, UNC-Asheville, UNC-Chapel Hill, UNC-Charlotte, UNC-Greensboro, UNC-Pembroke, UNC-Wilmington, Western Carolina University, and Winston-Salem State University. There are an additional 37 independent, private colleges and universities in North Carolina.

How much does it cost to attend?
The cost of an education can vary widely depending on the type of school and the program of study. The 16 campuses of the UNC system receive state support, and therefore have lower tuition than most private colleges and universities. On UNC campuses, tuition and fees run between about $1,750 to $3,500 a year, plus books, transportation, and living expenses. At private colleges and universities, tuition and fees vary between $6,000 and $27,000 a year, plus books, transportation, and living expenses. While fees are lower at public institutions, the private colleges and universities may offer students access to more financial aid resources.

Is financial aid available for students?
Yes! Most people cannot afford to pay for the full cost of higher education. Financial aid programs are available to help you. Scholarships, grants, work-study, and loans are all types of financial aid – some of which you may receive if you complete the necessary applications. Contact the specific university's financial aid office. Counselors there can assist you in identifying all types of aid available to you depending on your financial situation. The College Foundation of North Carolina website (www.cfnc.org) is another great place to explore your options for paying for your education. Visit their site and check out the information they provide in the financial aid section of this manual.

What educational programs do four-year universities and colleges offer?
North Carolina public and private college and university campuses collectively offer more than 200 degree programs and enroll more than 245,000 students. Programs include an array of distinguished liberal arts and professional degree programs.

Where do most four-year university students live while in school?
Many colleges and universities offer residence halls or dormitories where students may live on campus. Some students spend at least part of their four years in off-campus houses or apartments, and some students choose to commute from home. As online learning develops, some students find they can complete courses or programs without commuting to campus.

Are there ways I can enrich my university experience through community involvement?
There are many student organizations that you can join at universities. They range from clubs and volunteer organizations to professional associations and are a great way to meet people and be active in the community.
Many health professionals receive their training and education through the United States Military. Because all job specialties within the military have parallels in civilian life, the training provided in the military is the foundation for many people’s lifelong careers.

The military consists of five armed forces: the Air Force, the Army, the Coast Guard, the Marine Corps and the Navy. Everyone enters the military as either an enlistee or an officer. A high school education usually is required for an enlistee, while a college degree is necessary for an officer.

General requirements are that a person be between the ages of 17 and 35, have good health, be a U.S. citizen or legal alien, and have good moral character. A person also must achieve at least the minimum entry score on the Armed Services Vocational Aptitude Battery (ASVAB). Other requirements vary depending on the branch of the military selected.

Direct Appointments:
Because of the increased need for military personnel in medicine and allied health careers, qualified professionals may receive direct appointments as commissioned officers without attending a military academy, officer candidate school, or a college Reserve Officers’ Training Corps (ROTC) program.

Financial Aid:
Each service branch has financial aid programs for students to train in certain health professionals before entering active duty. Scholarships typically cover up to $17,000 per year for tuition, plus monthly stipends while in school. In return for this assistance, graduates must serve as active duty officers for a specified number of years, ranging from three to eight.

Education Benefits:
The opportunity for higher education is a very attractive military service benefit. Training and duty programs allow service personnel to increase their abilities and achieve advancement. Time and monetary allowances are given. Each branch has special educational programs in addition to the ones listed below that are available to active-duty personnel.

- Tuition Assistance Programs support any college-level, off-duty study at an accredited school. Up to 100% of tuition and fees will be paid each semester.

- Service members’ Opportunity College allows personnel to take courses at a number of different colleges or technical schools while earning degree credits at a single school. Credit also can be earned for certain military training courses. This accommodates personnel who move frequently.

- Defense Activity for Non-Traditional Education Support is a support service that administers examinations, including the College Level Examination Program, the SAT, and the GED test. The service also supports independent study programs offered at military bases.
Health Career Opportunities in the Military

Health Professions Scholarship Program:
The F. Edward Hebert Armed Forces Health Professions Scholarship Program provides scholarships and/or financial aid for dental, optometry, medical, veterinary, and osteopathic students, as well as graduate students in nurse anesthesia programs. Approximately 300 scholarships are offered each year. Each branch of the service has its own specific application criteria.

To be candidates for this scholarship program, individuals must either be accepted into the next entering class or be currently enrolled in an accredited institution in the United States or Puerto Rico. Candidates also must be U.S. citizens.

The scholarship’s benefits include:

- Full payment of tuition and fees.
- Reimbursement for books, equipment and supplies.
- 45 days of active duty with pay for each year of training.
- Monthly stipends while not on active duty.

Military Contacts

For information about health professions, scholarships and loans:

Health Professions
North and South Carolina
4030 Wake Forest Road - Suite 205
Raleigh, NC 27609
(919) 850-9471
www.airforce.com

Health Professions
Reserves: (919) 834-6461
Active Duty: (919) 873-1284
www.navyjobs.com

U.S. Army Healthcare Recruiting
3117 Poplarwood Ct., Suite 218
Raleigh, NC 27604
(919) 872-3357
www.armyrotc.com
www.goarmy.com
Since 1990, the NC AHEC Program and the North Carolina Health Careers Access Program (NC-HCAP) have collaborated on several projects to increase the presence of underrepresented minorities in the health professions. An interinstitutional program of the University of North Carolina system, NC-HCAP’s mission is to increase the number of individuals from disadvantaged backgrounds who are trained, educated and employed in the health professions.

NC-HCAP does this by:

• increasing awareness of career opportunities in the health professions
• cultivating interests in pursuit of health professions
• enhancing opportunities to gain access to formal training and educational programs in the health professions; and,
• increasing the probability of success in completing formal training and educational programs in the health professions.

Since 1971, NC-HCAP has served thousands of students, administrators, practitioners, health professionals, advisors, health professions programs, community health agencies, and local Area Health Education Centers (AHECs). Today, NC-HCAP continues to develop innovative ways to serve our students and to contribute to the overall health and well-being of North Carolina’s citizens.

Each year, NC-HCAP sponsors a variety of pre-college and undergraduate programs and activities throughout the state to promote careers in the health professions. From workshops to summer programs to open-house forums to lectures by prominent health professionals, the program provides a wide range of opportunities for students to explore, research, and become involved in the health care field.

FOR PRE-COLLEGE STUDENTS/PARENTS:

Health Careers Information and Enrichment (HCIE) Workshops
The HCIE Workshop is a hands-on outreach program for disadvantaged students at the upper elementary, middle, and high school levels (grades 5 - 12). Highly interactive, these two-hour workshops focus on small group and cooperative learning activities and are designed to increase the interest, motivation, and number of disadvantaged students considering careers in the health professions. HCIE Workshops, educational packages, and related activities provide students with general information about health careers, health career enrichment activities, and health professions schools and educational programs.

Parent Workshops
The Parent Workshop provides parents and guardians of disadvantaged students with strategies and support to help their children develop into caring, engaging adults who are proactive in their personal, educational, and professional pursuits. Workshops are conducted in the community at the Area Health Education Centers (AHECs), public schools, and various community-based organizations.

FOR UNDERGRADUATE STUDENTS:

Science Enrichment Preparation Program
Held each summer on the campus of UNC-Chapel Hill, the Science Enrichment Preparation (SEP) Program is an eight-week, honors-level academic program for disadvantaged undergraduate students (rising sophomores and juniors) who plan to pursue careers in health care. Program participants engage in more than 150 contact hours of rigorous classroom instruction in physics, organic chemistry, human physiology, quantitative skills, and biostatistics. Classes and seminars in reading speed and comprehension, test-taking strategies, essay writing, and interview techniques are woven into the curriculum, along with site visits to area health care and biomedical research facilities.
Health Professions Forum
Conducted at a North Carolina college or university campus once or twice each year, the Health Professions Forum provides disadvantaged undergraduate students with information about the health professions programs available in North Carolina and arranges opportunities for them to talk with current health science graduate students as well as graduate and health professional program representatives.

Inspirational Speakers in Science (ISIS) Lecture Series
Held once each year in conjunction with the Health Professions Forum, the ISIS Lecture Series exposes undergraduate students to prominent minority health professionals and scientists who discuss how they overcame the obstacles often faced by students who are educationally or economically disadvantaged while pursuing their educational and professional goals.

Clinical Health Summer Program
CHSP is a seven-week, full-time summer program geared toward disadvantaged students accepted to or enrolled in a health-related curriculum at Elizabeth City State University, North Carolina Central University, or the University of North Carolina at Pembroke. CHSP consists of full-time clinical experiences in health care agencies and academic enrichment experiences in health care agencies as well as supplementary coursework provided by NC-HCAP Careers Centers.

NC-HCAP Enrichment Seminars
NC-HCAP Enrichment Seminars are a series of seminars targeted at undergraduate students considering careers in the health professions and are held on the campus of UNC-Chapel Hill throughout the fall semester.

NC-HCAP Health Careers Centers are located at the following institutions:

- Elizabeth City State University
  Elizabeth City, NC 27909
  (252) 335-3270

- North Carolina Central University
  Durham, NC 27707
  (919) 530-7128

- University of North Carolina at Chapel Hill
  Chapel Hill, NC 27599
  (919) 966-2264

- University of North Carolina at Pembroke
  Pembroke, NC 28372
  (910) 521-6673

For more information about these and other programs, contact:

NC-HCAP HEALTH CAREERS CENTERS
Based on the campuses of four institutions in the UNC System, NC-HCAP Health Careers Centers identify, motivate, and recruit disadvantaged students for health training and professional health programs. Activities coordinated by the Health Careers Centers strengthen the academic and basic skills backgrounds of these students, as well as identify financial aid resources and provide advocacy for student admission to graduate and health professions schools.

An Interinstitutional Program of the University of North Carolina

North Carolina Health Careers Access Program
University of North Carolina at Chapel Hill
301 Pittsboro Street, Suite 351, CB# 8010
Chapel Hill, NC 27599-8010
(919) 966-2264 (phone)
(919) 966-6109 (fax)
e-mail: nchcap@email.unc.edu
http://nc-hcap.unc.edu
In every hospital, and in many other medical care facilities, there is a modern clinical laboratory where many different kinds of tests are performed to assist doctors in detecting and monitoring a variety of medical conditions and diseases. The laboratory team includes highly trained professionals such as clinical pathologists, medical technologists, histotechnologists and cytotechnologists, to name but a few, each specializing in performing various testing procedures. Examination of blood, other body fluids, and tissues can aid in the detection of a number of conditions, from pregnancy to the presence of alcohol or drugs, as well as diseases such as diabetes and bacterial infections like strep throat. Using advanced methods of testing and evaluation, diseases can be diagnosed and treated in the early stages.

People working in clinical laboratory sciences have numerous options for areas of concentration. Educational requirements range from one year of training after high school to several years of post-doctoral studies, depending on the area of specialization chosen.
Specialists in blood bank technology are medical technologists with advanced training in blood bank techniques such as typing, collection, and transfusion. Specialists in blood bank technology also search for blood irregularities and are responsible for processing, testing, and labeling donor blood. Disease control is a priority for these specialists because they ensure that blood samples are safe for public use and are handled properly. It is important for specialists in blood bank technology to minimize their risk of exposure as they come in direct, daily contact with blood.

Academic Requirements:
Certification as a clinical laboratory scientist (CLS) or medical technologist (MT) is recommended for admission to a program in blood bank technology. An undergraduate degree from an accredited college or university in clinical laboratory science, a biological science, or a physical science is required. The educational program is a minimum of 12 months' duration and covers practical experience in all areas of the blood bank. Upon completion of the program, certification is available through an exam given by the Board of Registry of the American Society of Clinical Pathologists (ASCP).

Work Environment:
Blood bank technologists work with hospital, university, or community blood bank centers, transfusion centers, and laboratories.

Salary Range:
$40,000 - $60,000

Currently there are no Blood Bank Technology Programs in North Carolina. Contact the American Association of Blood Banks to obtain a list of Blood Bank Technology Programs.
Clinical Laboratory Scientist (Medical Technologist)

Areas of Specialization:
- Clinical Chemistry
- Hematology
- Immunohematology
- Immunology
- Microbiology

Work Environment:
Most clinical laboratory scientists work in hospital laboratories. Others are employed by private physicians, public health laboratories, biotechnology companies, medical research facilities, pharmaceutical companies, universities, industrial medical laboratories, crime laboratories, and the military.

Academic Requirements:
Clinical laboratory scientists must complete four years of college including clinical education leading to a baccalaureate degree. Certification exams are voluntary, although most employers prefer certification through one of three agencies: the Board of Registry of the American Society of Clinical Pathologists, the National Certification Agency for Medical Laboratory Personnel or the American Medical Technologists (AMT).

Salary Range:
$33,000 - $46,000

Educational Programs

University-based Programs
East Carolina University
University of North Carolina - Chapel Hill
Winston-Salem State University

Hospital-based Programs
Carolinas College of Health Sciences
Duke University

The following universities and colleges have affiliate programs with at least one of the above programs:
Belmont Abbey College
Bennett College
Campbell University
Catawba College
Elon University

Greensboro College
North Carolina State University
Salem College
University of North Carolina - Charlotte
University of North Carolina - Greensboro

North Carolina Health Careers '04-'06
Gwen Taylor is a clinical laboratory scientist (or medical technologist) with Pitt County Memorial Hospital in Greenville, NC. Gwen grew up in Rowland, a small town in Robeson County, NC. She earned a BS in clinical laboratory science from East Carolina University, and now she works with a team of about 30 in a hematology lab.

"In this job I’m not on the front lines, but I do get to help people."

“I actually started out in nursing at ECU,” Gwen says. “My dad got sick, though, and I realized I liked science and health care, but I didn’t like one-to-one patient care. In this job I’m not on the front lines, but I do get to help people.”

As a clinical laboratory scientist, Gwen performs tests to analyze blood, urine, tissue, or other body specimens using sophisticated laboratory instruments. She provides the test results to the doctor, who uses the data to diagnose illness, develop treatment plans, find out a prognosis, or help the patient maintain good health.

“Hematology is exciting,” Gwen says. “I like what I do.” One thing Gwen appreciates about her job is the variety. There are six benches in the hematology lab, each for a different set of testing. Gwen rotates benches, thereby maintaining her skill level in all areas of the department. “I get to do a lot of different things, but my favorite tests are white blood cell differentials.” That’s where Gwen prepares a blood smear, stains it, and then looks at it under the microscope. This allows her to enumerate and identify the different types of white blood cells and evaluate red blood cells and platelets to help with the diagnosis of many kinds of diseases.

Gwen completes much of her work at the bench independently, but she also interacts with physicians, researchers, and other health care professionals as a very important member of the health care team.

“The work requires a lot of attention to detail in order to keep samples and results organized and accurate,” says Gwen. There are also times when test results require immediate attention. In those cases, the doctor and health care team are depending on the clinical laboratory scientist to call right away with information that may be critical to the patient’s care.

“The work requires a lot of attention to detail in order to keep samples and results organized and accurate.”

Clinical laboratory scientists are in high demand across the state and the nation. They find rewarding careers in hospital laboratories, clinics, the medical examiner’s forensic laboratory, veterinary clinics, and in medical, biotechnology, and industrial research laboratories.
Cytotechnology is the study of cells, the basic units of living tissue. Cytotechnologists (CTs) are specially trained laboratory technologists who study the structure and function of cells in the human body. They prepare slides of cell samples for examination, and must be able to recognize abnormalities in the color, size, shape, makeup, and patterns of the cells. After conducting an initial screening of cell samples, the cytotechnologists’ diagnosis is then confirmed by a pathologist.

**Work Environment:**
Most cytotechnologists work in hospitals, clinics, or private laboratories under the supervision of a pathologist (a physician who specializes in diagnosing the cause or nature of disease). Some work at universities as teachers or researchers.

**High School Preparation:**
Beyond general college preparation, advanced chemistry, biology, and math courses are also recommended.

**Academic Requirements:**
Cytotechnology may be offered as part of a 4-year undergraduate college program, or as a 5th year of training after completing a baccalaureate degree. College biology, chemistry and math courses are required before professional study in cytology begins. Professional course work includes anatomy and the study of normal and abnormal cells occurring in all organs of the body, plus related topics. A national board exam is given after completion of the program.

**Salary Range:**
$41,000 - $55,000

**Educational Programs**

**Certificate Programs**
Central Piedmont Community College
University of North Carolina - Chapel Hill
Histologic technicians (HTs) and technologists (HTLs) are clinical laboratory workers who prepare body tissues for microscopic examination by pathologists (medical doctors specializing in tissue disease). Histologic technicians perform such tasks as sectioning and staining tissues, embedding tissues in paraffin or plastic, preparing frozen sections of tissues directly from the operating room, and operating intricate equipment. Histotechnologists perform all of the tasks of a technician and more complex procedures as well. They may do analyses of sample histochemistry, explore immunological links to disease, prepare samples for electron microscopy, or supervise and teach others. Both careers are vital to the early detection of disease and illness.

**Academic Requirements:**
A certified histotechnologist may have a four-year bachelor's degree in histologic technology or complete a histological technology educational program after college. Histologic technicians complete a 12-month program, usually at a community college offering a diploma, or can complete on-the-job training and then take an examination. Studies for the technologist and technician levels cover medical terminology, chemistry, anatomy, laboratory mathematics, microscopy, and other related topics. Exams given by the American Society of Clinical Pathologists (ASCP) provide certification.

**Work Environment:**
Most histotechnologists and technicians work in the pathology laboratory of a hospital or clinic. This is the department that examines tissues to diagnose disease. Others may work in medical or research laboratories.

**Salary Range:**
- Technologist: $33,000 - $46,000
- Technician: $28,000 - $39,000

**Educational Programs**
No Histological Technology Educational Programs are offered in North Carolina. Contact the National Society for Histotechnology for information on programs in other states.
Medical laboratory technicians (MLTs) are clinical laboratory personnel who perform a variety of tests under the supervision of a medical technologist. They aid in the detection, diagnosis, and treatment of disease and accomplish this through specific tasks, including inoculating culture media, performing microscopic evaluations, and operating high-tech equipment. MLTs perform routine tests in the areas of blood banking, chemistry, hematology, immunology, microbiology, and urinalysis—an experienced MLT will be familiar with all of these areas.

Work Environment:
Most medical laboratory technicians work in hospital laboratories under the supervision of medical technologists. Others are employed by private physicians, public health laboratories, medical research facilities, pharmaceutical companies, universities, industrial medical laboratories, and the armed forces.

Academic Requirements:
Medical or clinical laboratory technicians must have an associate degree from an accredited community college, including clinical education. In addition, certification exams are voluntary, although most employers prefer certification through one of three agencies: the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists, the National Certification Agency for Medical Laboratory Personnel, or by American Medical Technologists.

Salary Range:
$27,000 - $36,000

Educational Programs

**Associate Degree (2 years)**
- Alamance Community College
- Asheville-Buncombe Technical Community College
- Beaufort County Community College
- Central Piedmont Community College
- Coastal Carolina Community College
- Davidson County Community College
- Halifax Community College
- James Sprunt Community College
- Sandhills Community College

**Southeastern Community College**
- Southwestern Community College
- Wake Technical Community College
- Western Piedmont Community College
Pathologists are physicians who receive four or more years of training after medical school in the use of laboratory tests to diagnose and treat disease. The pathologist is usually responsible for the administration of the pathology laboratory and also researches ways to improve disease detection, prevention, cure or treatment. Because of the pathologist's role in explaining and reporting laboratory test results, he or she is sometimes referred to as "the doctor's doctor."

**Areas of Specialization:**
Pathologists can specialize in just about every category of disease, including:
- Blood Banking/Transfusion Medicine
- Medical Microbiology
- Cytopathology
- Hematology
- Forensic Pathology
- Surgical Pathology

**Salary Range:**
$177,000 - $277,000

**Work Environment:**
Most pathologists work in a hospital setting, usually in charge of one or several medical laboratories. Medical schools also attract many pathologists to carry out teaching and research activities. Pathologists also work for independent laboratories and with major medical companies. Forensic pathologists typically work for government agencies to determine the facts about unattended, unexplained, and violent deaths.

**Academic Requirements:**
A pathologist is required to complete college and four years of medical school. Medical school graduates then need 4 to 5 years of residency specialty training in order to be eligible for the American Board of Pathology exams. College students preparing for medical school should take either a "pre-med" track or include substantial course work in mathematics and science (including biology, chemistry and physics). See the "Physician" page for more information.

**Educational Programs**
- Schools of Medicine with Depts. of Pathology
  - Bowman Gray School of Medicine - Wake Forest University
  - Duke University Medical Center
- East Carolina University - Pitt County Memorial Hospital
- University of North Carolina - Chapel Hill
Phlebotomists are specially trained to draw blood samples needed for medical tests and blood donations and to keep careful records of the blood tests. The phlebotomist helps hospitals, clinical laboratories, blood banks, and other health care facilities to ensure that blood samples are taken with safety, accuracy, and efficiency and with the least discomfort to the patient.

**Academic Requirements:**
Training as a phlebotomist takes from a few weeks to several months, depending on the program, and some hospitals offer on-the-job training. Training covers venipuncture skills, communication skills, record-keeping, and the safe care of samples. The phlebotomist may then become certified by passing a national certification examination; there are several national organizations offering certification.

**Salary Range:**
$19,000 - $25,000

**Work Environment:**
Phlebotomists are employed at hospital laboratories, clinics, large medical offices, and private commercial laboratories. Strict precautions to protect against diseases are carefully followed in the practice of phlebotomy.
Today, many patients consider alternatives to traditional medicine when treating health problems. Complementary medicine is based on treatments practiced thousands of years ago, stemming from cultural beliefs of spirituality and healing. These treatments all have one aspect in common – to treat the patient as a whole person rather than treating a specific symptom or symptoms. Complementary medicine is now seen as an accompaniment to conventional medicine, because while conventional medicine treats the specific symptoms or body system, complementary medicine uses methods of healing that treat the complete or whole person.
Acupuncture is the practice of inserting fine needles into specific locations on the body where nerves are centered to stimulate the body’s own natural healing processes. These locations on the body directly affect underlying organs either by releasing endorphins, neurotransmitters, prostaglandins, or by affecting the circulatory and nervous systems. Acupuncture has been used to treat many disorders such as gastrointestinal, gynecological, psychological, respiratory, and disorders of the bones or circulatory system. There is also evidence that acupuncture is effective for postoperative and chemotherapy nausea and vomiting, nausea of pregnancy, and postoperative dental pain. Acupuncture is more than 2,000 years old with origins in Eastern cultures.

Academic Requirements:
Acupuncturists must have graduated from a formal, full-time acupuncture program that meets the accreditation requirement and documentation of at least three academic years. The three years, or 1,725 hours, must meet the curricular requirements of the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM). Acupuncturists can also complete an apprenticeship, at least 4,000 preceptored contact hours in a three- to six-year period, to meet the accreditation requirement. After completing the formal education or apprenticeship, acupuncturists need to obtain certification through the National Certification Commission for Acupuncture and Oriental Medicine and obtain their individual state licensure.

Educational Programs

Jung Tao School of Classical Chinese Medicine
Diploma in Acupuncture program
207 Dale Adams Road
Sugar Grove, NC 28679
Phone: (828) 297-4181
Fax: (828) 297-4171
www.jungtao.edu

Atlantic University of Chinese Medicine
Diploma in Oriental Medicine program
P.O. Box 790
Mars Hill, NC 28754
Phone: (828) 689-1669
Fax: (828) 689-1670
www.aucm.com

North Carolina Health Careers '04-'06
Massage therapists use hands-on manipulation of muscles and other soft tissues of the body to restore health and well-being. Through a wide variety of methods, massage therapy can reduce muscle tension, improve blood flow, increase joint flexibility, assist in the removal of metabolic wastes, and increase oxygen and nutrient flow to every system of the body. In addition, massage may enhance emotional well-being and mental performance through the reduction of stress and anxiety and by promoting a healthy self-image and body awareness. While origins of this practice date back several thousand years, massage therapy is used today to address a range of conditions from orthopedic problems, cancer, and premenstrual syndrome, to the special needs of populations such as the elderly, pregnant women, and athletes.

**Academic Requirements:**
Licensure from the North Carolina Board of Massage and Bodywork Therapy is required to practice. These requirements include:
1. Graduation from board-approved school of massage therapy, with a minimum 500-hour curriculum of massage theory and technique, anatomy, physiology and pathology, business practices, professional ethics, and psychology;
2. Certification by the National Certification Board for Therapeutic Massage and Bodywork (NCBTMB), which is achieved by passing the National Certification Examination in Therapeutic Massage and Bodywork. The Commission on Massage Therapy Accreditation (COMTA) is the only recognized accrediting agency which has established standards specific to massage therapy education.

**Areas of Specialization:**
Massage therapists may specialize in many different areas and types of massage. These include but are not limited to: shiatsu, trigger point work, connective tissue massage, and Swedish massage.

**Work Environment:**
Massage therapists work in private practice, physician's offices, chiropractor's offices, salons and spas, health clubs and fitness centers, nursing homes, hospitals, and in client's homes or businesses.

**Salary Range:**
$20,000 - $50,000
Dentistry offers a variety of rewarding careers in an expanding and exciting field. There are many opportunities in the oral health care delivery system for dentists, dental hygienists, dental assistants, and dental laboratory technicians. Individuals who choose to pursue dental careers are motivated, scientifically curious, and socially conscious. Dental professionals are dedicated to treating people, not just teeth, mouths, or problems in the head and neck area. Members of the dental team interact with people of all ages, cultures, and personalities.

The dental health care team focuses on disease prevention, disease detection, diagnosis, aesthetic improvement, and surgical restoration. In addition to traditional dental practice, careers are available in community health centers and other public health agencies, hospitals, the military and Veterans Administration, and dental product sales. With the many innovative advances in science and technology, stimulating career options also exist in education, dental research, and industry.

Dentistry has a promising future and is a growing health care field. Dental professionals achieve prestige, financial stability, and unlike some workers, actually see their hard work reflected in the smiles of satisfied patients.
Dental assisting offers a number of career options. These positions include clinical assistant, infection control manager, practice manager, preventive assistant, and business/reception assistant. Most dental assistants work closely with the dentist and provide a host of support services. Clinical dental assistants review patient histories, perform blood pressure screenings, take and develop dental radiographs, apply dental sealants, and directly assist the dentist with patient procedures. In addition to chairside procedures, dental assistants are responsible for instrument sterilization and, in many practices, help manage the dental office.

**Work Environment:**
Besides the private dental practice, additional employment options include dental school clinics, public health clinics, hospital dental clinics, and civil and military services. Opportunities may also be found with dental insurance companies and dental products manufacturers.

**Academic Requirements:**
A dental assisting training program prepares graduates to qualify as certified dental assistants. Programs should be accredited by the American Dental Association Commission on Dental Accreditation. After graduation, dental assistants are eligible to take the Certification Examination offered by the Dental Assisting National Board. Training usually takes ten months to a year and covers chairside assisting, X-rays, anatomy of the mouth, manipulation of dental materials, dental record-keeping and other related topics.

**Salary Range:**
$19,000 - $30,000

**Educational Programs**

**Certificate Program**
- Alamance Community College
- Asheville-Buncombe Technical Community College
- Cape Fear Community College
- Central Piedmont Community College
- Coastal Carolina Community College
- Fayetteville Technical Community College
- Forsyth Technical Community College

- Guilford Technical Community College
- James Sprunt Community College
- Rowan-Cabarrus Community College
- Southeastern Community College (courses)
- University of North Carolina - Chapel Hill, School of Dentistry
- Wake Technical Community College
- Wayne Community College
- Wilkes Community College

[www.nchealthcareers.com](http://www.nchealthcareers.com)
Registered dental hygienists (RDHs) are licensed professionals who provide a variety of oral health services. They perform oral health assessments, provide nutritional counseling and self-care programs to prevent disease, examine the head, neck, and oral regions for disease, take and process dental X-rays, and perform other diagnostic tests. Hygienists provide services that help patients prevent gum disease and cavities by removing deposits from teeth and applying sealants and fluoride to prevent decay. They also perform oral cancer and blood pressure screenings, provide oral health instructions, place and remove temporary fillings and periodontal dressings, and remove sutures.

Work Environment:
Dental hygienists work as a member of the dental team in private dental offices, public health departments, hospitals, and nursing homes. They may teach dental hygiene for educational programs. Some are employed by private business, schools, correctional facilities, or the military.

Academic Requirements:
Dental hygienists are eligible for state licensure after graduation from an educational program accredited by the American Dental Association Commission on Dental Accreditation and after successfully completing a written National Board Dental Hygiene Examination and the state licensure examination, which includes both written and clinical examinations. Training is available from a community college (two-year program), and from a university three or four-year program. All programs cover content prescribed by the Commission on Dental Accreditation.

Salary Range:
$25,000 - $56,000

Educational Programs

Associate Degree
Asheville-Buncombe Technical Community College
Cape Fear Community College
Catawba Valley Community College
Central Piedmont Community College
Coastal Carolina Community College

Fayetteville Technical Community College
Forsyth Technical Community College
Guilford Technical Community College
Halifax Technical Community College
James Sprunt Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College

Certificate Program
University of North Carolina - Chapel Hill

Bachelor's Degree
University of North Carolina - Chapel Hill

Master's Program
University of North Carolina - Chapel Hill
Dental Laboratory Technologist

Dental laboratory technologists make and repair dental restorations and appliances such as dental crowns and bridges, orthodontics appliances, dentures, and other dental appliances. Dental laboratory technologists work with a wide variety of dental materials including ceramics, precious metal, acrylics, and gypsum. A thorough knowledge of dental anatomy and oral structures is essential as they examine impressions and models of the teeth and use this information to make the dental restoration or appliance as prescribed by a dentist.

Areas of Specialization:
There are five general areas of specialization for dental laboratory technologists:

- Cast Partial Dentures
- Ceramics
- Complete Dentures
- Crown and Bridge
- Orthodontics

Salary Range:
$21,000 - $32,000

Academic Requirements:
Dental laboratory technologists complete a 21 month (5 semesters) program which qualifies them to take written and practical examinations given by the National Board of Certification.

Work Environment:
Dental laboratory technologists work in dental offices, commercial laboratories, research settings, dental schools, and are in demand by dental manufacturers for sales positions.

Educational Programs
Durham Technical Community College

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Dentists (DDS, DMD) diagnose, prevent, and treat teeth and gum problems. They work directly with patients to remove decay, fill cavities, examine X-rays, place protective plastic sealants on teeth, straighten teeth, and repair fractured teeth. They also perform corrective surgery on gums and supporting bones to treat gum diseases. Dentists provide instruction on diet, brushing, flossing, use of fluorides, and other aspects of dental care. They also write prescriptions for antibiotics and use a variety of equipment, including X-ray machines, drills, and other dental instruments used for teeth cleaning or corrective surgery. Dentists in private practice may also have to oversee a variety of administrative tasks, including bookkeeping and employing and supervising staff.

**Academic Requirements:**
A minimum of three years (96 semester hours) of accredited college work is required to enter a school of dentistry. Sixty-four hours may be from a community or technical college. Thirty-two semester hours must be from a four-year college. Specific courses must include biology, physics, general chemistry, organic chemistry and English. Dentists must then complete four years of dental school. In addition, two or more years are required for specialty training. Dentists must graduate from schools recognized by the Commission on Dental Accreditation of the American Dental Association. In order to practice, they must pass examinations approved by the National Board of Dental Examiners as well as a state licensing examination.

**Areas of Specialization:**
There are many areas of concentration for dentists:
- Endodontics
- Oral and Maxillofacial Radiology
- Oral and Maxillofacial Surgery
- Oral Pathology
- Orthodontics
- Pediatric Dentistry
- Periodontology
- Public Health Dentistry
- Prosthodontics

**Salary Range:**
$166,000 - $261,000

**Work Environment:**
Dentists usually work with a dental hygienist, dental assistant, or nurse. They may have their own practice or be part of a dental or medical group, or work in a hospital, public health department, or the military.

**Educational Programs**
The University of North Carolina - Chapel Hill
It’s true, “you are what you eat.”

Each day we learn more about the importance of nutrition in preventing illness and early or premature death. Nutrition is the science of food and its effects on the body. Food becomes part of the body’s chemistry when it is eaten, and has a direct relationship to good or poor health.

Dietitians are nutrition experts who counsel individuals and groups about food and about changing diet to improve health. People who are ill or injured have special nutritional needs and registered dietitians develop plans to meet those needs. Dietitians also analyze food and study the way the body uses food. Dietetic technicians work with dietitians to carry out those plans, especially in large facilities such as schools, hospitals, and food service industries. Nutritionists specialize in promoting health and good eating habits through education, research, and community programs.
The media can’t get enough press coverage for the nation’s growing epidemic—the increasing waist size of the American public. “With 15.5% of the 6-19 year olds overweight and 30% of adults obese, people really need to start being more careful about what they eat and make sure they incorporate exercise into their days,” reports Carolyn Karageorgiou, RD, MPH, who has a Certificate of Training in Childhood and Adolescent Weight Management through the American Dietetic Association.

Obesity, which is diagnosed using the Body Mass Index, has many causes, including the foods you eat, how much exercise you get, genetics, the environment in which you live, medications you are taking, and your mental health. For adolescents, obesity can be greatly attributed to increased food availability, increased screen time (TV viewing, video games, and computer time), increased sweetened beverage consumption (soft drinks, juices, and sports drinks), and a reliance on fast food as a primary source of food.

Being obese increases your chances of hypertension (high blood pressure), heart disease, diabetes, cancer, low self-esteem, and depression. Dr. William J. Klish, from Texas Children’s Hospital, states, “If the current obesity trends continue, this will be the first generation of children who do not live longer than their parents.”

What can you do about it? “Adolescents and adults who want to lose weight should concentrate on living a healthy lifestyle and not weight loss. Families should concentrate on eating healthy foods, decreasing portion sizes, and being more active on a daily basis,” says Carolyn. “These changes in behavior will result in lost weight.”

**Some tips that Carolyn has for those interested in living a healthy lifestyle:**

- Try to eat at least 5 servings of fruits and vegetables a day
- Limit the amount of sweetened beverages you drink
- Limit the amount of screen time to less than 2 hours a day
- Take study breaks every hour and exercise for 5-10 minutes
- Get at least 30-60 minutes of exercise a day
- Snack on fruits or vegetables to lower calories and increase fiber

**If you eat out often, Carolyn suggests the following:**

- Downsize instead of supersize
- Don’t get refills on sweetened drinks
- Drink low-fat milk, water, or diet soda as the beverage
- Get a side salad with low-fat dressing instead of French fries
- Remove the bread basket from the table
- Split an entrée or dessert with a family member or friend

“Adults of any size or shape can model a healthy lifestyle by selecting wholesome foods for themselves and their children and by participating in some form of daily exercise,” Carolyn comments. “We must teach young people correct eating behaviors, because we need to ensure that they will grow and remain healthy throughout their lives.”
Nutrition for health is the goal of the dietitian. Registered dietitians (RDs) have completed an intensive study of all aspects of nutrition and health. They plan nutrition programs to help both sick and healthy people who need to improve their nutrition. The responsibilities of registered dietitians vary according to their specialty. For example, they may plan meals and nutrition programs at large organizations such as universities and military dining services. Others, such as clinical dietitians, work as part of a health care team in hospitals or other health care institutions.

**Academic Requirements:**
According to the American Dietetic Association, to become a registered dietitian you must complete a minimum of a bachelor's degree at a U.S. regionally accredited university or college and coursework approved by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association (ADA). You must then complete a CADE-accredited or CADE-approved supervised practice program at a health care facility, community agency, or a food service corporation, or combine the experience with undergraduate or graduate studies. After meeting these requirements, you then pass a national examination administered by the Commission on Dietetic Registration (CDR) and maintain your registration by completing continuing professional educational requirements.

**Salary Range:**
$31,000 - $43,000

**Areas of Specialization:**
Generally, dietitians can be classified as:
- Administrative Dietitians
- Clinical Dietitians
- Community Dietitians
- Consultant Dietitians
- Research Dietitians

**Work Environment:**
Dietitians work in hospitals, clinics, research laboratories, schools, public health departments, private practice, and the food industry.

**Educational Programs**

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Dietetic technicians assist in nutritional care services or food service management for organizations that prepare meals on a large scale, such as hospitals and schools. Those working in nutritional care interview patients and evaluate their diet histories, help patients at home plan and prepare meals on a budget, and help patients in hospitals choose menus that meet their dietary needs. Technicians in food service management may work with the food service operation of programs for the elderly or child care centers.

**Academic Requirements:**
Dietetic technicians generally complete a two-year associate degree program. Graduates of programs approved by the American Dietetic Association are eligible for the registration examination of the ADA to become registered dietetic technicians (DTR).

**Work Environment:**
Technicians may be employed by hospitals, public health nutrition programs, long-term care facilities, school lunch programs, nutrition programs for the elderly, or food service management firms.

**Salary Range:**
$14,000 - $26,000

**Educational Programs**

ADA-approved Programs
Gaston College
Lenoir Community College
Nutritionists focus on the promotion of health and the prevention of disease among groups and communities through good food habits. Nutritionist is a general occupational title for health professionals concerned with food science and human nutrition. This includes dietitians, home economists, food technologists, community nutritionists, and nutrition educators. Heart disease, diabetes, hypertension, infant low birth weight, and other problems are linked to diet, and nutritionists carry out research and educational programs to help individuals, groups, and entire communities reduce their health risks through nutrition programs. Nutritionists work to fight malnutrition in the United States and in other countries.

**Areas of Specialization:**
Nutritionists can specialize in specific aspects of food and nutrition, such as legislative policy making. A major area of specialization is public health nutrition, maternal and child health.

**Work Environment:**
Nutritionists work for international, federal, state, and local health agencies (such as public health departments), educational settings, sports programs, and food/health-related industries. Health departments in North Carolina employ public health nutritionists at several levels where they provide nutrition counseling and administer numerous nutrition programs for their communities.

**Academic Requirements:**
Nutritionists should have a master’s degree from an accredited program. A North Carolina license as a dietician and nutritionist (LDN) is recommended. In some states including North Carolina, entry level positions are available which require only a bachelor’s degree.

**Salary Range:**
$31,000 - $43,000

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**Educational Programs**

**Bachelor's Degree Programs**
- Appalachian State University
- East Carolina University
- Meredith College
- North Carolina A&T
- North Carolina Central University
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro
- Western Carolina University

**Master's Degree Programs**
- East Carolina University
- Meredith College
- North Carolina A&T State University
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro

**Ph.D. Programs**
- University of North Carolina - Greensboro
- University of North Carolina - Chapel Hill

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Health care professionals in the area of information

and communication are often overlooked when considering the key contributors to our nation’s health. In reality, the work of these individuals is indispensable. They have produced a wealth of studies and reports detailing the recent advances and breakthroughs in science and medicine.

Biological photographers, medical illustrators, and medical, science, and technical writers produce visual and written materials on health topics, while health science librarians and information scientists develop systems, organize information into accessible collections and databases, and offer information services.

The accuracy of the work done by health information and communication professionals is crucial, as it ensures and fosters medical progress and quality health care. As the expanding application of computers and the World Wide Web continue to revolutionize information and communication systems, these professionals will keep the health care field on the cusp.
In order to photograph and document scientific information, biological photographers are specially trained in the areas of medicine, biology, chemistry, or other health subjects. Typically, their work is used in research reports, scientific publications, medical journals, or textbooks. In addition to being skilled in all technical aspects of photography, biological photographers must also be familiar with the biological sciences. A unique technique these professionals employ is photomicrography, which allows a microscopic object, such as a virus or bacteria, to appear in full detail to the unaided eye. A biological photographer may also document a surgical procedure, photograph an autopsy, or create a visual record of specimens.

**Work Environment:**
Some biological photographers work on freelance (independent) assignments. Others may be employed by hospitals, medical schools, museums, libraries, colleges and universities, medical and pharmaceutical companies, advertising agencies, or research facilities.

**Academic Requirements:**
Biological photographers should have two to four years of training after high school. The BioCommunications Association’s Board of Registry conducts a certification program which will register all successful individuals as an RBP (registered biological photographer).

**Areas of Specialization:**
A biological photographer may specialize in several areas:
- Autopsy/Specimen Photography
- Cinematography
- Dental Photography
- Digital Photography
- Operating Room Photography
- Ophthalmic Photography
- Photomicrography

**Salary Range:**
$25,000 - $40,000

**Educational Programs**

*Associate Degree*
Randolph Community College
The medical record is a permanent document created and maintained for each person who becomes a patient at a health care facility. This record, which may be maintained in paper or electronic media contains the "who, what, where, when, why, and how" of a patient’s care. Maintaining this information is important because it is used to diagnose, treat and plan health care services, evaluate overall quality of care, and accurately bill for services that are provided. Health information administrators (who are certified as registered health information administrators) manage medical record or health information departments in hospitals and other health care organizations. They design and manage health information systems so they meet medical, legal, and ethical standards. They also supervise other personnel who process health information. The skills acquired in managing and displaying data provide them with numerous career growth opportunities.

**Work Environment:**
Health information administrators work in hospitals, outpatient clinics, insurance companies, governmental agencies, educational institutions, and private industry.

**Salary Range:**
$30,000 - $90,000

**Academic Requirements:**
A bachelor’s degree is required in health information administration from a college or university accredited by the American Health Information Management Association. Course work includes medical terminology, human disease, statistics, health care law, computerized health information systems, and administration/management.

Individuals who already have a college degree with prerequisite courses may earn a postgraduate certificate in health information management. Graduates from either a degree or certificate program are eligible for the national registration examination, offered by the American Health Information Management Association, to become a registered health information administrator (RHIA).

**Educational Programs**
East Carolina University
Western Carolina University
Health Information Technician

Registered health information technicians (RHITs) may have responsibility for a variety of technical duties in the management of health information, including diagnostic coding, data analysis, and record maintenance. The RHIT may work as an assistant to the registered health information administrator (RHIA) or may have full responsibility for the operation of the department, including compiling information, preparing technical reports, and other managerial duties. In larger facilities, the technician may specialize in a particular area of the medical record department.

Work Environment:
Health information technicians work in hospitals, clinics, medical offices, state and local health departments, long term care and other health care facilities, drug companies, and law firms.

Salary Range:
$20,000 - $55,000

Academic Requirements:
An associate degree is required in health information technology. Programs must be accredited by the American Health Information Management Association. Courses include health sciences, diagnostic and procedure coding, statistics, health law and ethics, and health information maintenance and administration. Graduates from an accredited program are eligible for the national registration examination, offered by the American Health Information Management Association, to become a registered health information technician (RHIT).

Educational Programs

Associate Degree
Brunswick Community College
Cape Fear Community College
Catawba Valley Community College
Central Piedmont Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
James Sprunt Community College
McDowell Community College
Pitt Community College
South Piedmont Community College
Southwestern Community College
Vance-Granville Community College

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Health Information & Communication 45
Health sciences librarians provide access to medical and health-related information including emerging fields like genomics, biopreparedness, and alternative health care for health professionals, biomedical researchers, students, patients, and members of the public. Information scientists and librarians develop and administer information systems including databases, networks, multimedia, the World Wide Web, instructional technologies, and other emerging technologies. Responsibilities include: locating specialized medical information via print and online sources; creating digital libraries; choosing and purchasing books and journals for health professionals; and organizing health science books, journals, and computerized databases for quick and easy usage. They also teach health care professionals, students, and members of the public how to use information resources found on the Internet and in print. Library management jobs include planning, budgeting, and leading libraries and information technology divisions.

**Work Environment:**
Health sciences librarians usually work in the health sciences libraries of hospitals or universities. Some are employed in medically related industries such as pharmaceutical firms, and consumer health libraries.

**Salary Range:**
$35,000 - $45,000

**Academic Requirements:**
Health sciences information professionals must have a master's degree in library or information science from a school accredited by the American Library Association. A bachelor's degree is required to enter a graduate program in library science, and a degree in a life or physical science is helpful for a position as a science or health sciences librarian. Schools of library and information science offer courses or programs specializing in biomedical information and information systems. Graduates may then apply for membership in the Academy of Health Information Professionals, Medical Library Association.

**Educational Programs**

- Schools of Library Information Science
  - North Carolina Central University
  - University of North Carolina - Chapel Hill
  - University of North Carolina - Greensboro

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North Carolina Health Careers '04-'06
Medical Coding Specialist

Medical coding specialists convert doctor's bills, services, and prescriptions into alphanumerical codes which can then be stored electronically. Their work makes it possible for medical information to be maintained in an organized way. There are two types of medical coding specialists. CCSs (clinical coding specialists) typically work in a hospital and primarily use the International Classification of Diseases, 9th Revision (ICD9) coding system. CCS-Ps (clinical coding specialist - physician) typically work in doctor's offices, group practices, or multi-specialty clinics and use current procedural terminology (CPT) codes. Coding specialists can become certified in either of the two specialties.

Work Environment:
Medical coding specialists work in hospitals, clinics, medical offices, state and local health departments, and other healthcare facilities.

Salary Range:
$25,000 - $40,000

Academic Requirements:
Medical coding specialists must have a high school diploma. Some college courses or an independent study course in medical coding is preferred. The recommended career track for a coding specialist is to work in the field for two years before taking the CCS or CCS-P exam administered by the American Health Information Management Association (AHIMA). Both certifications represent mastery in clinical coding and must be maintained on an annual basis.

Educational Programs
Health Information Technology Programs offering courses in medical coding:

- Brunswick County Community College
- Cape Fear Community College
- Catawba Valley Community College
- Central Piedmont Community College
- Davidson County Community College
- Durham Technical Community College
- Edgecombe Community College
- James Sprunt Community College
- McDowell Community College
- Pitt Community College
- South Piedmont Community College
- Southwestern Community College
- Vance-Granville Community College

www.nchealthcareers.com
Medical Illustrators are artists who create graphics to meet the requirements of communication media for the biosciences. This work may be used in publications, film, television, exhibits, and three-dimensional models. Because of the variety of assignments in medical illustration, the artists must be accomplished in drawing, painting, and modeling techniques as well as experienced in the media and materials of commercial art. A medical illustrator may work as a member of a research team to provide illustrations and assist with the study. Medical illustrators may also be responsible for preparing charts, graphs, and tables of statistical data. Some artists specialize in preparing artificial body parts such as noses, eyes, or ears to be used when patients require cosmetic or functional improvements. Still others prepare models for instructional purposes. They must have a strong foundation in anatomy and general medical knowledge to ensure the authenticity of their work.

**Areas of Specialization:**
Most medical illustrators are generalists and can handle a variety of assignments. However, some specialize in producing art for medical advertising, for computer animation and multimedia applications, for legal cases, for specific parts of the body such as the eye, or in veterinary illustration.

**Work Environment:**
Medical illustrators may work at medical, veterinary, and dental schools and hospitals. They may also work on a freelance (independent) basis for doctors, drug companies, publishers, advertising agencies, lawyers, or research teams.

**Salary Range:**
$28,000 - $40,000

**Educational Programs**
There are no programs for medical illustrators in North Carolina. The nearest programs are:
- Medical College of Georgia
  School of Graduate Studies
  Medical Illustration Graduate Program
  CJ - 1102
  Augusta, GA 30912-0030
  (706) 721-3266
  www.mcg.edu/medart
- Johns Hopkins School of Medicine
  Department of Art Applied to Medicine
  Medical Illustrator Program
  1830 East Monument Street, Suite 7000
  Baltimore, MD 21205-2100
  (410) 955-3213
  www.hopkinsmedicine.org/medart

**High School Preparation:**
Beyond general college preparation, some training in computer graphics is also helpful.

**Academic Requirements:**
A master’s degree from an accredited institution is generally required for most positions in medical illustration. There are few programs in the United States, with each program accepting fewer than 20 students a year. The normal length of these programs is two years. At the undergraduate level, courses in biology and art are equally important for admission to graduate schools. The Association of Medical Illustrators offers continuing education programming to keep its members abreast of medical developments and illustrative techniques.
Medical, Science, and Technical Writer

Medical, science, and technical writers are involved in many communications activities, including presenting health information to the public in informative and interesting styles and making professional, scientific, and technical information available to health specialists. They may write for newspapers, magazines, radio, television, public relations publications, professional periodicals, or the Internet. Technical writers deal with the same subject matter as science writers, but while technical writers draw an audience of health care professionals, science writers translate technical information into language that lay people can understand. Medical writers and editors are trained as journalists who write or edit health-related books, articles, and brochures on a freelance basis or as part of a professional staff.

Work Environment:
Medical and scientific writers may work in a publications office of a medical center, company, or educational institution. Jobs are also available in varied media outlets. Some work on a freelance (independent) basis.

High School Preparation:
Beyond general college preparation, courses in journalism, typing and technical English are also helpful.

Academic Requirements:
Medical and scientific writers must have a background in the fields in which they are working. Most earn at least a bachelor's degree in English, journalism, or educational media with a minor emphasis in the sciences; or students may major in one of the sciences with a minor emphasis in journalism, English, or technical writing.

Salary Range:
$30,000 - $50,000

Educational Programs
Most colleges and universities in North Carolina offer undergraduate and graduate programs that could lead to a career in medical and scientific writing.
Administrators are people who lead and supervise organizations, businesses, and agencies. The field of health care administration is growing as the health care industry becomes more diversified.

Health service administrators manage a wide variety of health services delivery and insurance organizations. They also may be actively involved in the development and analysis of governmental policies at all levels that affect how health services are organized, delivered, financed, and evaluated. Among the organizations health services administrators manage are hospitals, health maintenance organizations, medical group practices, surgical centers, long-term care facilities, retirement centers, home health agencies, insurance companies, public health departments, and community health centers.

Administrators develop organizational strategy, develop and implement operational plans and policies, and evaluate performance of the organization. The challenge for a health services administrator is to ensure that the organization delivers high quality service in a timely manner in a convenient location at an affordable cost. It is a vital role. The administrator must work with the community to determine the kinds of services required and how those services should be provided. It is a complex and rewarding job in which a motivated individual can make a difference in society.

Health administrators serve at many levels in an organization. Those that hold the top positions typically have graduate degrees.
Health services administrators lead and manage hospitals, clinics, and other health care agencies. They work with state and federal agencies and with governing boards to determine policies and procedures, then ensure that these policies are carried out so that the agency or institution runs smoothly. They provide leadership to the various health care professionals and support staff of their institutions. The administrator’s job includes planning and budget development, patient services administration, personnel issues, and preparing reports. In larger institutions, administrators may manage individual departments or projects.

Academic Requirements:
A minimum of a bachelor’s degree is required, preferably in business, health policy and administration, or a related field. Many employers require a graduate degree in health care, hospital, or business administration. Studies cover financial management, policy development, administrative and business principles. Some health services administrators are also health care practitioners such as physicians, nurses, or others who have received added training or experience.

Work Environment:
Health services administrators work in hospitals, health departments, group practices, health maintenance organizations, and the armed forces.

Salary Range:
$35,000 - $250,000

Educational Programs
The programs listed here are specific to health care or hospital administration. However, programs in business administration are also applicable in this field.

Bachelor’s Degree
Appalachian State University
Belmont Abbey College
Cabarrus College of Health Sciences
East Carolina University
Mount Olive College
University of North Carolina - Asheville
University of North Carolina - Chapel Hill

Master’s/Doctoral Degree
Duke University
Pfeiffer College
University of North Carolina - Chapel Hill
University of North Carolina - Charlotte
University of North Carolina - Greensboro
The nursing home industry is growing as the numbers of elderly people increase in North Carolina and the nation. Nursing home administrators organize and direct the operation of a nursing home, hospice, convalescent center, or a continuing care retirement center, following federal and state guidelines. They coordinate the activities of the medical, nursing, technical, clerical, volunteer, and service staffs of the facility and direct the hiring and training of employees. Some administrators may also take care of patients, teach programs, or conduct research.

**Work Environment:**
Nursing home administrators work under the supervision of an owner or governing board. In small nursing homes they may coordinate all aspects of health care. In larger facilities, they work with staffs in their facilities and in the central office of large nursing home systems.

**Academic Requirements:**
Nursing home administrators must have two years or 96 quarter hours of college level study from a community college or four-year college. They must complete an internship of 12-50 weeks as “Administrators in Training” as prescribed by the North Carolina State Board of Examiners for Nursing Home Administrators. The candidate must carry out a course of study in the area of nursing home administration approved by the board, and must also pass state and national examinations administered by the board.

**Salary Range:**
- Nursing Home Administrator: $30,000 - $70,000
- Continuing Care Center Administrator: $25,000 - $65,000

**Educational Programs**
The programs listed here are specific to health care or hospital administration. However, programs in business administration are also applicable in this field.

**Bachelor's Degree**
- Appalachian State University
- Belmont Abbey College
- Cabarrus College of Health Sciences
- East Carolina University
- Mount Olive College
- University of North Carolina - Asheville
- University of North Carolina - Chapel Hill

**Master's/Doctoral Degree**
- Duke University
- Pfeiffer College
- University of North Carolina - Chapel Hill
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
The practice of medicine dates back many centuries.

Today’s medical careers are far more complex and specialized than early physicians could have imagined, and the options in medical practice are many.

It is still possible to be a "country doctor" in a rural area, providing family health care for patients of all ages. Or, a physician today may be a specialist in a major medical center, conducting research on a specific disease. Most physicians are somewhere in between, caring for patients in an individual or group practice.

There are many specialties in medicine, and some of these are covered separately in this manual: radiologist (in the Radiology section); psychiatrist (in the Mental Health section); ophthalmologist (in the Vision Care section); and clinical pathologist (in the Clinical Laboratory Science section).

The field of medicine has expanded so widely and demands are so great that associated professions have developed. These include physician assistants (covered in this section), nurse practitioners (covered in the Nursing section), chiropractors, and podiatrists (both in this section).
Chiropractors, or doctors of chiropractic (DC), treat patients through manipulation of various joints of the body, particularly the spine which can ease irritation to spinal nerves. By re-establishing normal spinal mobility, the doctor of chiropractic allows the body to operate more efficiently and more comfortably. The chiropractor typically conducts patient consults, case histories, physical exams (orthopedic, neurological), laboratory analyses, and X-ray examinations. In addition, he or she provides a chiropractic structural examination, with emphasis on the spine. To assist in patient treatment, chiropractors can use exercise, water, light, traction, ultrasound, electric, laser, ice, and heat therapy. They also counsel on wellness concepts such as nutrition, ergonomics, lifestyle changes, and stress management, but do not prescribe drugs or perform surgery. Chiropractors use natural, medicine-free, non-invasive health treatments, consulting with or referring to other health care providers when indicated.

**Areas of Specialization:**
- Diagnostic Imaging
- Extremities
- Forensics
- Homeopathy
- Internal Disorders
- Neurology
- Nutrition
- Orthopedics
- Pediatrics
- Radiology
- Rehabilitation
- Sports Injury
- Thermography

**Affiliated Specialties**
- Chiropractic Assistant
- Chiropractic Technician

**Work Environment:**
Most chiropractors work in private practice or may join together with other health care professionals to form a group practice, sometimes in affiliation with a private clinic or a hospital.

**Academic Requirements:**
To practice as a doctor of chiropractic (DC) in North Carolina, one must earn a college degree and successfully complete four academic years of resident instruction in a college of chiropractic approved by the North Carolina State Board of Chiropractic Examiners. In addition, one must provide certification of successful completion of courses in the basic sciences (chemistry, pathology, microbiology, biochemistry, neurology, embryology, nutrition, anatomy, physiology, diagnosis, and the use and effects of X-rays), as well as satisfactory completion of Parts I, II, and III of the National Board and either Part IV or individual State Board Examinations.

**Salary Range:**
$40,000 - $119,000

**Educational Programs**
There are no schools of chiropractic in North Carolina. For a complete list of accredited chiropractic colleges, contact the NC Chiropractic Association.
Marco Alemán, MD, is a physician with UNC Hospitals and a faculty member with UNC-Chapel Hill School of Medicine. He was born in Lima, Peru, is a native Spanish speaker, and learned English as a second language while in grammar school. He and his family migrated to the U.S. when he was 12 years old. His life in America started in New York City and continued in Chicago, Illinois. He has lived and worked in North Carolina since 1997.

Marco’s parents both worked in health professions; his father was a doctor, and his mother was a pharmacist who later retrained to be a teacher. “My father was definitely a role model for me, and I credit my mother for nurturing my interest in learning.”

Marco is a doctor of internal medicine. “That means I treat adult patients, men and women; my patients currently range in age from 16 to 104. Internal medicine requires a lot of thinking and puzzling, putting together the many different pieces of information from the patient’s life and current health issues to develop a diagnosis and treatment plan.”

“When the provider speaks even the most basic Spanish, they break the ice and convey that they value the patient as an individual.”

In addition to his medical practice, Marco trains medical students, exposing them to the basics of what a doctor should be and introducing them to interviewing, examination, and clinical reasoning skills. He also directs a medical Spanish and culture course. “When the provider speaks even the most basic Spanish, they break the ice and convey that they value the patient as an individual. It impacts the way the provider relates to the patient and the way the care is perceived.”

In addition to bilingual skills, Marco encourages and trains students to develop their knowledge and understanding of other cultures. “Cultural competency makes you better able to reflect on the patient’s culture and its impact on their health and that reflection also makes you grow personally. When you are not closed-minded, you can really offer much better care to the patient.”

Marco feels strongly that young people should get as much education as they can. “I think the value of education is best seen in the long term. It really is an investment in oneself. You need to think about what you want and what you can offer your community, but don’t just look at the next 3 to 5 years. Look 10 or 30 years down the road. Education means personal gains, but it also affects your family and their needs and what you can offer your local community. Education opens up doors for you.”

“You may have to sacrifice your short-term personal needs and desires,”Marco adds. “I would advise students to look ahead 10 years, set goals, and get your family’s support behind you. Your family can help you reach your dreams.”

Marco says there are many opportunities for bilingual young people in the health professions. “If you want a hands-on approach to helping people, you can find it in a variety of health professions. We desperately need an entire infrastructure of bilingual health professionals – nurses, social workers, physical therapists, dietitians, physician assistants. You don’t have to be a physician; we need bilingual providers at all levels.”

He has lots of advice for those thinking of careers in health care. “It’s never too early to get experience. You can explore health careers through your personal contacts, school, through volunteer experience, and by talking to different health providers. Go work with underserved populations and volunteer in clinics. It’s a great way to meet providers and students in health science programs. Get experience in research by starting at a beginning level, such as an assistant in a medical laboratory and then increasing your responsibilities with your research mentor.”

“Don’t give up even if you get discouraged or receive bad advice. Make sure you get the opinions of a variety of people you can trust.” He urges students to remember, “Education is the key.”
Physicians diagnose, treat, and try to prevent human illness, disease, or injury. They perform many functions, including but not limited to: analysis of patient histories, physical examinations, and interpretation of diagnostic tests. Physicians stress preventive care and often counsel their patients on better health care practices. Physicians use accepted methods of medical treatment, including pharmaceutical agents and surgical procedures. There are two types of physicians: allopathic physicians, better known as the MD (medical doctor) and osteopathic physicians, better known as the DO (doctor of osteopathic medicine). Although both MDs and DOs are physicians who may specialize, prescribe medication, and perform surgery, they differ in their health care philosophy and attend separate training schools.

Areas of Specialization:
- Anesthesiology
- Cardiology
- Dermatology
- Emergency Medicine
- Family Practice
- Geriatrics
- Internal Medicine
- Neurology
- Obstetrics/Gynecology
- Ophthalmology
- Orthopedics
- Pathology
- Pediatrics
- Psychiatry
- Radiology
- Rheumatology
- Surgery

Work Environment:
Physicians work in clinics, private offices or group practices, health maintenance organizations (HMOs), hospitals, medical schools, public health departments, government health agencies, research institutes, and the armed forces.
Academic Requirements:
To practice as a physician, one must earn a college degree followed by a four-year degree as a doctor of medicine (MD) or a doctor of osteopathy (DO) from an accredited school and pass an examination for state licensure from the NC Board of Medical Examiners as well as a National Medical Licensure Examination. At least one year of post-medical school experience is required, but most graduates of medical and osteopathy schools complete a longer period of specialty training called a residency. Residency training is required for persons entering any specialty, and can take from three to eight years. An in-depth examination is required at the end of the residency training in order to become certified by the board of examiners of the specialty.

As an undergraduate, premedical students must complete coursework in physics, biology, mathematics, English, and inorganic and organic chemistry. Increasingly, particularly in North Carolina, physicians are strongly encouraged to study Spanish. Applicants must also take the MCAT (Medical College Admission Test) no less than one year before applying to start medical school.

Salary Range:
$75,000 - $145,000

Educational Programs
Duke University
East Carolina University
University of North Carolina - Chapel Hill
Wake Forest University
Physician assistants (PAs) practice medicine with a physician’s supervision. Physician assistants perform complete physical examinations, diagnose illness, give treatments, order and review laboratory tests and X-rays, and counsel patients on their health problems. North Carolina, like most other states, allows its PAs to prescribe medication. PAs are always directly supervised by a physician but the supervision may be indirect or occur at a distance. The majority of physician assistants choose to work in primary care, while the rest specialize in such areas as surgery, emergency medicine, or other medical specialties.

Areas of Specialization:
Physician assistants are all trained as generalists based on national standards, but they may specialize in any area of medicine.

Work Environment:
Physician assistants work in doctor’s offices, clinics, hospitals, health maintenance organizations (HMOs), health departments, and the military. Some work in clinics away from the direct supervision of the physician and communicate with the physician electronically.

Academic Requirements:
To become licensed as a physician assistant, an applicant must complete a course of study which has been approved and accredited by the Accreditation Review Committee on Education for the Physician Assistant (ARC-PA). Two-year programs generally follow two or three years of undergraduate preparation or a bachelor’s degree. Four-year programs are combined with a baccalaureate degree program. Programs cover science courses as well as supervised practice. The graduate must pass an examination given by the National Commission for Certification of Physician Assistants. Finally, the candidate must apply to the NC Medical Board for a license to practice in the state.

Salary Range:
$55,000 - $78,000

Educational Programs

Master's Degree
Duke University
East Carolina University

Methodist College
Wake Forest University
Doctors of podiatric medicine (DPM), also known as podiatrists, can diagnose, treat and prevent disorders of the foot and ankle. They employ medical, surgical and biomechanical means to treat injuries, deformities or abnormal growths of the foot and ankle. Podiatric physicians prescribe orthotics, braces and shoes to treat conditions and improve the patients walking and posture. Podiatric physicians stress preventive health care and are often the first health care professionals to recognize symptoms of diabetes, heart disease or arthritis. Podiatric physicians work with all other health care professionals and will refer patients for treatment of serious conditions involving the body. In addition to general practice, DPMs may choose to pursue certification in a specialty area such as surgery, orthopedics, or public health. Some of the noted subspecialties are primary care, sports medicine, geriatrics, pediatrics, radiology and diabetic foot care.

Academic Requirements:
A minimum of 90 hours of undergraduate preparation is required to enter a professional program in podiatry; most applicants have a bachelor's degree. Undergraduate courses must include organic and inorganic chemistry, biology, physics, and mathematics. Applicants must also take the MCAT (Medical College Admission Test). The educational program in podiatric medicine takes four years, including clinical training. Following this the graduate enters a one to three-year postdoctoral training period at a teaching hospital. Those choosing to specialize will spend more time in residency training or pursue fellowship training.

Work Environment:
Podiatrists may work in private or group practices or may be associated with major hospitals, rehabilitation centers, or research/teaching institutions.

Areas of Specialization:
There are four areas of specialization for podiatrists:
- Orthopedics/Biomechanics (treatment of imperfect foot structures)
- Podiatric Sports Medicine
- Podiatric Surgery
- Podogeriatrics (foot disorders of the elderly)
- Podopediatrics (children’s foot problems)

Salary Range:
$105,000 - $145,000

American Association of Colleges of Podiatric Medicine
1350 Piccard Drive, Suite 322
Rockville, MD 20850
(301) 990-6882 fax (301) 990-2807
(800) 922-9266 www.aacpm.org

Educational Programs
There are no schools of podiatric medicine in North Carolina, and only seven accredited schools nationally. For information about schools in the U.S. contact:

www.nchcahealthcare.com
Most people receive their general health care in medical offices in their communities. The medical office has changed a lot since the days of the country doctor. Medical offices today often house several physicians and other practitioners whose services provide not only general medical care but can also focus on one specialty. Also, many medical services are now offered by health maintenance organizations (HMOs), which provide overall health care plans for health insurance subscribers.

Today’s medical office handles many more patients than the medical practice of long ago. In the office, medical assistants can contribute to efficient patient care by working both in the clinical and front office area. Medical secretaries can work in the business area of the medical office, the hospital, or other medical facilities. You can enter either of these occupations after one to two years of training.
Medical Assistant

Medical assistants help doctors by performing a variety of clinical and administrative duties. The scope of their duties generally depends on the size of the practice in which they are employed, with those in larger practices tending to be more specialized. Administrative duties may involve telephone monitoring, patient record organization, appointment scheduling, billing, and bookkeeping. Some common clinical assignments may be: taking vital signs, electrocardiography, drawing blood, performing basic laboratory tests, preparing patients for the physician, and assisting the physician during office procedures.

Academic Requirements:
Education is available at community colleges and leads to either a certificate/diploma (one year) or an associate degree (two years). The curriculum covers anatomy and physiology, medical terminology, medical law and ethics, administrative, examination room, and laboratory procedures, medical record management, and other related topics. Graduates of accredited programs are eligible to take the certification examination given by the Certifying Board of the American Association of Medical Assistants. Certification is not mandatory in North Carolina, but some employers require it.

Work Environment:
Medical assistants are employed by physicians' offices, health maintenance organizations (HMOs) and other medical settings. They work with doctors, nurses, and other personnel and may supervise medical secretaries and clerks.

Salary Range:
$19,000 - $27,000

Educational Programs

- Alamance Community College
- Carteret Community College
- Central Carolina Community College
- Central Piedmont Community College
- College of Albemarle
- Davidson County Community College
- Edgecombe Community College
- Forsyth Technical Community College
- Gaston College
- Guilford Technical Community College
- Haywood Community College
- James Sprunt Community College
- Johnston Community College
- Lenoir Community College
- Martin Community College
- Mitchell Community College
- Montgomery Community College
- Pamlico Community College
- Pitt Community College
- Randolph Community College
- Richmond Community College
- Rowan-Cabarrus Community College
- South Piedmont Community College
- Stanly Community College
- Surry Community College
- Tri-County Community College
- Vance-Granville Community College
- Wake Technical Community College
- Wayne Community College
- Western Piedmont Community College
- Wilkes Community College

Hospital-based Programs
- Cabarrus College of Health Sciences
Medical Office Administrator

Medical office administrators perform a variety of tasks to keep a medical office running smoothly. They are familiar with medical practice and terminology and can transcribe medical notes, prepare written reports, handle correspondence, file records, answer the telephone, and bill patients.

Work Environment:
Medical office administrators work alone or with others and are employed by doctors, hospitals, clinics, local and state health departments, group medical practices, medical research departments, pharmaceutical companies, or health care specialists.

Academic Requirements:
Formal training as a medical office administrator is not required but is very helpful. Training covers medical terminology, medical office procedures, preparation of medical charts and histories, and billing procedures.

Areas of Specialization:
Medical office administrators may specialize in a particular medical specialty, such as cardiology or pathology. Another specialization is medical transcriptionist.

Salary Range:
$17,000 - $24,000

Educational Programs

**Medical Office Administration**

**Associate Degree**

- Alamance Community College
- Asheville-Buncombe Technical Community College
- Beaufort County Community College
- Caldwell Community College
- Central Carolina Community College
- Central Piedmont Community College
- Cleveland Community College
- Coastal Carolina Community College
- College of the Albemarle
- Craven Community College
- Durham Technical Community College
- Forsyth Community College
- Gaston Community College
- Guilford Technical Community College
- Halifax Community College
- Isothermal Community College
- Johnston Community College
- Lenoir Community College
- Martin Community College
- Mayland Community College
- Nash Community College
- Piedmont Community College
- Pitt Community College
- Rockingham Community College
- Rowan-Cabarrus Community College
- Sandhills Community College
- South Piedmont Community College
- Surry Community College
- Vance-Granville Community College
- Wake Technical Community College
- Wayne Community College
- Western Piedmont Community College

North Carolina Health Careers '04-'06
Society today places a much larger emphasis on mental health and social well-being than did previous generations. Career professionals specializing in mental and social health not only help individuals with severe emotional disabilities and psychological disorders, but also help clients resolve family conflicts, counsel victims of substance abuse, people with developmental disabilities, and work with the aged and disabled.

Mental health professionals include psychiatrists, psychologists, psychological associates, social workers, substance abuse counselors, hospital chaplains, and mental health technicians/aides. They work with other health professionals, community agencies, and the courts to provide services for their clients and patients. Mental health professionals also work with the families of their clients to involve them in the process of treating and preventing mental problems.

Fortunately, eliciting the help of a mental or social health professional does not necessarily carry with it the stigma of years past. Job opportunities for workers in this field will be plentiful as more people take advantage of the services these professionals provide.
Chaplains and pastoral counselors attend to the spiritual needs of individuals in specialized settings, such as hospitals. The hospital chaplain provides counseling as well as spiritual and moral guidance to patients, their loved ones, and staff members, upon request. At times, a chaplain is asked to perform religious services on site, in accordance with the chaplain's denomination or faith group.

Work Environment:
In addition to hospitals, chaplains may also be employed in mental health or mental retardation centers, correctional institutions, law enforcement agencies, the armed forces, as well as in business and industrial settings.

Salary Range:
$29,000 - $53,000

Academic Requirements:
A professional chaplain requires a baccalaureate and a master's degree (M.Div.) in theology, the latter from an accredited theological seminary. In addition, the chaplain will need to complete at least four (4) units of clinical pastoral education (CPE), each unit consisting of at least 400 hours of supervised ministry within an institution. To practice in a hospital, a chaplaincy residency is required at an accredited hospital or medical center. Many medical centers offer a chaplaincy residency in which three or four units of CPE can be completed in one year. CPE programs are accredited by one of three recognized educational associations: the Association of Clinical Pastoral Education (ACPE); the United States Catholic Conference (USCC); and the Canadian Association of Pastoral Practice and Education (CAPPE). In addition, many hospitals require board certification through the Association of Professional Chaplains (APC) or National Association of Catholic Chaplains (NACC).

Educational Programs
Master's Degree (M.Div.)
Campbell University Divinity School
Duke University Divinity School
Gardner-Webb School of Divinity
Southeastern Baptist Theological Seminary
Wake Forest University Divinity School

A hospital chaplain residency program is offered at the following North Carolina medical centers:
Alamance Regional Medical Center
Department of VA Medical Center - Durham
Duke University Medical Center

Moses Cone Health Care System
New Hanover Regional Medical Center
NC Baptist Hospital
Rex Healthcare
UNC Hospitals
WakeMed
Mental health technicians and aids care for mentally impaired and/or emotionally disturbed individuals. They work under a team that may include psychiatrists, psychologists, psychological associates, social workers, and therapists. In addition to helping patients dress, bathe, groom, and eat, mental health aids socialize with them and lead them in educational and recreational activities. Mental health aids may play games such as cards with the patients, watch television with them, or participate in group activities such as sports or field trips. They observe patients and report any physical or behavioral signs which might be important for the professional staff to know. They accompany patients to and from psychiatric units for examination and treatment. Because they have the closest contact with patients, psychiatric aids have a great deal of influence on their outlook and treatment.

**Work Environment:**
Mental health technicians and aides work in psychiatric hospitals and units, mental health facilities, and centers for people with developmental disabilities.

**Salary Range:**
$18,000 - $28,000

**Academic Requirements:**
These may vary according to occupation. Post-secondary training is required to work as a technician and can be obtained in an associate degree program through a community college. Aides are usually trained on the job.

**Educational Programs**

**Associate Degree**
- Beaufort County Community College
- Central Carolina Community College
- Central Piedmont Community College
- Montgomery Community College

- Richmond Community College
- Roanoke-Chowan Community College
- Sandhills Community College
- Southwestern Community College
- Stanly Community College

- Vance-Granville Community College
- Wayne Community College
- Wilkes Community College
Psychiatrists are medical doctors who specialize in diagnosing, treating, and preventing mental and emotional and behavioral problems. Sometimes these problems are severe, long-term, or related to physical diseases and the psychiatrist, as a physician, can order tests and prescribe medications that can help. The psychiatrist often works as part of a treatment team including nurses, social workers, psychologists, occupational therapists, and when possible, the patient's family.

Areas of Specialization:
Psychiatrists may specialize in several areas such as the following:
• Child Psychiatry
• Community Psychiatry
• Developmental Psychiatry
• Forensic Psychiatry
• Geriatric Psychiatry
• Neuropsychiatry

Work Environment:
Psychiatrists work in many settings including community mental health centers, psychiatric hospitals, private practice, the military, and medical schools. They may combine private practice with work at a community mental health center or hospital.

Academic Requirements:
Training as a psychiatrist comes after completion of a bachelor's degree and a four-year medical degree. Students in college can learn about the best preparation for medical school through advisors at their college (also consult the "Physician" page in this handbook). After medical school, the future psychiatrist enters a four-year training period called a residency, usually at a university medical center. Certification can then be sought from the American Board of Psychiatry and Neurology. State licensure from the North Carolina Board of Medical Examiners is required to practice psychiatry.

Salary Range:
$73,000 - $139,000

Educational Programs
Psychiatry residency training programs are available at North Carolina’s four medical schools:
Duke University
East Carolina University

University of North Carolina - Chapel Hill
Wake Forest University
Psychologists study the behavior, emotions, and thinking processes of humans to better understand their behavior. These licensed mental health professionals are trained to assess, diagnose, and treat mental disorders by using individual, child, family, and group therapies. Psychologists may teach, conduct research, or serve as consultants or therapists.

Areas of Specialization:
There are many areas of specialization in teaching, research, therapy, or public service. Specific areas include:
- Clinical Psychology
- Community Psychology
- Counseling Psychology
- Developmental Psychology
- Educational/School Psychology
- Health Psychology
- Industrial/Organizational Psychology
- Neuropsychology
- School Psychology
- Social Psychology

Work Environment:
Psychologists work alone or with other specialists in hospitals, correctional institutions, mental health clinics, private practice, public schools, businesses, government agencies and research laboratories.

Academic Requirements:
School psychologists and some community mental health psychologists hold at least a master's degree in psychology. However, to become licensed as a psychologist, you must have a doctorate in psychology. Most doctoral programs in psychology and clinical psychology involve four to five years of study after receiving a bachelor's degree. One year of internship is required during the doctoral program in clinical psychology. One year of supervised post-doctoral experience is required for licensure in North Carolina. Also, psychologists must pass an examination by the North Carolina Psychology Licensing Board.

Salary Range:
$28,000 - $70,000

Educational Programs

Master's Degree
(Clinical or General Psychology)
- Appalachian State University
- East Carolina University
- Fayetteville State University
- North Carolina Central University

North Carolina State University
University of North Carolina - Chapel Hill
University of North Carolina - Charlotte
University of North Carolina - Wilmington
Wake Forest University
Western Carolina University

Doctoral Degree
- Duke University
- North Carolina State University
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro
Psychological associates are licensed professionals who provide psychological services such as interviewing or administering and interpreting tests of mental abilities, interests, aptitudes, and personality characteristics. They provide clients with psychological evaluation, educational selection, vocational selection, personnel selection, or guidance. With qualified supervision, psychological associates are allowed to render the same professional psychological services as a licensed psychologist.

**Work Environment:**
Under the supervision of a psychologist, psychological associates can work in hospitals, correctional institutions, mental health clinics, private practice, public schools, businesses, government agencies, or research laboratories.

**Salary Range:**
$30,000 - $55,000

**Educational Programs**

**Educational Programs (Master of Psychology)**
- Appalachian State University
- East Carolina University
- Fayetteville State University
- North Carolina Central University

**Academic Requirements:**
Psychological associates must have a master's degree or specialist degree in psychology from an accredited university or college. Associates must successfully pass the Examination for Professional Practice in Psychology (EPPP). Both psychologists and psychological associates take the EPPP; however, the passing point differs for the two levels of licensure.
Social workers work with individuals, families, groups, organizations, and communities. In a medical setting, they help patients and their families deal with problems related to physical, mental, or emotional illness and disability. Working in the community, social workers assist residents in finding employment or housing and help initiate community projects. A social worker may provide personal counseling to help individuals and families improve their problem-solving and coping skills and developmental capacities. Social workers also serve as leaders in promoting and designing more effective and humane policies, organizations, and communities.

Areas of Specialization:
Social workers can train to specialize in clinical work, group work, case management, community development, administration, or a combination of these. They may concentrate in substance abuse, mental health, developmental disabilities, geriatrics, family and children’s services, health services, or management and planning.

Work Environment:
Social workers are employed in private and public social agencies, schools, correction centers, corporations, courts of law, and private practice. Health care and mental health social workers work in hospitals, home health agencies, nursing homes, hospices, mental health clinics, substance abuse centers, and employee assistance programs.

Academic Requirements:
A bachelor’s degree in social work (BSW) is the entry degree for the field; a master’s degree (MSW) is necessary for more advanced positions. To become certified/licensed, an applicant must hold a bachelor’s or master’s degree in social work from a school accredited by the Council on Social Work Education, submit recommendations, and pass an examination for certification/licensure as a: certified social worker, certified master social worker, licensed clinical social worker, or certified social work manager. Certification/licensure is also available for school social workers, marriage and family therapists, substance abuse counselors, and in gerontology social work.

Salary Range:
$24,000 - $50,000

Educational Programs

**Bachelor's Degree Programs**
- Appalachian State University
- Barton College
- Bennett College
- Campbell University
- East Carolina University
- Mars Hill College
- Meredith College
- Methodist College
- North Carolina A&T University
- North Carolina Central University
- North Carolina State University
- Shaw University
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
- University of North Carolina - Pembroke
- University of North Carolina - Wilmington
- Warren Wilson College
- Western Carolina University

**Master of Social Work**
- East Carolina University
- Fayetteville State University
- NC A&T State University
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro

**Doctorate in Social Work**
- University of North Carolina - Chapel Hill

www.nchealthcareers.com
Substance abuse counselors work with individuals who are having problems with alcohol and other drugs. They provide counseling for individuals, families, and groups, and work to help substance abusers focus on life problems and behaviors that relate to their addictions. Substance abuse counselors also work with mental health and health professionals, the police and courts, as well as schools to prevent substance abuse problems.

Academic Requirements:
To be a certified substance abuse counselor in North Carolina, you must satisfy several requirements of the North Carolina Substance Abuse Profession Certification Board. These include three years of full-time paid or volunteer supervised experience; a 300-hour supervised practicum; 270 hours of board-approved education covering various areas in substance abuse and professional skill-building (which may or may not be part of a degree program), and completion of written and oral exams given by the board. People intending to complete this process may submit an application to the board to become a substance abuse intern. Master’s level providers can seek the certified clinical addiction specialist (CCAS) credential.

Salary Range:
$28,000 - $45,000

Work Environment:
Substance abuse counselors work with physicians, nurses, social workers, and other counselors. They work for mental health agencies, hospitals, schools, substance abuse treatment programs, and correctional facilities.

Educational Programs

Associate Degree
Central Piedmont Community College
Guilford Technical Community College
Sandhills Community College
Southwestern Community College
Vance-Granville Community College

Wayne Community College
Western Piedmont Community College

Master’s Degree
Appalachian State University
East Carolina University
Nursing is one of the fastest growing health care fields and that growth is projected to continue through 2020. Licensed practical nurses and registered nurses at all levels of education are being hired in record numbers to fill positions which present them with increased independence and job opportunities. Most nurses have no difficulty finding jobs in hospitals, nursing homes, in the community, and in nursing education and administration. There are a range of possibilities for specialization for nurses who have graduate degrees. Some examples of these include nurse midwives, certified registered nurse anesthetists, clinical nurse specialists, and nurse practitioners.

Nurses may also carry out nursing activities in a number of other positions. Home health aides and nursing assistants care for individuals in some settings, and are especially important in providing care for the elderly.

All of these providers, working cooperatively, provide essential care to the public.
Certified nursing assistants (CNAs) are extremely valuable health care providers, especially to their patients, the families of the patients, and employers at health care facilities. CNAs help care for physically or mentally ill, injured, and disabled individuals confined to hospitals, nursing and personal care facilities, and mental health settings. CNAs perform much-needed daily tasks, such as serve meals, make beds, and help patients eat, dress, and bathe. CNAs work under the supervision of nursing and medical staff and are important members of the health care team. CNAs take temperatures, pulse, respiration, and blood pressure; help patients with range-of-motion exercises; and assist patients with their daily living needs. Interaction with the nursing assistant may be the only contact a patient has with the outside world, especially in nursing home settings.

Work Environment:
Nursing assistants and geriatric aides work in hospitals, nursing homes or other extended care facilities, doctor's offices, or private homes.

Salary Range:
$15,000 - $18,000

Academic Requirements:
Nursing assistants, aides, and geriatric assistants can be trained at many of North Carolina's community colleges or through on-the-job training programs. The community college system offers a nursing assistant certificate comprised of 12-18 semester hours of credit.

Educational Programs
Certificate Programs
Alamance Community College
Beaufort County Community College
Bladen Community College
Brunswick Community College
Carteret Community College
Central Carolina Community College
Cleveland Community College
Coastal Carolina Community College
College of the Albemarle
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Gaston Community College
Halifax Community College
Isothermal Community College
Mayland Community College
McDowell Technical Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southeastern Community College
Stanly Community College
Vance-Granville Community College
Wake Technical Community College
Western Piedmont Community College
Wilson Technical Community College
The biggest growth of jobs in the health care industry is projected to occur in the home health care arena. Home health care encompasses a wide range of health and social services. These services are delivered at home to recovering, disabled, chronically or terminally ill persons in need of medical, nursing, social, or therapeutic treatment and assistance with the essential activities of daily living.

Home health care is considered by many to be a cost-effective alternative to extended hospitalizations, lengthy rehabilitation, or nursing facility stays. Growth in the home health industry is a natural consequence of the trend to keep patients at home when possible, and to discharge them sooner from hospitals in order to control costs.

Carolyn Cusic, PT, co-owner of Total Rehabilitation, Inc. and a member of the Council for Allied Health representing the Association for Home and Hospice Care of North Carolina, says when patients are sent home to complete their healing, they often require assistance with all kinds of technology and prescribed therapeutic procedures. Workers needed for home health include those in nursing, physical therapy, speech/language therapy, occupational therapy, and social work.

"The limitations of working away from the hospital and its technologically-advanced equipment challenge the health provider's creativity, but the rewards are great."

"People who work in home health usually have a passion for it," Cusic says. The limitations of working away from the hospital and its technologically-advanced equipment challenge the health provider's creativity, but the rewards are great. "There is no better place than in your own home to get rehabilitated. A lot of times patients leave the hospital with devices and instruments meant to aid in the rehabilitation process. Not having seen where and how the patient lives, it's hard for the health care provider to know if the patient can even use those instruments once they return home."

Home health care also presents opportunities for using other skills, such as decision-making, communication, and patient assessment. The challenges presented in traveling to the patient's home and working in this isolated setting are balanced by a degree of independence and a supportive work environment.

"You interact one-on-one with the patient, and you really see their improvement first hand when you work with them in their homes. The feeling of knowing that you helped the patient regain a piece of their lives is the greatest feeling in the world," Cusic says.

Home health workers also have more options for schedule flexibility than health care providers in some other settings. "There are lots of opportunities for part-time work," says Cusic, "particularly for therapists."

"Home health care allows the provider to truly understand the patient in their home environment, and challenges the health care provider to help make the patient as independent and comfortable as possible," Cusic says. "Typically, patients end up wanting to adopt their caregivers. They are so appreciative of the encouragement, support, and health care we give them. Just knowing that fact and seeing how happy they are as they improve is the greatest reward."
Certified Nurse Midwife

Certified nurse midwives (CNMs) are RNs with advanced training in midwifery that allows them to care for healthy expectant mothers and to provide a range of clinical services for women. They examine women during pregnancy, manage labor, deliver infants, and, after delivery, care for the newborn and mother. Other duties include preventive health care, counseling, prescribing medication (most states), conducting clinical research, and teaching. All 50 states have recognized nurse midwifery as a legal profession.

Academic Requirements:
Nurse midwives are registered nurses with a bachelor’s degree who receive instruction in prenatal, intrapartum, postpartum/newborn care, gynecology, and the care of women in the child-bearing cycle. Educational programs provide either certificate training or master’s degrees. Programs in nurse midwifery take one to two years (beyond the training as an RN) depending on the program and its prerequisites. Graduates must then pass an examination given by the American College of Nurse Midwives Certification Council, Inc. and apply to the NC Midwifery Joint Committee to practice.

Work Environment:
Nurse midwives work in hospitals, birthing centers, health maintenance organizations, public health departments, doctor’s offices, and clinics. Some have their own private practices. Usually they deliver babies in hospitals or birthing centers.

Salary Range:
$53,000 - $69,000

Educational Programs
Master’s Program
East Carolina University

North Carolina Health Careers '04-'06
Clinical nurse specialists (CNSs) are registered nurses who specialize in a specific field of clinical practice. Some common areas of specialization are cardiac rehabilitation, cardiology, community health, critical care, diabetes, emergency services, gerontology, maternity and child health, medical surgical health, neonatal health, oncology, pediatrics, psychiatric-mental health, organ transplants, and trauma. Clinical nurse specialists also may work as part of a clinical research team.

Areas of Specialization:
Common areas of specialized nursing practice include:
- Cardiac Rehabilitation
- Cardiology
- Community Health
- Critical Care
- Diabetes
- Emergency Services
- Gerontology
- Maternal & Child Health
- Medical Surgical
- Neonatal
- Oncology
- Pediatric Cardiology
- Pediatrics
- Psychiatric-Mental Health
- Thoracic
- Transplant

Work Environment:
In addition to the traditional hospital and physician office settings, clinical nurse specialists provide patient care in the home, clinic, school, occupational setting, and independent nurse-owned practices.

Academic Requirements:
Clinical nurse specialists must first be registered nurses who go on to complete graduate programs (master's level or above). To work as a clinical nurse specialist, you must be certified in a clinical specialty from a national credentialing body approved by the NC Board of Nursing.

Salary Range:
$42,000 - $77,000

Educational Programs
See "Registered Nurse" on pages 80 and 81.
Licensed Practical Nurse

**Work Environment:**
Licensed practical nurses work in hospitals, nursing homes, doctor’s offices, private homes, health departments, and other settings.

**Academic Requirements:**
To become qualified as an LPN, you must complete an accredited practical nursing program at a community college/technical institute or other approved institution. Training involves 36-48 semester hours of course work to prepare for the National Council Licensure Examination for Licensed Practical Nurses. Course work includes fundamental nursing skills.

**Salary Range:**
$24,000 - $34,000

**Educational Programs**

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Anesthesia is the use of special drugs that temporarily block sensation in an area of the body or enable a patient to be kept unconscious and pain free during surgery. Anesthesia is administered by either an anesthesiologist (a physician who specializes in this area of practice) or a nurse anesthetist (a registered nurse who is specially trained in anesthesiology). As a key member of the operating team, the nurse anesthetist combines professional nursing skills with the science of anesthesia and works in collaboration with a doctor or dentist to administer and monitor anesthesia.

**Academic Requirements:**
To become a nurse anesthetist, you must be a registered nurse with either a bachelor of science in nursing degree or a bachelor's degree in a biophysical science, then complete a minimum 24-month training course in anesthesiology from an approved school of nurse anesthesia. Often, training is through a graduate school and leads to a master's degree. Course work includes principles of anesthesia practice, pharmacology, respiratory care, anatomy, and physiology. After completing the training course, you must pass an examination by the Council on Certification for Nurse Anesthetists to become a certified registered nurse anesthetist (CRNA).

**Work Environment:**
Although anesthetics are usually administered in a hospital operating room, the nurse anesthetist may work in the emergency room, in dental offices, outpatient settings, and anywhere else anesthetics are administered.

**Salary Range:**
$99,000 - $118,000

**Educational Programs**
- Carolinas College of Health Sciences & UNC - Charlotte
- Duke University
- East Carolina University
- UNC - Greensboro & Raleigh School of Nurse Anesthesia
- Wake Forest University School of Medicine & NC Baptist Hospital
Nurse practitioners (NPs) are nurses who have completed a master’s nursing degree or post-master’s training in providing preventive and medical health care to individuals and families in collaboration with a physician. NPs provide comprehensive health promotion services to ambulatory clients, evaluate presenting problems at the client’s initial contact with the primary care system, and provide continuing care to clients with acute illness and stable chronic illness. Nurse practitioners also educate patients about staying healthy. They often take care of special populations such as the rural poor, migrant farm workers, elderly persons, and children. In communities or facilities with few physicians, nurse practitioners are especially important as providers of health care.

**Areas of Specialization:**
Nurse practitioners can specialize in family care, geriatrics, adult health, pediatrics, neonatal, and women’s health.

**Work Environment:**
Nurse practitioners are employed at a variety of clinical settings, family practices, health maintenance organizations, student health services, occupational health clinics, home health services, rural clinics, child, adolescent, adult and geriatric sites, community clinics, health departments, medical practices, hospitals, migrant health clinics and prisons.

**Academic Requirements:**
Nurse practitioners are registered nurses (RNs) who go on to complete graduate or post-master’s certificate nurse practitioner programs. Programs usually take one to two years, depending on the educational institution. Graduates must earn American Nurses Credentialing Center (ANCC) certification by examination and apply to the joint NC Board of Nursing and NC Board of Medical Examiners Committee to practice.

**Salary Range:**
$42,000 - $74,000

**Educational Programs**

**Master’s Degree**
Duke University
East Carolina University
University of North Carolina - Chapel Hill

University of North Carolina - Charlotte
University of North Carolina - Greensboro
University of North Carolina - Wilmington
Western Carolina University
Public health nurses, also called community health nurses, are registered nurses with special training and experience in providing public health services in health departments, homes, schools, and community health agencies. Public health nurses must be able to work independently to provide health screening, home care, patient education, and consultation to groups and individuals. They also provide health education services to communities.

**Areas of Specialization:**
Public health nurses may specialize in any of eight areas:
- Child Health
- Clinic Nurse
- Communicable & Chronic Disease
- Community Health
- Home Health Nurse
- Maternal health
- Occupational Health
- School Nurse

**Work Environment:**
Public health nurses are employed by local and state health departments, private industry, home health agencies, and school systems.

**Academic Requirements:**
Public health nurses must first be registered nurses (RN) and then receive additional education as well as supervised on-the-job experience, either during or beyond nursing school, in community settings. Four-year nursing programs include training in community health nursing. Additional training and education is provided through local health departments and schools of nursing. Graduate level education for BSN-prepared nurses is available through schools of public health.

**Salary Range:**
$29,000 - $52,000

**Educational Programs**

**Bachelor of Science Degree in Nursing (BSN)**
- Barton College
- Duke University
- East Carolina University
- Fayetteville State
- Gardner-Webb University
- Lees-McRae College
- Lenoir-Rhyne College
- North Carolina A&T State University
- North Carolina Central University
- Queens College
- University of North Carolina - Chapel Hill
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
- University of North Carolina - Pembroke
- University of North Carolina - Wilmington
- Western Carolina University
- Winston-Salem State University

**Master of Public Health in Public Health Nursing (MPH)**
- University of North Carolina - Chapel Hill

**Master of Science in Public Health Nursing (MS)**
- University of North Carolina - Chapel Hill

[www.nchalthcareers.com](http://www.nchalthcareers.com)
Registered nurses (RNs) care for patients and promote their physical, mental, and social well-being. The duties performed by RNs include: monitoring patient status and progress, assisting in care and rehabilitation, administering medication, and advising patients and their families on preventive health care measures. State laws and specific employer restrictions specify exactly what a registered nurse is allowed to do on the job. The title of registered nurse encompasses a wide range of specialties, among them: hospital nurses (bedside care in various hospital departments), office nurses (office and clinical care which may involve office work), home health nurse (nursing service in the home environment), nursing home nurses (long-term care nursing), public health nurses (community-wide health educator), occupational health/industrial nurses (worksite care), and head nurse/nurse supervisor (managerial and administrative responsibilities). RNs may also work on clinical research teams. Specialized training or experience may be necessary for all of these positions. The main difference among them, however, is the setting and/or the population served.

**Academic Requirements:**
To become qualified as a registered nurse, you must complete an accredited professional nursing program. This may be at hospital-based diploma programs at the community college level, which awards an associate degree in nursing (ADN) or an associate of applied science (AAS); or at the baccalaureate level, which awards a bachelor of science in nursing (BSN). The ADN program usually takes about two years; the bachelor’s degree generally requires four years of college. (Some university nursing programs accept transfer credit from community colleges.) To work as a nurse, you must pass The National Council Licensure Examination for Registered Nurses.

**Advanced Practice** - Many nurses continue their formal education to earn a master’s degree in nursing. This provides them with expanded career options, including the roles of clinical nurse specialist, nurse practitioner, nurse midwife, and nurse anesthetist.

**Work Environment:**
Due to the changing environment for delivering health and illness care, today’s nurses are found in acute care hospitals, sub-acute settings, rehabilitation and long-term care facilities, retirement communities, health maintenance organizations, outpatient surgical centers, ambulatory care clinics, specialized outpatient clinics, urgent care, birthing centers, schools, mental health settings, churches, home health, and hospice care.

**Salary Range:**
$31,000 - $51,000
Educational Programs

Bachelor of Science Degree in Nursing (BSN)
- Barton College
- Cabarrus College of Health Sciences
- Duke University
- East Carolina University
- Fayetteville State University
- Gardner-Webb University
- Lees-McRae College
- Lenoir-Rhyne College
- North Carolina A&T State University
- North Carolina Central University
- Queens College
- University of North Carolina - Chapel Hill
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
- University of North Carolina - Pembroke
- University of North Carolina - Wilmington
- Western Carolina University
- Winston-Salem State University

Master of Science Degree in Nursing (MSN)
- Duke University Medical Center
- East Carolina University
- Gardner-Webb University
- Queens College
- University of North Carolina - Chapel Hill
  (also offers MS, MPH in Public Health Nursing and Ph.D. in Nursing)
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
- University of North Carolina - Wilmington
- Western Carolina University

Hospital-based Programs (Diploma in Nursing)
- Mercy School of Nursing
- Presbyterian Healthcare System
- Watts School of Nursing

Hospital-based Programs
(Associate Degree in Nursing)
- Cabarrus College of Health Sciences
- Carolinas College of Health Sciences
- Presbyterian Healthcare System
- Watts School of Nursing

Associate Degree in Nursing (ADN and AAS)
- Alamanche Community College
- Asheville-Buncombe Technical Community College
- Beaufort County Community College
- Bladen Community College
- Blue Ridge Community College
- Brunswick Community College
- Caldwell Community College and Technical Institute
- Cape Fear Community College
- Carteret Community College
- Catawba Valley Community College
- Central Carolina Community College
- Central Piedmont Community College
- Cleveland Community College
- Coastal Carolina Community College
- College of the Albemarle
- Craven Community College
- Davidson County Community College
- Durham Technical Community College
- Edgecombe Community College
- Fayetteville Technical Community College
- Forsyth Technical Community College
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- Lenoir Community College
- Mayland Community College
- McDowell Technical Community College
- Mitchell Community College
- Montgomery Community College
- Nash Community College
- Piedmont Community College
- Pitt Community College
- Randolph Community College
- Richmond Community College
- Roanoke-Chowan Community College
- Robeson Community College
- Rockingham Community College
- Rowan-Cabarrus Community College
- Sampson Community College
- Sandhills Community College
- South Piedmont Community College
- Southeastern Community College
- Southwestern Community College
- Stanly Community College
- Surry Community College
- Tri-County Community College
- Vance-Granville Community College
- Wake Technical Community College
- Wayne Community College
- Western Piedmont Community College
- Wilkes Community College
- Wilson Technical Community College

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Under Examination: Opportunities in Nursing

It's hard to imagine a career that offers more flexibility and opportunity than nursing. Nursing graduates today receive numerous job offers, and enter a field with a wide range of employment opportunities with clear paths for career advancement.

Meet six nurses who work with Wake Forest University Baptist Medical Center. They all have RN degrees, many have further education, and each has found an area of work that suits his or her unique skills and interests. Their departments and job responsibilities vary greatly, but they all agree that the opportunities in nursing are endless.

Cassidy Sykola, RN, is an assistant unit manager in intermediate care. He cares for patients who have just come out of the intensive care unit. “When it comes to direct patient care, nurses are it,” Cassidy says. “The patient needs the entire health care team, but the nurse’s role is very important.”

Sharon Allen, RN, BSN, grew up in Advance, NC. “My department is pediatric sedation, and I work one-on-one with children and their families,” Sharon says. “On our unit, we sedate children to prepare them for invasive or painful procedures.” It’s Sharon’s job to deal with the physical and emotional stresses of her young patients and their families. “I love nursing for the interaction with my patients.”

Catie Wylie, RN, CRRN, CNRN, has been a nurse for 14 years. She works in the acquired brain injury department. During her career, she has worked on medical surgical floors, in high risk labor and delivery, in an intensive care unit, and as a home health nurse. Home health nursing is where she became interested in rehabilitation. She is now certified in both rehabilitation and neurosciences. “In nursing, the opportunities for learning are endless,” Catie says. “You can grow in your career as much as you want.”

Kari Crawford, MS, APRN, BC, is a pediatric nurse practitioner. She works in cardiac surgery and cardiology for kids and has been a nurse for 10 years. “I like the autonomy of my job, and I love working with the kids,” Kari says. “I work with a supervising physician, but I can write my own orders, write prescriptions, and diagnose illnesses. The most important thing I bring to my job is my compassion. It’s critical in my interactions with patients and their families.”

Clinical nurse specialists handle a variety of physical and mental health problems and work in research, education, and administration. Kim Hutchinson, EdD, MS, MSN, CNS, FNE, is a clinical nurse specialist in behavioral health services. “I believe the most important thing about nurses is that they have the ability to allow people to seek comfort from them. Sometimes the most important thing is to be there—to offer yourself.” Kim provides a lot of support to the staff in her department. “I work 40 hours each week, but I’m constantly thinking of ways I can make things better for the nursing staff, the patients, their families, and the physicians.”

Valerie Vestal, RN, BSN, has been a nurse for 8 years. She has worked directly with patients and in nursing management, but now she is part of a team that implements new technology systems for the medical center. She and her co-workers install computerized physician order entry systems throughout the hospital, working with one department at a time. After installation is complete, Valerie trains nurses and physicians to use the new technology. “One reason I love being a nurse is I love trying new things.” Valerie is currently taking classes toward a master’s degree and plans to become a family nurse practitioner. She is also a part-time clinical instructor for Forsyth Technical College. “Nursing allows you to explore your talents and follow your interests. It has offered me opportunities I wouldn’t have had otherwise. It’s an awesome career.”

Front row l to r: Catie Wylie, Kari Crawford, Sharon Allen
Back row l to r: Kim Hutchinson, Cassidy Sykola, Valerie Vestal
Pharmacy is a health service discipline with a foundation in the biomedical and clinical sciences. Pharmacists and pharmacy technicians are important members of this rapidly expanding field.

The practice of pharmacy is based on the concept of providing pharmaceutical care to those in need. Pharmaceutical care is the direct interaction of the pharmacist with the patient for the purpose of caring for that patient’s medication-related needs. Translated into everyday practice, an individual pharmacist evaluates a patient’s medication-related needs, determines whether the patient has any actual or potential medication-related problems, and works with the patient and other health care professionals to design, implement, and monitor a pharmacotherapeutic plan that will resolve or prevent the problem.

As members of the health care team, pharmacists are the most important source of medication information for consumers and other health care professionals. In response to increased consumer demands and unmet needs in the health care system, the scope of pharmacy practice has evolved from a product-based profession to an information-based profession. Today’s pharmacist works closely with physicians and other health professionals to make the best decisions regarding pharmaceutical care. There has never been a more exciting time to begin a career in pharmacy.
The field of pharmacy is experiencing unprecedented growth and the role of the pharmacist touches every aspect of health care. Because pharmacists are the experts in matters involving medications, they must demonstrate a solid foundation in math and science, as well as critical thinking and problem solving skills to make the right decisions about medications. They must be detail oriented and not afraid of responsibility or hard work. They must be dependable, conscientious, and prudent. Typical tasks include interpreting prescription orders, communicating information such as uses, side effects and drug interactions, and assisting patients in the selection of nonprescription medicines and health products. A pharmacist must enjoy working with people and helping those in need. The pharmacist works as part of a health care team to improve patient health. The familiar community pharmacist remains the most accessible health professional to the general public. However, a career in pharmacy can also lead to many other opportunities.

**Areas of Specialization:**
- Community Pharmacy (Retail Pharmacy)
- Health-System Pharmacy
- Consultant Pharmacy
- Research and Development
- Pharmacotherapy Specialty

**Work Environment:**
Pharmacists work in many dynamic fields including community pharmacy, health-system pharmacy, long-term care pharmacy, managed care pharmacy, ambulatory care centers, physician offices, academia, the pharmaceutical industry as well as positions in various government agencies.

**Academic Requirements:**
The doctor of pharmacy (PharmD) degree is the educational standard for clinical practice in pharmacy. The PharmD degree is a professional degree. It requires a minimum of six years postsecondary study to complete; at least 2 years of pre-professional coursework followed by 4 years of professional study. To become a certified pharmacist upon graduation from a school of pharmacy, one must also pass a state and national board exam.

**Salary Range:**
$59,000 - $82,000

**Educational Programs**
Campbell University
University of North Carolina-Chapel Hill
Wingate University
When you think of careers in pharmacy, can you imagine something other than the drug store pharmacist? Dispensing medicine and working in a retail setting is an important role for pharmacists, but many people greatly underestimate the variety of health care services a pharmacist can provide.

Michelle Bozovich, PharmD, CPP, is on the cutting edge of pharmacy practice in North Carolina and in the US. She and her husband are both pharmacists and co-owners of Bennett’s Pharmacy in Greensboro. They also own a consulting firm that places pharmacists in family medicine and cardiology physicians’ practices. In these less traditional roles, pharmacists work with doctors to offer patient education and initiate medicine therapy plans. They see patients and help them manage chronic diseases such as diabetes, cardiovascular disease, and asthma.

Michelle started her college education at NC State University, thinking she might become a physician. Then she transferred to UNC-Chapel Hill where she earned a bachelor of science degree and her doctor of pharmacy or PharmD degree from the School of Pharmacy.

"A PharmD is a valuable resource to the doctor in a medical practice. We provide an on-site resource for drug information and help prevent drug interactions."

The CPP designation in her professional title means she is a clinical pharmacist practitioner and can prescribe medications to her patients. “A PharmD is a valuable resource to the doctor in a medical practice. We provide an on-site resource for drug information and help prevent drug interactions,” Michelle says. “PharmDs can also work with patients who need more individual attention, freeing up the doctor’s time to see more patients.”

Other benefits of PharmDs working directly with patients are better outcomes for patients. “We can reduce the number of referrals to specialists, especially in rural and family medicine practices. We provide intensive education and help patients with chronic disease management.”

"I think the best thing about my job is seeing patient outcomes and knowing I have a direct effect on their health care."

”I think the best thing about my job is seeing patient outcomes and knowing I have a direct effect on their health care,” Michelle says. “The feedback from the patients is a great reward."

Pharmacists who work in hospitals and in the drug industry have less patient contact than those who work in retail settings or in physicians’ practices. Pharmacists might also work in long-term care agencies.

“If you want to be a pharmacist, you’ve got to love science and chemistry,” Michelle says. “All pharmacists have to be attentive to details, especially in retail settings. Pharmacists who want to work with people should have a patient and calm manner under stress, and they should have good communication skills.” Michelle loves working with patients and bringing all her skills as a pharmacist to both retail and ambulatory care settings. “If you like seeing the rewards of your work and want to directly affect patient care, you should definitely consider becoming a pharmacist.”

Michelle Bozovich

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Pharmacy Technician

Pharmacy technicians assist and support pharmacists in providing medications and other health care products to patients. They have a broad knowledge of pharmacy practice and are skilled in the techniques required to order, stock, package, and prepare medications. When working in a pharmacy, pharmacy technicians work under the direct supervision of a pharmacist.

Work Environment:
Pharmacy technicians work in hospital pharmacies, community pharmacies, home health pharmacies, long-term care pharmacies, clinic pharmacies, nuclear medicine pharmacies, managed care organizations, health insurance companies, and in mail-order prescription pharmacies.

Salary Range:
$14,000 - $23,000

Academic Requirements:
Pharmacy technicians may be trained and educated in pharmacy technology programs at community colleges. Training takes up to one year, depending on the program, and covers basic pharmacology, medical terminology, ethical and legal considerations, drug distribution systems, pharmaceutical techniques, pharmacy record keeping, and organizational/clerical responsibilities.

Certification
The Pharmacy Technician Certification Board (PTCB) administers a voluntary, National Pharmacy Technician Certification Examination which is designed to certify the competency of those individuals who demonstrate the knowledge required to practice as a pharmacy technician. Those who pass the exam earn the title, certified pharmacy technician (CPhT). Pharmacy technicians in North Carolina must also be registered with the North Carolina Board of Pharmacy.

Educational Programs
Caldwell Community College and Technical Institute
Cape Fear Community College
Davidson County Community College
Durham Technical Community College
Fayetteville Technical Community College
Nash Community College

Southeastern Community College awards the credential in collaboration with:
Bladen Community College
Brunswick Community College
James Sprunt Community College
Robeson Community College
Vance-Granville Community College
Public health workers are concerned with community-wide health care and deal with populations rather than individuals. Some populations may include specific occupational workers, members of a specific age group, or any group of people who share a common risk factor for disease.

Public health professionals identify communities or groups at risk for disease, develop public policy initiatives that address global, national, and community health problems, and work to ensure that all individuals receive adequate health care. Although all public health specialists work for the ultimate goal of health promotion and disease prevention, they differ in their methods. Biomedical and laboratory practitioners, health services administrators, nutritionists, environmental scientists, and occupational health and safety specialists are workers who may function within or outside the public health context. Biostatisticians, epidemiologists, health educators, international health specialists, and public health program specialists generally work in public health agencies.

For public health professionals of all types, employment opportunities are far-reaching and are increasingly expanding into other health care fields.
Biostatisticians apply mathematics and statistics to the compilation, analysis, and reporting of health-related information. They also play a role in decision making and strategic planning of health programs. They might estimate what percentage of a certain population is likely to develop a disease, consider the likelihood of disease transmission, and look at data from clinical trials and studies to determine the best method of intervention. Biostatisticians also use their expertise in sampling and hypothesis testing to assist health investigators designing studies. They may specialize in demography or health data systems/vital statistics.

**Work Environment:**
Biostatisticians work for state and federal government agencies, health departments, private industry, and research institutions.

**Academic Requirements:**
Biostatisticians should have at least a baccalaureate degree, and a master’s or doctoral degree for more advanced research positions. Studies cover statistical methods, data management, demographics and other related areas.

**Salary Range:**
$40,000 - $100,000

**Educational Programs**
University of North Carolina - Chapel Hill
Epidemiologists analyze the occurrence and distribution of diseases within a population, determine the possible vector or mode of disease transmission, and examine the efficiency of intervention programs. These public health scientists provide the data to help governments, health agencies, health care providers, and communities deal with epidemics and other health issues. Epidemiologists may specialize in infectious disease, chronic disease, environmental/occupational epidemiology, psycho/social epidemiology, health care evaluation, or human genetics.

**Areas of Specialization:**
Epidemiologists can specialize in a number of areas including cancer, cardiovascular diseases, environmental/occupational diseases, reproductive health, infectious diseases, and research about health care.

**Salary Range:**
$40,000 - $100,000

**Academic Requirements:**
An excellent undergraduate preparation for a graduate program in this field would include a bachelor's degree in the health sciences, mathematics, biological science, or behavioral science. A doctoral degree is usually required to be an epidemiologist, and some epidemiologists are MDs in addition to holding a master's degree in epidemiology.

**Work Environment:**
Epidemiologists work at universities, research institutions, state and federal health agencies, major health organizations, and large corporations.

**Educational Programs**
University of North Carolina - Chapel Hill
Wake Forest University
Environmental health workers plan, develop, implement, and evaluate standards and systems to improve the quality of the physical environment as it affects health. They also manage environmental health problems and promote public awareness of the need to prevent and eliminate environmental health hazards. Specialists within this field may concentrate on food protection, radiological health, environmental health, environmental medicine, sanitation, water quality/resources, air pollution/resources, noise pollution, toxicology, solid waste management, and research.

**Academic Requirements:**
A licensed environmental health specialist in a public health department must have a bachelor's degree in environmental health or a related field (including 15 hours of biology or physical science), complete a supervised training and internship period of one to two years on the job at a health department and pass a licensure examination given by the North Carolina State Board of Sanitarian Examiners.

Environmental health specialists involved in research, administration, environmental protection and resource management earn at least a master's degree, and some earn doctoral degrees in areas such as water resources engineering, air and industrial hygiene, environmental management and related fields. To enter a graduate program, you should have a bachelor's degree or substantial course work in science and engineering.

**Areas of Specialization:**
- Air and Industrial Hygiene
- Environmental Chemistry and Biology
- Environmental Management
- Food Protection
- Water Resources

**Work Environment:**
Environmental health specialists work in a variety of settings, including public health departments, government agencies, universities and private industry.

**Salary Range:**
$24,000 - $40,000
Health educators plan, implement, and evaluate the effects of educational programs designed to support and modify health-related behaviors. They promote good health by educating the public about the causes of disease and the means of prevention on a community-wide level. Health educators also may provide counseling, plan programs, and organize community efforts. Public health workers within this area may specialize in the behavioral sciences, public health education, school health education, and communication theory/health media.

**Work Environment:**
Health educators are employed by public health departments, schools, corporations, and community, government, or voluntary agencies.

**Academic Requirements:**
Health educators must earn a baccalaureate or master’s degree in health education. Studies cover public health research, theory and practice, social policy, health issues in different populations, community diagnosis, planning, management and evaluation techniques. To be recognized as a certified health education specialist (CHES), health educators must successfully complete a certification examination.

**Salary Range:**
$30,000 - $50,000

**Educational Programs**

- Appalachian State University
- East Carolina University
- Elizabeth City State University
- Elon University
- Gardner-Webb University
- North Carolina A&T State University
- North Carolina Central University
- University of North Carolina - Greensboro
- University of North Carolina - Pembroke
- Master’s Degree
  - East Carolina University
  - University of North Carolina - Chapel Hill
  - University of North Carolina - Charlotte
Radiologic science is used to create images of body structures, disease, and injury. Radiation and medical imaging services are also used in treating some diseases and conditions. There are a number of careers in radiologic science including radiologist, radiation therapist, radiologic technologist, nuclear medicine technologist, and diagnostic medical sonographer.

The field of radiology has made tremendous advances since the discovery, in 1895, of “X-rays” that could penetrate material to produce an image on a piece of film. The uses of radiation in medicine have revolutionized the diagnosis and the treatment of injury and disease.

While general diagnostic radiography is utilized widely by physicians to obtain accurate information about the inside of the body, there are also other technologies and procedures which play an important role in patient care. Other areas of medical imaging include technology such as computerized tomography (CT), which produces images of “slices” of the body taken from different angles and processed by a computer. Vascular and interventional radiology services examine various blood vessels, ducts, and other body structures and often provide a non-surgical treatment for some complex medical conditions. Another area of imaging is medical sonography, in which sound waves are projected into the body and reflected back to create a picture of the structures inside the body. In magnetic resonance imaging (MRI), radio waves and powerful magnets are used to create a computer-generated image of the body tissues. In nuclear medicine, radioactive isotopes administered to the patient are mapped as they travel to anatomic structures. Radiation is also used not only to image the body but for treatment of diseases such as cancer in the field of radiation oncology.
Diagnostic medical sonographers use sound waves (ultrasound) to create images that show the shape and composition of body tissues, organs, and pathologies. These images assist physicians in diagnosing disease, injury, or other physical conditions. The sonographer will first record patient history, position the patient for ultrasound testing, and explain the procedure in detail. Although many sonographers are trained to use ultrasound on all body parts, some may specialize in neurosonography (brain), vascular sonography (blood vessels), echocardiography (heart), abdominal sonography (abdominal cavity), obstetrics/gynecological sonography (female reproductive system), or ophthalmologic sonography (eye). As with other medical imaging personnel, diagnostic medical sonographers work under the direct supervision of a physician.

Academic Requirements:
Training can take one, two or four years depending on the student’s educational and professional experience background and the degree or diploma desired. Individuals with no prior training may complete a two-year program leading to the associate in applied science degree. Advanced certificate programs for persons with prior healthcare education and professional practice are usually one year in length. Baccalaureate degree programs in radiologic science may have “specialization” tracks in diagnostic medical sonography. Graduates of accredited programs are eligible to apply for certification and registration with the American Registry of Diagnostic Medical Sonographers. The programs include coursework and laboratories covering anatomy, pathophysiology, the science and use of ultrasound, sound physics, communication skills and other related topics.

Work Environment:
Sonographers work in medical centers, hospitals, clinics and doctors’ offices. They may perform examinations at the patient’s bedside, in the emergency department, or in surgery.

Salary Range:
$35,000 - $60,000

Educational Programs

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<th>Associate Degree</th>
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Nuclear medicine technologists use radiopharmaceuticals under a physician’s supervision to produce images for diagnosis and for the treatment of some diseases. Radiopharmaceuticals, introduced into the body via injection, inhalation, or ingestion, aid in the diagnostic imaging of such organs as the heart, lungs, bone, liver, kidneys, and brain. These radioactive tracers are useful because they are attracted by certain internal organs and emit easily detectable high energy rays. Using sensitive instrumentation, the nuclear medicine technologist can obtain images of the structure and function of the specific organ in question. These technologists are also concerned with the safe storage and disposal of these radioactive materials. They prepare and administer the radioactive materials, operate nuclear instruments, position patients for diagnostic procedures, and prepare information received from the examinations for the radiologist’s interpretation. Technologists must monitor radiation levels at all times to ensure the safety of patients and themselves.

**Academic Requirements:**
The time required for training differs with the type of program ranging from one to four years. Programs can either be associate degree (two year) or bachelor’s degree programs (four year) or certificate programs (one year). Certificate programs most often require the applicant to be a certified/registered or registry eligible clinical laboratory scientist, radiologic technologist, nurse or medical technologist. Curriculum content includes courses in physics, instrumentation, radiation protection and biology, radiopharmaceuticals, clinical courses on general, cardiac and laboratory imaging studies, and therapy procedures. Certification for graduates can be obtained through the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

**Work Environment:**
Nuclear medicine technologists work under the direction of physicians in hospitals, diagnostic centers, research facilities, and educational institutions and must follow state and federal regulations.

**Salary Range:**
$35,000 - $60,000

**Educational Programs**

**Associate Degree**
- Caldwell Community College & Technical Institute
- Forsyth Technical Community College
- Pitt Community College

**Advanced Certificate**
- UNC Hospitals and the University of North Carolina - Chapel Hill
Radiation therapists administer doses of radiation to treat patients, primarily cancer patients. By applying high energy photon and electron beams to specific body areas, radiation therapy attempts to halt the spread of disease or to offer relief from symptoms. Radiation therapists deliver the course of radiation, give support and information to the patient, and work closely with oncologists to decide treatment options and to monitor patient progress. Cancer patients and their families often develop a meaningful relationship with these health care providers over the course of treatment.

**Academic Requirements:**
Professional preparation usually takes one year for a certificate, two years for an associate degree or four years for a bachelor’s degree. Applicants to one-year programs must have graduated from an accredited program in radiography or a related allied health field. Two year programs require a high school diploma or equivalent with an educational background in science and mathematics. Students earning a bachelor’s degree program complete general education and math/science prerequisite courses and then two years of professional courses in radiation therapy and radiologic science. The educational programs include medical terminology, human anatomy and physiology, oncology (study of cancers), radiation physics, dosimetry, radiation oncology treatment techniques, and related areas of patient care, safety, and quality control. Graduates of accredited programs may be eligible for certification offered by the American Registry of Radiologic Technologists.

**Work Environment:**
Radiation therapists work in cancer treatment centers and radiation oncology departments in medical centers and hospitals. Radiation hazards exist but are minimized by following appropriate procedures and using protective equipment.

**Salary Range:**
$38,000 - $65,000

**Educational Programs**

**Associate Degree Programs**
Forsyth Technical Community College
Pitt Community College

**Hospital-based Certificate Program**
University of North Carolina Hospitals
The title of radiologic technologist covers a wide range of health care professionals who use radiation and magnetic fields for diagnostic imaging. For most sections of the medical imaging field, the health care provider must first complete a radiography program and successfully pass the national certification examination in radiography before seeking additional training and certification in other medical imaging areas. Radiographers produce radiographs or images of all parts of the human body for use in diagnosing and treating illnesses. They are responsible for patient assessment and preparation for radiologic procedures and for image production for analysis by a radiologist.

| Work Environment: |
| Radiologic technologists usually work under the direction of radiologists or other physicians in medical centers, hospitals, clinics, physicians' offices, public health departments, and imaging centers. In hospitals, radiographers operate mobile radiographic (X-ray) equipment at the patient's bedside, in the emergency room, or in surgery. |

| Salary Range: |
| $35,000 - $65,000 |

| Academic Requirements: |
| Radiologic technologists can receive their education at community colleges, universities, or in hospital-based programs (which are often affiliated with colleges and universities). The program is usually a minimum of two years in length. Students earning a bachelor's degree complete general education courses and math/science prerequisite courses and then two years of professional coursework in radiologic science. The educational programs cover principles of radiography, medical ethics and law, medical terminology, patient care and assessment, anatomy and physiology (human structures and their functions), pathology (disease and injury), radiographic procedures, imaging equipment, and federal and state regulations and safety procedures. Program graduates may be eligible for certification through a national examination by the American Registry of Radiologic Technologists. To enter a program in the other imaging technologies/areas, you must first be certified/registered (or eligible to be registered) as a radiologic technologist by the American Registry of Radiologic Technologists (ARRT). The diploma programs in the CT, MRI, and vascular/interventional areas range in length from 6 months to one year to complete. These areas may also be included in the bachelor's degree programs in radiologic science. |
Some radiographers may specialize in fluoroscopic examinations (watching a patient’s internal organs on a monitor or screen), in pediatrics or in orthopedics. Radiographers who are CT technologists use computerized tomography to view patient anatomy and disease from a cross-sectional perspective. Magnetic resonance imaging (MRI) technologists are also radiographers, but they are skilled in using magnetic fields and radiofrequency waves instead of ionizing radiation, to create images. Vascular/interventional technologists began as radiographers and then specialized in the imaging and treatment of blood vessels, ducts, and other structures. All radiologic technologists work under the direct supervision of a physician.

Educational Programs

Hospital-based Programs (Certificate)
Carolinas College of Health Sciences/Carolinas Medical Center - Charlotte
Moses Cone Health System - Greensboro
Presbyterian Healthcare System - Charlotte
Wilkes Regional Medical Center - Wilkesboro

Community College Programs (Associate Degree)
Asheville-Buncombe Technical Community College
Caldwell Community College & Technical Institute
Cape Fear Community College
Carteret Community College
 Catawba Valley Community College
Cleveland Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Catawba Valley Community College
Johnston Community College
Lenoir Community College
Pitt Community College
Randolph Community College
Rowan-Cabarrus Community College
Sandhills Community College
Southeastern Community College
Southwestern Community College
Vance-Granville Community College
Wake Technical Community College

University Programs
Bachelor’s Degree - Radiologic Science
University of North Carolina - Chapel Hill
(Certificate and Bachelors programs)

Bachelor’s Degree
Greensboro College* through affiliation with hospital-based programs

Educational Institutions in CT and MRI, and Cardiovascular and Vascular/Interventional Technology

Community College Programs (Diploma)
Caldwell Community College & Technical Institute
Edgecombe Community College
Forsyth Technical Community College
Pitt Community College
Stanly Community College
Wake Technical Community College

University Program
Bachelor’s Degree - Radiologic Science
University of North Carolina - Chapel Hill

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"If you like helping people and working with technology, then you should definitely consider a career in radiology," says Doug Philip.

Doug is the son of two nurses, so it's no surprise he has always been interested in health care. "With encouragement from my parents, I gravitated toward radiology because it's such an expanding field," he says. "I'm not only able to perform health care practices, but I'm also on the cutting edge of computer science."

Doug started his radiology education at Wilkes Regional Medical Center. After graduating from radiography school, Doug worked as a radiologic technologist for UNC Hospitals and completed the UNC-Chapel Hill Department of Radiology's nuclear medicine program. While working as a nuclear medicine technologist, Doug went on to earn his bachelor of science degree in radiologic science.

In January 2003, UNC Hospitals started using a new positron emission tomography/computed tomography (PET/CT) scanner to detect hypermetabolic areas in the body (indicating a possible malignancy). Doug was selected as one of the first PET/CT fusion technologists for UNC Health Care. Now, as a PET/CT applications specialist, he travels to hospitals and clinics with new or upgraded scanners and trains their staff.

What's it like to work in radiology? "In nuclear medicine, I pretty much worked 9 to 5 and took some on-call time," Doug explains. "My job now requires a lot of travel and almost all my work is done independently. In radiology, most of the work is done as a team, but as you learn more and specialize in new areas (CT, MRI, nuclear medicine) you work more independently than before."

Doug says his education is not over; he plans to pursue a master's in business administration (MBA) or master's in public health (MPH) degree in the near future.

Credits: Many thanks to UNC-Chapel Hill Design Services, especially to Lauren E. Holder for text and Dan Sears for the photograph.
Radiologists are physicians who specialize in the use of X-rays, radioactive materials and other imaging procedures to diagnose diseases and injuries and in some cases to treat disease and injury. They conduct examinations and use procedures to provide the most complete information with the least radiation dose to the patient. The imaging modalities available include radiography, computerized tomography (CT), vascular imaging, nuclear medicine, magnetic resonance imaging (MRI) and sonography. A radiologist mainly performs these services with patients who were referred to radiology by the patient’s primary care physician.

**Areas of Specialization:**
Diagnostic imaging (using imaging to diagnose injury and disease); additional subspecialty fellowships and certifications available in areas such as pediatrics, vascular/interventional radiology, and neuroradiology.

**Work Environment:**
Radiologists generally work as the medical leaders of radiology departments in hospitals and in medical schools and as part of private radiology practices. Often they supervise other personnel trained in medical imaging. While the field of radiology involves risk from radiation emitting equipment and nuclear isotopes, safety standards and practice guidelines protect both the radiologist and the patient from unnecessary exposure.

**Academic Requirements:**
A radiologist is required to complete college and four years of medical school. After the MD degree is earned, at least five additional years of training in a radiology residency are necessary before the individual is eligible to take the certification examinations (written and oral) from the American Board of Radiology. College students preparing for medical school should take either a “pre-med” track or include substantial course work in mathematics and science (including biology, chemistry and physics). See the “Physician” page for more information.

**Salary Range:**
$200,000 - $350,000

**Educational Programs**
Duke University
University of North Carolina - Chapel Hill
Wake Forest University

www.nchealthcareers.com
Radiologist assistants (RAs) are radiologic technologists with additional education and responsibilities. The RAs' responsibilities include conducting radiologic patient assessments, participating in patient management, and performing radiologic procedures. Similar to physician assistants, the RA works under the supervision of a physician, specifically a radiologist. RAs do not diagnose, order tests or procedures, or prescribe medications.

**Work Environment:**
The majority of RAs work in hospital radiology departments and imaging centers as part of the radiologist professional practice.

**Salary Range:**
$75,000 - $125,000

**Academic Requirements:**
All radiologist assistant programs must be at least at a baccalaureate level or above. Programs currently under development are bachelor's degree, post-baccalaureate certificate, and master's degree programs. To be eligible for these programs, the applicant must be registered in radiography from the American Registry of Radiologic Technologists. Other admissions requirements vary by program. The program length is between 20 - 24 months. The curriculum includes courses such as advanced patient assessment, radiologic procedures, pathophysiology, and pharmacology. The student will participate in a clinical preceptorship with radiologist to gain advanced level practice skills and knowledge.

**Educational Programs**
At the printing of this book, North Carolina is in the process of developing a radiologist assistant program at UNC-Chapel Hill. For more information, check with the American Society of Radiologic Technologist website at www.asrt.org for more information related to radiologist assistant programs available. The American Registry of Radiologic Technologists is developing the national certification requirements for this profession and information on the examination can be found at www.arrt.org.
The fields of science and engineering are closely related to medicine. Many scientists work in the health field to detect, control, or prevent disease and/or protect the environment. New drugs, methods, equipment, and technology can contribute to medical treatment and to the prevention of disease.

Environmental scientists use their knowledge of biology and environmental science to improve and manage air, water, and other environmental resources. Industrial hygienists protect the work environment by detecting and controlling disease-producing agents.

Biomedical engineers combine their knowledge of medicine and engineering to provide materials, tools and techniques that help health care professionals in research, diagnosis, and treatment. Biomedical equipment technicians apply their technical skills to the repair or installation of health care equipment. Health physicists examine the effects of radiation on living things as well as study potential health hazards such as radioactive waste disposal and indoor radon.

Over the last century, the advances made by health care scientists and engineers have been astounding, transforming the practice of medicine into a more accurate science and helping eliminate diseases, change unhealthy behaviors and produce new medical treatments. These fields challenge the brightest minds to match and exceed their predecessors.
Biomedical engineers apply engineering techniques to solve biological and medical problems. Environmental engineers study the environment to determine methods for improving air and water quality. In clinical engineering, the biomedical engineer designs and maintains diagnostic and health care delivery systems. In medical engineering, the biomedical engineer develops artificial organs and limbs, diagnostic and therapeutic devices, pacemakers and imaging equipment. These engineers may also carry out research in the medical field which provides ideas for innovative projects.

Work Environment:
The biomedical engineer may work in a variety of medical and technical settings. Most jobs are in hospitals, industrial manufacturing, companies, private and university level research facilities, medical schools, and the government.

Academic Requirements:
The recommended requirement is a four- or five-year bachelor's degree from an engineering or physical science program with a concentration in biology, anatomy, or behavioral sciences. Most careers require a master's or doctoral degree; some biomedical engineers are physicians with specialty training.

Salary Range:
$49,000 - $78,000

Educational Programs

**Bachelor's Degree**
Duke University
University of North Carolina - Chapel Hill
(Curriculum in Applied Sciences)

**Master's Program**
Duke University
University of North Carolina - Chapel Hill

**Doctoral Program**
Duke University
East Carolina University
University of North Carolina - Chapel Hill
Wake Forest University School of Medicine
(Medical Engineering)
Biomedical equipment technicians install, operate, repair, and maintain equipment such as X-ray machines, incubators, electronic thermometers, dental equipment, cardiac pressure monitors, and sterilizers. The biomedical equipment technician also instructs other health care personnel in the correct use of the equipment and assists in the evaluation of new devices.

Work Environment:
Some biomedical equipment technicians work in hospitals and large clinics. Others work on teams with biomedical or clinical engineers, medical personnel and scientists, or for manufacturers of biomedical equipment.

Academic Requirements:
Biomedical equipment technicians are not required to be certified. Employers may hire individuals who have a background in electronics and train them on the job. However, most prefer graduates of formal biomedical equipment technology programs. Training in these programs usually takes two years at a community college. Certification is available after appropriate training and/or experience from the International Commission for Clinical Engineering and Biomedical Technology.

Salary Range:
$30,000 - $38,000

Educational Programs

Associate Degree Programs
Caldwell Community College and Technical Institute
Stanly Community College
Health physics is a scientific discipline devoted to the study of radiation and its effects on living things. Health physicists develop or implement methods to evaluate radiation hazards and to protect humans and the environment from radiation. They may study issues such as radioactive waste disposal, nuclear energy, indoor radon, and other potential hazards. Health physicists who work in regulatory enforcement establish guidelines for adequate radiation control.

**Work Environment:**
Health physicists work in several areas: nuclear power reactor facilities, research facilities, medical centers, federal and state governmental programs such as the Nuclear Regulatory Commission, and environmental control agencies.

**Salary Range:**
$56,000 - $90,000

**Academic Requirements:**
A college degree, preferably in physics, biology, or chemistry is required to enter a graduate educational program in health physics/radiologic hygiene. The educational program leads to either a master's or a Ph.D. degree. Students with significant preparatory course work may complete a master's degree program. Studies cover health physics topics such as radiation biology, hazards evaluation, and environmental radioactivity. Certification may be obtained from the American Board of Health Physics (ABHP).

**Educational Programs**

Master's Degree/Ph.D.
University of North Carolina - Chapel Hill
Medical research scientists use scientific methods to study countless aspects of our world. Researchers who specialize in health and medical research study diseases, drugs, microorganisms, genetics, and many other areas of human and animal health. They can help develop new treatments or new understanding of diseases and environmental hazards. The medicines we take today, the inoculations that protect us from infectious diseases, and the processes that preserve our food were all developed by medical research scientists.

**Areas of Specialization:**
Medical research scientists may specialize in many different areas of health and medicine. These include but are not limited to:
- Biochemistry
- Epidemiology
- Genetics
- Immunology
- Marine Biology
- Microbiology

**Academic Requirements:**
The minimum educational requirement is a bachelor's degree. However, a master's or doctorate is required to conduct advanced research and to be eligible for many jobs at university and industrial research laboratories. Civil service examinations may be required for employment at governmental agencies. Students entering college with an interest in medical research should establish a major in one of the physical, biological, mathematical or health sciences.

**Work Environment:**
Medical research scientists usually work in research laboratories at universities, in private industry, and at government agencies.

**Salary Range:**
$25,000 - $100,000+
Salaries vary widely depending on education, experience, accomplishments, and employer.

**Educational Programs**
Most accredited colleges and universities in North Carolina offer undergraduate courses of study in the sciences. Those with graduate schools offer master's and doctoral programs in many scientific disciplines.
The broad title of occupational health and safety specialist includes all occupational health and safety professionals who work to eliminate illnesses and injuries in the workplace. These professionals evaluate and communicate the risks associated with hazards and develop methods to control or eliminate them. Occupational health specialists may evaluate and control chemical or radiological exposures, redesign machinery to reduce the risk of injuries, or perform job safety analyses to identify risks associated with particular work tasks. These professionals develop and update global as well as site-specific hazard control programs, which they later evaluate for effectiveness. Occupational health and safety specialists comprise professionals from many disciplines, including industrial hygienists, safety engineers, occupational and health technologists, ergonomists, risk managers, as well as toxicologists and occupational nurses and doctors.

**Areas of Specialization:**
Occupational health and safety specialists often concentrate in a particular area of expertise, such as the identification, evaluation and control of exposures to physical and chemical agents, the prevention of injuries, or the reduction of acoustical hazards.

**Work Environment:**
Occupational health and safety specialists work within governmental agencies, private industry, environmental groups, and labor groups to prevent occupational injuries and illnesses.

**Academic Requirements:**
To become an occupational health and safety specialist, you should have a college degree in science or engineering and a master’s degree in occupational hygiene or safety, environmental engineering, physical science, or natural science. Certification is available for occupational health and safety professionals, though not always required by employers.

**Salary Range:**
$60,000-$85,000

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**Educational Programs**

**Bachelor’s Degree**
- St. Augustine’s College
- University of North Carolina - Chapel Hill

**Master’s/Ph.D. Degree**
- University of North Carolina - Chapel Hill
New technology and science have vastly improved the practice of health care in this country. Technological advancements have made medical treatments more effective and have greatly enhanced the diagnostic capabilities of health care providers. Today, it is possible to observe internal organs, identify genetic defects, and test the functioning of the brain non-invasively. The health care professionals responsible for using this equipment properly are highly trained in both the technical and medical aspects of their respective fields.

The professionals who work with the advanced equipment used in medical centers are critical members of the health care team. Other professionals, such as translators or interpreters, serve as a link between medical professionals and the patient. A career in any of these fields is likely to challenge the most inquisitive of individuals and allow the individual to learn new ways to use technology and science to aid patients.
Cardiovascular technologists determine how well the heart and blood vessels are functioning. They use the following techniques: cardiac catheterization, which involves inserting an instrument into the body to monitor the heart and blood vessels; echocardiography, which uses sound waves to produce images of the heart chambers and valves; and electrocardiography, which uses electrodes placed on the body to detect the heart's electrical activity. Physicians use the results of these tests to determine the presence of heart disease.

Areas of Specialization:
There are four general areas of specialization for cardiovascular technologists:
• Echocardiography (Ultrasound of the Heart)
• Invasive Technologies
  (Cardiac Catheterization, Electrophysiology)
• Non-invasive Technologies
  (EKG, Exercise Stress Testing, Arrhythmia Screening, Pacemaker Monitoring)
• Vascular Ultrasound

Work Environment:
Cardiovascular technologists usually work under the direction of a cardiologist (a physician who specializes in the heart) at hospitals and medical centers.

Academic Requirements:
A high school diploma or qualifications in a related allied health profession are the minimum prerequisites for entering training in this field. Programs may be from one to four years depending on previous qualifications of the applicant and specialty areas chosen; the average is two years. Training includes general and applied sciences, anatomy and physiology, basic pharmacology, medical electronics, and instrumentation. On-the-job experience is included in hospital programs.

Salary Range:
$27,000 - $55,000

Educational Programs
Cardiovascular Sonography
• Caldwell Community College and Technical Institute
• Central Piedmont Community College
• Forsyth Technical Community College
• Johnston Community College
• Pitt Community College

Medical Sonography
• Asheville-Buncombe Technical Community College
• Caldwell Community College and Technical Institute
• Cape Fear Community College
• Forsyth Technical Community College
• Johnston Community College
• Pitt Community College
• South Piedmont Community College
• Southwestern Community College
Electroneurodiagnostic technologists record the electrical activity of the brain and nervous system. This activity is recorded by electrodes on the scalp or other regions of the body, using the electroencephalographic (EEG) and other electrophysiological equipment. Electroneurodiagnostic technologists must have a thorough knowledge of neuromedicine, be able to recognize the activity recorded by their instruments and be able to communicate the information effectively to other health care personnel.

**Work Environment:**
Electroneurodiagnostic technologists work under the supervision of a neurologist (a doctor who specializes in the brain and nervous system) or a chief technologist at hospitals or laboratories. Some may work at the patient's bedside or in surgical or medical units, in the operating room or in laboratories specializing in sleep disorders.

**High School Preparation:**
A high school diploma or equivalent is required. Course work in mathematics, biology, and electronics is recommended.

**Salary Range:**
$30,000 - $45,000

**Academic Requirements:**
Electroneurodiagnostic programs should be accredited by the Committee on Allied Health Education and Accreditation. Training may be from one to two years and may include general and applied sciences, anatomy and physiology, neurology and neuroanatomy, medical electronics, and instrumentation. On-the-job training is also provided by some hospitals.
Emergency Medical Technician

Emergency medical technicians (EMTs) are members of the emergency medical care team. They use their knowledge and skills to provide basic and advanced life support to seriously ill or injured patients before these patients reach the hospital. They are involved in patient rescue and they transport patients by ambulance or aircraft to appropriate medical centers. Depending on the level of training (basic, intermediate, or paramedic), EMTs have increasingly advanced responsibilities.

Areas of Specialization:
There are three levels of certification for EMTs:
- EMT
- EMT - Intermediate
- EMT - Paramedic

Work Environment:
EMTs may be employed by ambulance, rescue or aeromedical services, in specialty areas of hospitals and by private industry, educational institutions and government agencies. On ambulances, EMTs usually work in teams of two and may be exposed to a variety of hazards. They work closely with police and fire departments.

Academic Requirements:
EMTs complete a 169-hour training program at a community college, a university, or a municipal or county emergency medical service organization. Students in the community college or university curriculum become eligible at different levels in their education to take the exams given by the NC Office of Emergency Medical Technicians and/or the National Registry of Emergency Medical Technicians for the other levels of EMT certification. A valid driver's license and a good driving record are also required.

Salary Range:
EMT: $20,000 - $32,000
EMT-I: $21,000 - $33,000
EMT Paramedic: $25,000 - $39,000

Educational Programs

Associate Degree Programs
Emergency Medical Science (2 years)
- Asheville-Buncombe Technical Community College
- Carteret Community College
- Catawba Valley Community College
- Coastal Carolina Community College
- College of The Albemarle
- Davidson Community College
- Fayetteville Technical Community College
- Forsyth Community College
- Gaston College
- Guilford Technical Community College
- Montgomery Community College
- Sandhills Community College
- Southwestern Community College
- Tri-County Community College
- Wake Technical Community College
- Wilson Technical Community College

EMS Nationally Accredited
- Catawba Valley Community College
- Joint Special Operations Medical Training Center
- Western Carolina University

University Programs
- (EMT - Paramedic)
  - Western Carolina University
Funeral practices and rites vary greatly among various cultures and religions, and the scope of practice can vary in each state. Among the many diverse groups in the United States, funeral practices usually share some common elements: removal of the deceased to a mortuary, preparation of the remains, performance of a ceremony that honors the deceased and addresses the spiritual needs of the family, and burial or disposition of the remains. Funeral directors, also called morticians or undertakers, arrange and direct these tasks for grieving families. In addition, some funeral directors are trained, licensed, and practicing embalmers. Embalming is a sanitary, cosmetic, and preservative process through which the body is prepared for interment.

Work Environment:
Most funeral directors and embalmers work in funeral homes that can be small, family-run businesses, or larger, corporate-owned establishments. However, funeral services may take place in a home, house of worship, funeral home chapel, gravesite, or crematory. Other funeral directors and embalmers may be employed in hospitals, medical examiners offices, education, or in retail sales within the funeral industry.

Academic Requirements:
College programs in mortuary science usually last from two to four years; the American Board of Funeral Service Education accredits 49 mortuary science programs. For licensure in North Carolina as a funeral director, embalmer, or funeral service professional, an apprenticeship period of one year is required under an experienced and licensed funeral director or embalmer. Graduates must take the Funeral Service National Board Examination and must apply to the NC Board of Mortuary Science for licensure before practicing in North Carolina.

Salary Range:
$28,000 - $57,000

Educational Programs
Fayetteville Technical Community College
Genetic counselors work as members of a health care team, providing information and support to families who have members with birth defects or genetic disorders and to families who may be at risk for a variety of inherited conditions. They identify families at risk, investigate the problem present in the family, interpret information about the disorder, analyze inheritance patterns and risks of recurrence, and review available options with the family. Genetic counselors also provide supportive counseling to families, serve as patient advocates, and refer individuals and families to community or state support services. They serve as educators and resource people for other health care professionals and for the general public. Some counselors also work in administrative capacities. Many engage in research activities related to the field of medical genetics and counseling.

Work Environment:
Most genetic counselors work in a university teaching hospital, private hospital, HMO, or research setting. However, genetic counselors are branching out into industry, the private sector, public health, and policy making.

Academic Requirements:
A minimum of a master’s degree in genetic counseling is required. To be certified as a genetic counselor, the American Board of Genetic Counseling (ABGC) requires training at an accredited site, documentation of genetic counseling experience, evidence of continuing education, and the successful completion of a comprehensive ABGC certification examination.

Salary Range:
$41,000 - $50,000

Educational Programs

Master’s Degree
University of North Carolina - Greensboro

North Carolina Health Careers '04-'06
Medical Interpreters/Translators interpret and translate oral and written information from one language to another for patients, medical staff, and agency support staff to facilitate communication between parties. Interpreter/translator services are provided during a patient’s registration at a health care facility, admission to a hospital, financial aid counseling, and during examination, diagnosis, and treatment of medical conditions. Often, health care providers such as social workers, nurses, or public health educators learn another language and have both interpreting and traditional responsibilities. In North Carolina, there is a growing need for Spanish-speaking health professionals.

**Work Environment:**
Medical interpreters/translators may work in physician offices, hospitals, health departments, or other medical settings. Some medical interpreters/translators are employed by an interpreter agency and provide services by contract or on an “as needed” basis.

**Salary Range:**
$30,000 - $50,000

**Academic Requirements:**
Formal training as a medical interpreter/translator is not required, but it is very helpful. A high school diploma or equivalent is recommended. The skills of a medical interpreter/translator include cultural sensitivity and respect of all parties involved, as well as knowledge of medical terminology and colloquial terminology. Skills in speaking, reading, and writing in another language and translating from another language to English and from English to another language are required. Courses in medical terminology in both languages are recommended. Skills in medical interpretation and knowledge and understanding of a particular culture are helpful.

**Educational Programs**

**Associate Degree**
Blue Ridge Community College
Central Piedmont Community College
Wilson Community College

**Bachelor’s Degree**
University of North Carolina - Charlotte

**Master’s Degree**
University of North Carolina - Charlotte
Perfusionists are trained to operate special equipment that temporarily takes over a patient’s respiratory (breathing) and/or circulatory (blood movement) functions. This ensures that oxygen reaches the patient’s body through the blood, even when the patient’s lungs and heart are temporarily not functioning. Perfusionists are part of the surgical team and are responsible for operating the heart-lung machine during surgery, monitoring the altered circulatory process closely, taking appropriate corrective action when abnormal situations arise, and keeping both the surgeon and the anesthesiologist fully informed.

(Source: www.Perfusion.com)

Work Environment:
Perfusionists usually work at hospitals, although some may be hired by surgeons or medical service groups.

Salary Range:
$50,000 - $90,000

Academic Requirements:
To become a perfusionist, you must complete an education program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and pass an examination by the American Board of Cardiovascular Perfusion (ABCP). Training takes one to two years depending on program design and the student's qualifications. All programs either require a bachelor's degree prior to admission or award a bachelor's degree upon completion of the program. Some programs prefer students with prior training in medical technology, respiratory care, or nursing, or who have prior college or community college coursework in anatomy, physiology, chemistry, and pharmacology. Training includes the study of heart/lung bypass, long-term life support, monitoring of the patient, and special technologies.

Educational Programs
There are currently no perfusionist programs in North Carolina. Nearby programs are:

- Johns Hopkins Hospital Perfusion Program
  600 N. Wolfe St.
  Baltimore, MD 21287-4814
  (410) 955-5168
  www.hopkinsmedicine.org/perfusion/home.html

- Medical University of South Carolina Perfusion Program
  171 Ashley Ave.
  Charleston, SC 29425
  (843) 792-2298
  www.musc.edu/chp-clin/ect/ect.htm

- Medical University of South Carolina Medical Center Perfusion Program
  2986 The Vanderbilt Clinics
  Nashville, TN 37232
  (615) 322-0064
  www.mc.vanderbilt.edu/cvpt/geninfo.htm
Certified orthotists (COs) and certified prosthetists (CPs) fabricate and fit upper and lower limb devices designed to replace or repair those lost or disabled through injury or disease. Orthotists fabricate and fit orthopedic braces; prosthetists fabricate and fit artificial limbs. Some people may be qualified to work in both areas. They examine and measure patients and custom fabricate prosthetic or orthotic devices to individual specifications. These professionals must be familiar with different materials and designs, accurately measure the static and dynamic proportions of the affected limb, and work closely with their patients to choose the ideal combination of products to best suit the patient’s needs and desires.

**Work Environment:**
Orthotists and prosthetists work in hospitals, rehabilitation facilities, specialty clinics, home health settings, and private industries that produce orthotic and prosthetic devices. Many practitioners have their own private practice.

**High School Preparation:**
Beyond college preparation, experience at a local O&P facility and courses in art, science and technology are helpful.

**Salary Range:**
$24,000 - $120,000

**Academic Requirements:**
In order to practice as an orthotist or prosthetist, an individual must be certified by the American Board for Certification in Orthotics and Prosthetics, Inc. The prerequisites include a bachelor’s degree and/or specific certificate training courses in orthotics and prosthetics, and at least one year of supervised experience in the field. Upon completing training and passing the certification examination, one may use the credentials of CO, CP, or certified prosthetist/orthotist (CPO).

**Educational Programs**
There are no training programs in North Carolina. For information about training opportunities, please contact:

American Academy of Orthotists and Prosthetists
526 King Street, Suite 201
Alexandria, VA 22314
(703) 836-0788

www.nchealthcareers.com
Surgical technologists are members of operating room teams, which most commonly include surgeons, anesthesiologists, and circulating nurses. Before an operation, surgical technologists help prepare the operating room by setting up surgical instruments and equipment, sterile drapes, and sterile solutions. They assemble surgical equipment, as well as get patients ready for surgery by preparing the incision site. They transport patients to the operating room, help position them on the operating table, and cover them with sterile surgical drapes. During surgery, technologists pass instruments and other sterile supplies to surgeons and surgeon assistants and operate diagnostic equipment. Surgical technologists help prepare, care for, and dispose of specimens taken for laboratory analysis and help apply dressings.

**Academic Requirements:**

Programs in North Carolina provide classroom education and supervised clinical experience and lead to an associate degree. Students take courses in medical terminology, ethics, medical aspects of surgical care, sterile techniques, anatomy, and anesthesia. Technologists may obtain voluntary professional certification from the Liaison Council on Certification for the Surgical Technologist by graduating from a CAAHEP-accredited program and passing a national certification examination to gain the certified surgical technologist (CST) designation. Certification may also be obtained from the National Center for Competency Testing. After passing the exam, individuals may use the designation tech in surgery-certified, TS-C (NCCT).

**Work Environment:**

Surgical technologists usually work in a hospital's surgical units, day-surgery centers, the emergency room, labor and delivery unit or in a physician's office.

**Salary Range:**

$26,000 - $37,000

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**Educational Programs**

**Hospital-based Programs**
- Cabarrus College of Health Sciences
- Carolinas College of Health Sciences
- Presbyterian Hospital (Surgical Technology Certificate)

**Surgical Technology**
- Asheville-Buncombe Technical Community College
- Blue Ridge Community College
- Catawba Valley Community College
- Coastal Carolina Community College
- College of Albemarle
- Durham Technical Community College
- Edgecombe Community College

**Fayetteville Technical Community College**
- Guilford Technical Community College
- Lenoir Community College
- Miller-Motte Technical College
- Rockingham Community College
- Sandhills Community College
- South Piedmont Community College
- Wilson Technical Community College
The most rewarding aspect of this work is making a difference in the lives of those with physical, mental, emotional, or social disabilities. With today's advances in medicine and health technology, trauma victims, premature infants, and the infirm are more likely to survive than previously. However, many will have disabilities and require the assistance of trained professionals to adjust to their limitations and function on their own.

Speech-language pathologists help patients with communication problems master proper language and speech, while audiologists work with hearing-impaired individuals. Physical therapists and athletic trainers promote the physical health of patients recovering from injury or trauma. Specialists for people with visual disabilities help patients whose sight is irrevocably damaged to learn skills which will help them function in their day-to-day activities. Rehabilitation counselors have an active role in helping patients with disabilities move toward more independent lives and rewarding careers.

Many specialists, such as creative arts and activity therapists, occupational therapists, and recreational therapists, teach patients skills which foster their productivity and usefulness, in spite of their disability. Assistants to these therapeutic and rehabilitative personnel, such as occupational therapy assistants and physical therapy assistants, and will experience significant job growth as administrators try to contain health care costs.
Audiologist

Audiologists are professionals specializing in the study of normal and impaired hearing, including the prevention of hearing loss, identification and assessment of hearing problems, and the rehabilitation of people with hearing impairment. Daily duties include conducting hearing examinations, training clients in communications strategies, measuring noise levels in work settings, and teaching individuals to use hearing aids or other helpful devices. An audiologist sees all types of hearing-impaired individuals – from children born with auditory abnormalities to elderly individuals just beginning to adjust to hearing loss. They frequently work with medical specialists, educators, engineers, scientists, and other health professionals in a variety of work settings.

Areas of Specialization:
Audiologists can choose to specialize in research related to hearing disorders or may work with children, the elderly, or other groups.

Work Environment:
Audiologists work in hospitals, speech/hearing clinics, schools, rehabilitation centers, research centers, and private practice settings. They do their evaluations in specially constructed “quiet” rooms suitable for hearing tests.

Academic Requirements:
At the present time, a master’s degree is required to practice as an audiologist. In the future, professional certification will require a doctorate degree. Undergraduate work can be in hearing/speech science or in other fields such as education, psychology, or the sciences. Studies in audiology cover the anatomy of speech and hearing mechanisms, speech and hearing science, audiology (measurement of hearing acuity), hearing rehabilitation, and other related topics. Those completing graduate work in audiology must then pass the Praxis exam.

Salary Range:
$43,000 - $72,000

Educational Programs

Master’s Degree Programs
East Carolina University

Undergraduate programs with preparatory studies in speech and hearing
Appalachian State University
East Carolina University

Elizabeth City State University
North Carolina A&T State University
North Carolina State University
Shaw University
University of North Carolina - Chapel Hill
University of North Carolina - Greensboro
Western Carolina University

Doctoral Programs
East Carolina University (PhD)
University of North Carolina - Chapel Hill (AuD)
Certified athletic trainers (ATCs) are medical professionals who prevent, assess, manage, and rehabilitate injuries that result from physical activity. ATCs strive to help physically active individuals avoid unnecessary medical treatment and disruption of normal daily life. As part of a complete health care team, the ATC works under the direction of a licensed physician and in cooperation with other health care professionals, athletics administrators, coaches, and parents.

**Areas of Specialization:**
- Evaluation and Assessment of Injury
- Immediate Care
- Organization and Administration
- Prevention of Injury
- Professional Development and Responsibility
- Recognition of Injury
- Treatment, Rehabilitation and Reconditioning

**Salary Range:**
$22,000 - $100,000

**Academic Requirements:**
All certified or licensed ATCs must have at least a bachelor’s degree from an accredited college or university and pass the National Athletic Trainers’ Association Board of Certification (NATABOC) exam. Seventy percent of all ATCs hold a master’s degree or higher. Accredited athletic training education programs include formal instruction in a variety of areas, such as: injury/illness prevention, assessment of injury/illness, therapeutic exercise and rehabilitation techniques, human anatomy and physiology, nutrition, and health care administration. Under the direction of an approved clinical instructor, students further develop their knowledge and skills through clinical education experiences.

**Work Environment:**
Certified athletic trainers may be employed in the following settings: secondary schools, colleges and universities, professional sports, sports medicine clinics, industrial and commercial workplaces, health clubs, and military branches.

**Educational Programs**

**Bachelor’s Degree**
- Appalachian State University
- Barton College
- Campbell University
- Catawba College
- East Carolina University
- Elon University
- Gardner-Webb University
- Greensboro College
- High Point University
- Lenoir-Rhyne College
- Mars Hill College
- Meredith College
- Methodist College
- North Carolina Central University
- Pfeiffer College
- Shaw University
- University of North Carolina - Chapel Hill
- University of North Carolina - Charlotte
- University of North Carolina - Greensboro
- University of North Carolina - Wilmington
- Wake Forest University
- Western Carolina University
- Wingate University

**Master’s Programs**
- East Carolina University
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro
- Wake Forest University

**Doctoral Programs**
- University of North Carolina - Chapel Hill
- University of North Carolina - Greensboro

www.nchealthcareers.com
Creative Arts Therapist

Creative arts therapists develop programs that incorporate their artistic talents and health skills to improve the mental and physical well-being of patients. Creative arts therapists are concerned with determining what the patient’s art reflects about his or her personality development, traits, and emotional state. These means of expression and communication can assist in improving the client’s functional abilities and resolving emotional issues. Creative arts therapists encourage a patient’s artistic abilities and instill a sense of accomplishment.

Areas of Specialization:
Other forms of therapy include:
- Art Therapy
- Dance Therapy
- Drama Therapy
- Music Therapy

Work Environment:
Creative arts therapists may work in hospitals (both medical and psychiatric), outpatient facilities, clinics, residential treatment centers, halfway houses, shelters, schools, correctional facilities, elder care facilities, pain clinics, universities, or art studios.

Academic Requirements:
To become a creative arts therapist, one must first complete an accredited master’s level program for dance, drama, and art therapy and at least a bachelor’s level program for music therapy. Creative arts therapists also complete field training hours through supervised internships. After successful completion of the internship, many graduates are required to take an examination to become board-certified in their respective fields.

Salary Range:
$25,000 - $60,000

Educational Programs

Music Therapy
Bachelor’s Degree
Appalachian State University
East Carolina University
Queens University of Charlotte

Master’s Degree
East Carolina University

Although no accredited art, dance, or drama therapy programs are available in North Carolina, most colleges and universities offer courses in psychology and art which could be useful undergraduate prerequisites toward admission to graduate school.

For a list of accredited programs, contact the American Art Therapy Association, American Dance Therapy Association, American Music Therapy Association, and the National Association for Drama Therapy.
Occupational therapists (OTs) use many techniques to help people learn or re-learn to carry out the occupations of daily life such as eating, dressing, writing, cooking, going to work, being a student and doing the other things people want to do. They work with people whose functioning is impaired by physical or mental illness or injury, old age or developmental disabilities. OTs evaluate functional skills, train people to do things such as dress or drive a car in a new way, identify barriers to meaningful activities, and help people adapt activities or use adaptive equipment to help their clients achieve self-sufficiency. OTs often work with other therapists and health professionals as members of a treatment team.

Areas of Specialization:
Occupational therapists may choose to work with certain populations such as pediatrics, gerontology, physical rehabilitation, or mental health. Also, they may orient toward specialty practice in assistive technology, driver rehabilitation, hand therapy, or community-based programs. Experienced occupational therapists may also move into an educational, administrative, or consultative role.

Work Environment:
Occupational therapists work in hospitals, nursing homes, rehabilitation centers, schools, programs for people with disabilities, psychiatric centers, private practice, and a variety of industries and community-based human services agencies.

Academic Requirements:
A bachelor’s or master’s degree in occupational therapy is required to practice in this profession as a registered occupational therapist (OTR). This program includes six to nine months of clinical training. Studies include human growth and development, anatomy and physiology, kinesiology, therapeutic use of activities, and occupational therapy theory. Graduates of accredited programs are eligible for the examination given by the American Occupational Therapy Certification Board.

Salary Range:
$39,000 - $63,000

Educational Programs

Bachelor’s Degree
East Carolina University
Lenoir-Rhyne College
Winston-Salem State University

Master’s Degree
East Carolina University
Lenoir-Rhyne College
University of North Carolina - Chapel Hill

www.nchealthcareers.com
Certified occupational therapy assistants (COTAs) work under the supervision of a registered occupational therapist (OTR). They help individuals who are learning to handle the occupations of daily living, such as dressing, eating, or maintaining their home, but who have disabilities because of age, developmental disabilities, injury, or illness. COTAs carry out treatment plans established by the occupational therapist for individuals and groups in a variety of settings.

**Work Environment:**
Occupational therapy assistants work in hospitals, rehabilitation facilities, nursing homes, schools, and home health care.

**High School Preparation:**
A high school diploma or equivalent is required; courses in mathematics, biology, sociology and psychology are recommended.

**Academic Requirements:**
Occupational therapy assistants are prepared at community colleges through associate degree programs. Graduates of these programs must also pass a national certification examination given by the American Occupational Therapy Certification Board.

**Salary Range:**
$23,000 - $40,000

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**Educational Programs**

**Associate Degree Programs (2 years)**
Cabarrus College of Health Sciences
Caldwell Community College and Technical Institute
Cape Fear Community College
Durham Technical Community College
James Sprunt Community College

Nash Community College
Pitt Community College
Rockingham Community College
Southwestern Community College
Stanly Community College

North Carolina Health Careers '04-'06
Physical therapists (PTs) help patients who have disabilities due to illness or an accident or who were born with a developmental disability. They plan and carry out programs to help these people gain strength, flexibility, endurance, coordination, and overall physical functioning. Physical therapists also provide programs to lessen pain and to prevent injury. They use lifestyle modification techniques, exercises, heat, cold, electrical stimulation, water, and assistive devices to help their patients. Often physical therapists work as part of a health care or rehabilitation team.

Areas of Specialization:
Physical therapists may choose to focus on neuromuscular or skeletal disorders, sports-related problems, or may specialize in therapy for specific groups such as children or the elderly.

Work Environment:
Physical therapists are employed in hospitals, rehabilitation centers, extended care facilities such as nursing homes, home health agencies, public and private schools, industry, and private practice.

Academic Requirements:
To become a physical therapist, you must graduate from either a clinical master’s or a clinical doctoral degree program. Studies cover anatomy and physiology, skeletal and neuromuscular disorders, therapeutic techniques, educational methods, research, administration, and clinical practice. Graduates of programs accredited by the American Physical Therapy Association must complete a licensing examination given by the Federation of State Boards of Physical Therapy.

Salary Range:
$45,000 - $69,000

Educational Programs

Master’s Degree
East Carolina University
University of North Carolina - Chapel Hill
Western Carolina University
Winston-Salem State University

Doctoral Degree
Duke University Medical Center
Elon University
University of North Carolina - Chapel Hill
People are living longer. Each year the number of older people in North Carolina increases due to advances in medicine and technology. Our state is also a popular place for people to retire. Half of the people born in 1900 died before they were 50 years old. In contrast, people born today can expect to celebrate their 75th birthday. In 1900, about one in 25 Americans was over 65; today, one in eight is over 65, and the age group growing fastest is people age 85 and over.

By the middle of the 21st century, one in five Americans will be over 65, and there will be 15 to 18 million people over the age of 85.

The growth of the elderly population is sure to continue. In North Carolina, the number of people 65 and older is projected to more than double in the next 25 years. Those 85 and older are projected to increase more than 150%. By the middle of the 21st century, one in five Americans will be over 65, and there will be 15 to 18 million people over the age of 85. These growth trends will result in a demand for health care professionals with knowledge and expertise in aging.

The field of aging is very diverse, offering many different employment opportunities. This diversity exists, in part, because older people are very different from each other in many ways. As we age, our experiences, needs, resources, and abilities vary according to such factors as gender, race, ethnicity, and economic status. For example, many older people are very healthy and active. Health care professionals working with these older people might be providing educational opportunities, recreation and leisure programs, and volunteer activities.

Some older people are frail and less active. Jobs which relate to these more vulnerable patients might be in long-term care, home health services, or other health care settings. The relative newness of the field means that there are opportunities for innovative ideas and new programs and products. Many people have started their own businesses, such as coordinating home health care or consulting with businesses and corporations about how to develop services or design products that would improve the health of the elderly.

The varied needs of older people lead to exciting opportunities for working side by side with professionals from other disciplines. Some health professionals might coordinate information from housing agencies, lawyers, transportation providers, nurses, and family counselors. Others might serve on a health care team providing hospital care, day care, or home care to patients. As a researcher, you might study the relationships between the maintenance of friendship networks and the mental and physical health of older people.

People who work with the elderly report great satisfaction in addressing the challenges of those who are growing older, helping to maintain the quality of their lives, and enjoying the wit, wisdom, and creativity of the people with whom they come in contact. There will be plenty of opportunities to work with older patients when you become a health professional, but you don't need to wait. Even as a student you can make a difference; your community can benefit from volunteer work you do with older people.
Physical therapy assistants (PTAs) perform routine treatment procedures as directed by physical therapists and assist them with more complex procedures. An assistant may monitor a patient’s progress on exercise equipment; perform massage; provide heat/cold, electrical, and ultrasound therapy; and provide the therapist with a detailed account of all therapeutic sessions. Clerical tasks, supply maintenance, and paperwork are often included among the duties of a physical therapy assistant, but the extent of these assignments will vary from setting to setting.

Work Environment:
Physical therapy assistants are employed in hospitals, rehabilitation centers, nursing homes, home health agencies, public and private schools, and physical therapy clinics.

Academic Requirements:
Training for physical therapy assistants is available at the community college level through associate degree programs. Graduates of programs accredited by the Commission on Physical Therapy Education are eligible to take the licensing examination for assistants given by the Federation of State Boards of Physical Therapy.

Salary Range:
$30,000 - $41,000

Educational Programs

Physical Therapy Assistant
Associate Degree Program
Caldwell Community College & Technical Institute
Central Piedmont Community College
Fayetteville Technical Community College

Guilford Technical Community College
Martin Community College
Nash Community College
Stanly Community College
Recreational therapists individually assess and treat patients using interventions designed to improve patients’ physical, cognitive, emotional, leisure, and social functioning. They work to increase patients’ independence in life activities as well as reduce or eliminate the effects of illness or disability. Recreational therapists use a variety of therapeutic interventions to help their clients such as exercise, relaxation training techniques, athletics, weight training, social activities, behavior modification and management, values clarification, counseling, meditation, leisure education, and community reintegration. A certified recreational therapist supervises the work of recreational therapy assistants or technicians.

**Academic Requirements:**
Recreational therapists have, at a minimum, a baccalaureate degree in therapeutic recreation or recreation therapy which must include a clinical internship. A master’s degree may be preferred for supervisory or management positions, and a doctorate is usually required for teaching positions. Recreational therapy assistants have, at a minimum, an associate degree in therapeutic recreation or recreation therapy. Recreational therapists and assistants practicing in North Carolina are required to be certified by the North Carolina Therapeutic Recreation Certification Board.

**Areas of Specialization:**
In hospitals, recreational therapists work with psychiatric, addiction, palliative care, rehabilitation, or pediatric patients. They also work in skilled nursing facilities or in a variety of residential and community health care and human service agencies, such as school systems, or independent living facilities.

**Work Environment:**
Recreational therapists work in clinical and community settings in public or private agencies, such as acute care hospitals, rehabilitation centers, psychiatric hospitals, halfway houses, community living arrangements, and long-term care facilities.

**Salary Range:**
$20,000 - $35,000

**Educational Programs**
- **Therapeutic Recreation Associate Degree Programs**
  - Carteret Community College
  - Vance-Granville Community College
  - Western Piedmont Community College
- **Bachelor’s Degree Programs (4 years)**
  - Catawba College
  - East Carolina University
  - Mount Olive College
  - University of North Carolina - Wilmington
  - Western Carolina University
  - Winston-Salem State University
- **Specialization & Graduate Programs**
  - East Carolina University
  - Shaw University
  - University of North Carolina - Chapel Hill
Rehabilitation counselors help people with physical, mental, or social disabilities return to a satisfying and productive life. These counselors use work as a method of assisting people with disabilities to fulfill their full potential. They may counsel them about job opportunities and training availability, assist in job placement, or provide counseling to help the person adjust successfully to the new work situation. A rehabilitation counselor also helps individuals with disabilities adjust to their limitations, assesses an individual's potential to live independently, and confers often with a patient's family, physician, social worker, occupational therapist, and psychologist.

**Work Environment:**
Rehabilitation counselors are employed at state and federal vocational rehabilitation agencies, comprehensive rehabilitation centers, mental health programs, employee assistance programs, sheltered workshops, insurance companies, and private industry.

**Academic Requirements:**
A master's degree is required to be a rehabilitation counselor. A bachelor's degree in psychology, education, or rehabilitation counseling is good preparation for the program in rehabilitation counseling. The educational program at the master's level usually takes two years and covers all aspects of the rehabilitation process, including a practicum in the planning and provision of rehabilitation services. A minimum of 600 hours of supervised clinical experience is required. Certification is available from the Commission on Rehabilitation Counselor Certification based on educational and work experience and completion of an examination.

**Salary Range:**
$28,000 - $45,000

**Educational Programs**

- **Master's Degree**
  - East Carolina University
  - University of North Carolina - Chapel Hill

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Therapy 127
The respiratory care practitioner (RCP), also known as a respiratory therapist, provides care to a diverse group of patients ranging from newborn and pediatric patients to adults and the elderly. The respiratory care profession requires that every RCP demonstrate an advanced level of critical thinking, assessment, and problem-solving skills. Today’s RCPs participate in the development, modification, and evaluation of care plans, protocol administration, disease management, and patient education involving such disease states or conditions such as asthma, emphysema, chronic obstructive lung disease, pneumonia, cystic fibrosis, infant respiratory distress syndrome, and conditions brought on by shock, trauma, or postoperative surgical complications. RCPs perform over 100 different procedures and diagnostic studies throughout the health care system. They are involved in many specialty areas of the hospital such as: adult intensive care units, newborn labor and delivery, neonatal and pediatric intensive care units, pulmonary function laboratory, sleep laboratory, extracorporeal membrane oxygenation, stress testing, and bronchoscopy. RCPs also deliver respiratory therapy in the home, rehabilitation agencies, nursing homes, outpatient clinics, and physician offices.

Work Environment:
Respiratory care practitioners are employed at hospitals, nursing care facilities, clinics, home care agencies, educational facilities, research centers, private industry, and special medical services.

Salary Range:
$32,000-43,000

Academic Requirements:
There are two levels of respiratory therapist: the certified respiratory therapist and the registered respiratory therapist. Respiratory therapists are required to complete either a two-year associate’s degree or a four-year baccalaureate degree. Upon graduation they are eligible to take the National Board for Respiratory Care (NBRC)-Certified Respiratory Therapy (CRT) exam. All graduates of any respiratory therapy program must pass the CRT exam in order to qualify for a permanent North Carolina license as a respiratory care practitioner. Graduates of respiratory therapy programs are also eligible to take the advanced practitioner exam given by the NBRC also known as the Registered Respiratory Therapist exam after passing the CRT. Employers prefer that the RRT credential be earned within the 1st year of clinical practice in order to place graduates in the more critical patient care areas.

High School Preparation:
A high school diploma or equivalent is required. Courses in algebra, biology, anatomy, physiology, and chemistry are recommended or required depending on the college of choice. Students are encouraged to check with their local college for specific requirements.

Educational Programs
Carteret Community College
Catawba Valley Community College
Central Piedmont Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Guilford Technical Community College
Pitt Community College
Robeson Community College
Rockingham Community College
Sandhills Community College
Southwestern Community College
Stanly Community College
Speech/language pathologists are specialists in communication who evaluate and treat problems with speech, language, and swallowing. Such problems include difficulties with articulation (pronunciation of the speech sounds), fluency (such as stuttering), vocal nodules caused by improper voice use, as well as problems with organizing heard or spoken language that result from brain disorders or strokes. These professionals also work with patients who have conditions such as cleft palate, mental retardation, and hearing loss.

Speech/language pathologists work closely with hearing specialists (audiologists) to treat children and adults whose hearing problems affect their communication skills.

Areas of Specialization:
Speech/language pathologists may specialize in specific areas such as fluency, child language, or swallowing disorder.

Work Environment:
Speech/language pathologists are employed in a variety of work settings including schools, hospitals, speech/language pathology and audiology offices, staffed nursing facilities, and rehabilitation centers. Others may choose to enter private solo or group practice.

Academic Requirements:
A master's degree is required to be licensed to practice as a speech/language pathologist in North Carolina. A bachelor's degree is the first step to enter this profession; undergraduate programs in speech/hearing are available as preparation for the professional degree. However, undergraduate degrees in education, psychology, or other related fields are also acceptable. The professional (master's degree) program covers anatomy, speech and language pathologies, therapeutic approaches, and other related topics. Graduates of accredited programs are eligible for state licensure after passing the Praxis series Specialty Area Test in speech language pathology.

Salary Range:
$40,000 - $62,000

Educational Programs

Master's Degree Programs
Appalachian State University
East Carolina University
Shaw University
University of North Carolina - Chapel Hill
University of North Carolina - Greensboro

Undergraduate programs with preparatory studies in speech and hearing:
Appalachian State University
East Carolina University
Elizabeth City State University
North Carolina A&T State University
North Carolina State University

www.nchealthcareers.com
Speech/language pathology assistants (SLPAs) are paraprofessionals who are specifically educated and trained to treat children and adults with speech and language problems under the direct supervision of a speech/language pathologist. SLPAs perform screening tests and provide therapy following a written treatment protocol developed by the speech/language pathologist. SLPAs can also help with scheduling patients, ordering supplies, filing information, and conducting research activities.

**Work Environment:**
SLPAs are eligible to work in hospitals, nursing homes, public schools, Head Start programs, rehab centers, home health agencies, and other facilities that employ speech/language pathologists.

**Academic Requirements:**
Completion of an associate degree program in speech/language pathology assisting is required to become an SLPA. There is also a transition track that allows students who hold a bachelor’s degree to qualify by taking several courses in SLP-Assisting. All SLPAs must pass a competency test and register with the NC Board of Examiners for Speech/Language Pathologists and Audiologists.

**Salary Range:**
$19,000 - $25,000

**Educational Programs**
Caldwell Community College and Technical Institute
Cape Fear Community College
Fayetteville Community College
Forsyth Community College
Veterinarians treat and prevent the illnesses of pets, livestock, marine animals, and wildlife. They also help to prevent diseases which can be transmitted from animals to humans. They may be involved in wildlife preservation and conservation. Also, veterinarians play an important role in agriculture. They use their knowledge to increase food production through genetics, animal nutrition, feed production, and preventive medicine.

The veterinary profession has assumed a major role in the advancement of research in nuclear medicine, in the development of tranquilizers, corticosteroids and other pharmaceuticals, and in the study of space medicine. This research has greatly benefited humans.

Veterinary technicians are trained to assist the veterinarian and to care for animals in many settings.

The importance of animal care is creating new opportunities for veterinarians and veterinary technicians. More specialties mean more jobs and choices for individuals who possess an affinity and love for animals, combined with the confidence and gentleness necessary to care for them.
Veterinarians play a major role in the health care of pets, livestock, and zoo, sporting, and laboratory animals. Veterinarians in clinical practice diagnose animal health problems; vaccinate against diseases; medicate animals suffering from infections or illnesses; treat and dress wounds; set fractures; perform surgery; and advise owners about animal feeding, behavior, and breeding. Some veterinarians use their skills in a research setting to protect humans against diseases carried by animals and conduct clinical research on human and animal health problems. Other veterinarians are livestock, meat, poultry, or egg product inspectors in order to ensure food safety and enforce government regulations regarding food purity and sanitation.

**Areas of Specialization:**
Veterinarians may focus on specific animals, or specific areas such as dentistry, ophthalmology (eyes), surgery, immunology, or dermatology (skin) in animals.

**Work Environment:**
Most veterinarians work independently or in group practices in animal clinics, or may conduct visits to farms and livestock centers. Veterinarians also work for state and federal agencies such as the U.S. Department of Agriculture and the National Science Foundation. Those who specialize in research work in laboratories at universities and veterinary schools. Others are employed by biomedical industries.

**Salary Range:**
$42,000 - $200,000

**Academic Requirements:**
Veterinarians must receive a degree from an accredited college of veterinary medicine. Candidates may apply to veterinary school after completing required coursework in an undergraduate program which includes English, biological and physical science, humanities and social sciences. Veterinary school takes four years and includes course work and clinical experience in anatomy and physiology of animals, disease systems, toxicology, diagnosis of injury and disease, veterinary public health and other topics. Graduates of veterinary school must then pass a national certification examination and meet the requirements of the NC Veterinary Medical Board in order to be licensed to practice in North Carolina.

**High School Preparation:**
Beyond general college preparation, related experience is helpful such as jobs with veterinarians or pet shops, membership in the 4-H clubs or Future Farmers of America, or volunteer work with animal shelters and humane societies.

**Educational Programs**
Doctor of Veterinary Medicine
North Carolina State University
Veterinary technicians work under the tutelage of practicing veterinarians and perform a wide range of duties. They work in the laboratory to conduct tests on animal specimens, prepare vaccines, restrain animals, perform radiographs, monitor anesthesia, and perform dental cleanings. Technicians may draw blood and prepare animals for surgery. Additionally, “vet techs” interact with the patient’s owner and veterinarians to assist in the diagnosis and prevention of illness and disease. Technicians may also manage an office and coordinate hospital care.

Work Environment:
Veterinary technicians work in private veterinary centers, diagnostic and research laboratories, veterinary supply businesses, zoos, schools of veterinary medicine, and other areas dealing with animal care.

High School Preparation:
Beyond general college preparation, prior experience in animal care is helpful.

Academic Requirements:
Veterinary technicians are trained through an accredited technical associate degree program in the community college system. This prepares the graduate to take the national and state written examinations administered by the NC Veterinary Medical Board, which leads to certification as a registered veterinary medical technician.

Salary Range:
$16,000 - $25,000

Educational Programs

Associate Degree
Central Carolina Community College
Gaston College

www.nchealthcareers.com
Vision care professionals work to preserve or restore vision and eye health. Ophthalmologists are physicians who specialize in the treatment of eye disease and injuries. They may be assisted by ophthalmic assistants. Optometrists, or doctors of optometry, also examine the eye, check vision, and prescribe corrective lenses, with the aid of optometric assistants.

Opticians and optical lab mechanics fill the prescriptions of the optometrist or ophthalmologist to make corrective lenses and to fit those lenses to the patient’s face or eyes.

Vision care providers are respected members of the health care team. These careers are excellent options for anyone seeking to enter the health care field.
Ophthalmologists are physicians (MDs) who specialize in diagnosing and treating diseases and injuries of the eye. Most ophthalmologists practice a mixture of medicine and surgery. They perform examinations of the internal and external structures of the eye, order laboratory tests, prescribe medications and treatments, evaluate vision, prescribe corrective lenses, and perform delicate surgical procedures.

**Areas of Sub-Specialization:**
- Cornea and External Disease
- Glaucoma
- Neuro-ophthalmology
- Ophthalmic Pathology
- Ophthalmic Plastic Surgery
- Pediatric Ophthalmology
- Vitreoretinal Diseases

**Work Environment:**
Ophthalmologists may be self-employed or work with other professionals in group practices. They may be associated with hospitals and other medical centers or with university teaching programs as professors and researchers.

**Academic Requirements:**
Ophthalmologists must earn a bachelor's degree and then a four-year medical degree from an accredited medical school. A one-year internship is followed by a three-year period of specialty training, called a residency in ophthalmology. They are then eligible to take an exam and be certified by the American Board of Ophthalmology. Specialization in an advanced area of ophthalmology may require one or more years of fellowship training beyond the residency. For more information about preparing for a medical career see the "Physician" page of this manual.

**Salary Range:**
$125,000 - $250,000

**Educational Programs**
Duke University
East Carolina University
University of North Carolina - Chapel Hill
Wake Forest University School of Medicine

www.nchealthcareers.com
Ophthalmic Medical Assistant

Ophthalmic medical assistants work with ophthalmologists and optometrists to provide vision care. They work directly with patients to get information necessary for the doctor. Also, they may give eye tests, measure the eyes and help to fit the patient with glasses or contact lenses.

Areas of Specialization:
There are three levels of technicians in the ophthalmic field:
• Certified Ophthalmic Assistant
• Certified Ophthalmic Technician
• Certified Ophthalmic Technologist

Work Environment:
Ophthalmic medical assistants are usually employed in ophthalmologists' offices, optometrists' offices, or medical centers providing eye and vision care.

Salary Range:
$29,000 - $41,000

Academic Requirements:
Educational programs are usually one year in length. Studies include anatomy and physiology, medical terminology, diseases of the eye, measurement of vision, and the use of ophthalmic equipment. Ophthalmic medical assistants with at least one year of on-the-job training are eligible for the certification examination to become a certified ophthalmic medical assistant (COMA). Others may enter the programs with either a high school or associate degree and no previous experience. Those individuals must then complete one year of work under the supervision of an ophthalmologist before taking the examination for certification by the Joint Commission on Allied Health Personnel in ophthalmology.

High School Preparation:
A high school diploma or equivalent is required; courses in mathematics and the sciences are recommended.

Educational Programs:
Duke University
Caldwell Community College & Technical Institute

North Carolina Health Careers '04-'06
Opticians order, prepare and fit eyeglasses and contact lenses for patients, based on a prescription from an ophthalmologist or an optometrist. Opticians grind lenses and shape them to fit an eyeglass frame and adjust the finished product to the customer. They help their customers select the best eyewear in terms of comfort, usefulness, and appearance. Opticians also repair eyewear and replace lost or damaged lenses or parts.

**Work Environment:**
Opticians often have their own businesses or may work for large retail optical chains. They may work with optometrists or ophthalmologists as part of their practices.

**Salary Range:**
$20,000 - $35,000

**Academic Requirements:**
Opticians are trained in two-year technical associate degree programs at a community college, followed by a six-month internship with a licensed North Carolina optician, optometrist, or ophthalmologist. Graduates of the programs accredited by the Commission on Opticianry Accreditation are eligible for a national certification examination and for state licensure, after passing the NC Opticians Examination. State licensure is also available through related instruction from the community college system and a three-and-a-half year internship under a licensed practitioner. Applicants must pass the NC Opticians Examination for state licensure.

**Educational Programs**

**Associate Degree Programs**
Durham Technical Community College

[www.nchealthcareers.com](http://www.nchealthcareers.com)
Optometrists, or doctors of optometry (OD), provide services to evaluate, improve and preserve vision. They diagnose and treat conditions and diseases of the human eye and, depending on their diagnosis, may prescribe therapeutic medication, visual training, corrective eyeglasses, contact lenses or other visual aids. They examine the internal and external structure of the eye, evaluate vision and determine if glasses or contact lenses are needed. Like any health professional, optometrists may refer the patient to other medical specialists such as an ophthalmologist.

**Areas of Specialization:**
All optometrists provide general eye and vision care; some have more specialized practices such as geriatrics, low vision services for the chronically visually impaired, occupational vision (to protect workers' vision), pediatrics and contact lenses.

**Work Environment:**
Optometrists work in single or group practices, the military, public health, and as part of hospital-based eye clinics. Others may teach at schools of optometry or work in the vision industry.

**Academic Requirements:**
Doctors of optometry must complete a four-year accredited program at a college of optometry after earning a four-year undergraduate degree. The bachelor's degree should include a year each of biology and zoology, chemistry, physics, English and mathematics. Applicants must also take the Optometry Admission Test before applying to a school of optometry. Optometrists must be licensed by the North Carolina State Board of Optometry; requirements include a degree from an accredited school and an examination.

**Salary Range:**
$63,000 - $119,000

**Educational Programs**
There are currently 17 schools of optometry in the United States and Puerto Rico. Since none of these schools is in North Carolina, contact the American Optometric Society for more information.
Exploring your future means investigating all of the career choices, options, and opportunities available to you. This section will help you plan your high school education, prepare for college, and guide you to a successful career as a health professional.
The NC AHEC Health Careers Manual is your guidebook for careers in health care. We’ve designed the book to help you begin your explorations, and we hope you’ll use it as a catalog of the many opportunities that await you.

Search through the pages and as you read the career descriptions, imagine yourself as the registered nurse, clinical laboratory scientist, physician assistant, or substance abuse counselor. Many times your first career is just the beginning of a ladder toward an ultimate career goal. It is possible to start out as a nursing assistant and work your way to a career as a Ph.D.-level nurse educator. Whatever health career you choose, you can be sure all health care professionals are valued and respected community members.

Your regional AHEC can help you explore health careers even further. Use the information at the beginning of the manual to locate your AHEC and learn about the health career programs and activities offered in your area.

Be sure to check out the information on the College Foundation of North Carolina website. The College Foundation of North Carolina offers a student planner where you can organize your search, track progress toward educational goals, research schools, and even apply for college and financial aid.

Acceptance into health career educational programs is competitive. Candidates are evaluated on grades, class size, SAT scores, high school activities, letters of recommendation, interviews, and sometimes work experience. Almost all health professions require a high school diploma. Students should work closely with teachers and counselors to make sure they fulfill the state’s academic requirements for graduation and prepare themselves for health-related college or university study.

Students in high school should develop strengths and take classes in math and science to prepare for higher-level programs. The ability to speak and translate a second language is also extremely valuable in your career preparation. Spanish-speaking health care workers are especially desired in many North Carolina communities.

As you explore your options in health professions, consider doing the following:

- Talk with a career or guidance counselor about your interests
- Contact your regional AHEC and speak with the health careers director who can provide you with free counseling
- Talk with people practicing in your field of interest; ask why they chose their career, where they went to school, what they think are the pros and cons of the occupation
- Check out the www.CFNC.org website; explore the possibilities through this Internet resource and watch your plans take shape.
One of the first decisions you will make as a high school student will be which of three courses of study you want to pursue to reach graduation day. The three courses of study are: career preparation, college technical preparation, and college preparation. A fourth course of study, the occupational course of study, is available for certain students with disabilities.

Requirements for admission vary among North Carolina colleges, universities, and community colleges. All require high school graduation or a high school equivalency certificate, a transcript showing all courses taken and grades received, SAT (or ACT) scores, and an application fee. Most require a list of high school extracurricular activities and a recommendation from a counselor or teacher.

High school students should take the SAT (or ACT) either in their junior year or in the fall of their senior year. Your scores are forwarded directly to the admissions officer of the colleges you select when you register for the test. Students unable to pay the fee for the test may request a waiver through their high school counselor.

The following courses are required for admission to most NC colleges and universities, in addition to an institution’s own specific requirements:

Six course units in language, including
- four units in English emphasizing grammar, composition, and literature, and
- two units of a language other than English.

Three course units of mathematics, in any of the following combinations:
- algebra I and II, and geometry,
- algebra I and II, and one unit beyond algebra II, or
- integrated math I, II, and III.

It is recommended that prospective students take a mathematics course unit in the 12th grade. In 2006, the requirement will be raised to four course units of mathematics.

Three course units in science, including
- at least one unit in a life or biological science (for example, biology),
- at least one unit in physical science (for example, physical science, chemistry, physics), and
- at least one laboratory course.

North Carolina’s public community and technical colleges offer many opportunities for career preparation. More than 750,000 students enroll in NC community colleges every year. Community colleges offer certificates, diplomas, and two-year programs which lead to rewarding and useful careers in health care. Many students go to a community college before transferring to a four-year university.

The NC Community College System and most NC colleges and universities have developed an articulation agreement which aids the student transfer process. If you plan to transfer from a community college to a four-year university, you should discuss the requirements with community college academic advisers at the beginning of your studies. Also be sure to check transfer requirements with admissions offices at four-year institutions to which you plan to apply.
High School Timetable

It is never too early to begin planning your career and exploring all the options available. As you begin your search, be sure to:

- Contact your AHEC for counseling, enrichment opportunities, and other resources for future health professionals.
- Use the www.CFNC.org website and take advantage of all the assistance they can provide to help you plan, apply, and pay for college.

**FRESHMAN YEAR**

- Enroll in the classes that are designed to prepare you for college.
- Set up at least two appointments with your high school counselor, preferably in the early fall and spring, to schedule your classes.
- Talk about careers, professions, or studies that interest you.
- Create your own free, secure account on the Student Planner section of www.CFNC.org. Use it to record your accomplishments, plan your course work, and research your career choices.

**SOPHOMORE YEAR**

- Enroll in the classes that are designed to prepare you for college.
- Make appointments in October and January with your counselor to discuss career plans.
- Research college opportunities and talk to college representatives when they visit your region.
- Ask counselors to post College Day/College Night schedules.
- Take the PSAT in the fall.
- Visit college campuses and “tour” colleges in the College Fair section at www.CFNC.org.

**JUNIOR YEAR**

- Study the admission requirements for the colleges and universities that interest you. Confirm that you are taking appropriate courses to meet college entrance requirements.
- Meet with your counselor.
- Attend College Day programs.
- Attend meetings concerning financial aid or college admissions held in your region.
- Register for and take the Preliminary Scholastic Aptitude Test (PSAT) and the National Merit Scholarship Qualifying Test (NMSQT), usually given in October.
- Set up a calendar for taking tests and completing college applications.
- Discuss your family’s financial resources and review plans for financial aid using www.CFNC.org resources.
- Think about people who might write you a recommendation; start with teachers, counselors, and employers.
- In the spring, register for and take the Scholastic Aptitude Test (SAT), Achievement Test, or the American College Test (ACT).
- See your counselor and your AHEC about available Summer Enrichment Programs.
- Visit selected college campuses; talk to graduates and students at the institutions.

**SENIOR YEAR**

**JULY & AUGUST**

- Contact the colleges you are considering to request application forms, catalogs, and financial aid information.
- Visit selected college campuses; talk to graduates and students at the institutions.

**SEPTEMBER**

- Maintain or improve academic grades. College officials look unfavorably upon failing grades and reduced or less rigorous academic loads during the senior year.
High School Timetable

• Check with your counselor and use the Career Center to determine which tests are required and the deadlines for applying.
• Set up a calendar for taking tests and completing college applications.
• Make sure to fulfill application requirements.
• Check early-decision deadlines. See your counselor when you have questions and need help.
• Talk with college representatives when they visit your school.

OCTOBER & NOVEMBER
• Attend College Day/Night programs.
• Apply to colleges with different admission requirements (least selective to most selective).
• Ask your counselor to look over your application form and discuss the next steps in applying to college.
• See your counselor about completing the Free Application for Federal Student Aid (FAFSA). Colleges require that students requesting financial aid provide the FAFSA, including the part that explains any unusual financial circumstances. You can find the FAFSA online at www.fafsa.ed.gov or at www.CFNC.org.
• Check your school’s newspaper for testing deadlines and scholarship information.
• Mail completed forms to colleges or online at www.CFNC.org.
• Check Military Academy and ROTC application and scholarship deadlines if appropriate.

DECEMBER
• Send all applications and copies of high school grades to the colleges before December 25, unless a college indicates otherwise.
• Give your guidance counselor all required forms at least two weeks before they are due since November and December are very busy months for counselors.
• Take the Achievement Test required by some colleges.

JANUARY
• Submit the FAFSA.
• Some colleges accept outstanding candidates during this month.
• If you are planning to attend a community college, take the ASSET, COMPASS, or Accuplacer test.

FEBRUARY
• Ask your counselor to send your first semester’s grades to the colleges, along with any other information not already forwarded. Some colleges provide forms for this purpose and some do not.

MARCH
• Recheck college catalogs and see your counselor to make sure that you have taken all of the necessary tests. If you haven’t, make sure you register to take the tests in May.

APRIL, MAY & JUNE
• Keep a record of acceptances, rejections, and financial aid awards.
• Reply promptly to colleges to notify them of your decision.
• Reply promptly when you are notified that you have been awarded a financial aid package.
• Tell the college whether you are accepting or refusing the award.
• Meet the reply deadline or you may lose the admission acceptance or financial aid you have earned.
• Before you leave school in June, see your counselor to request that a final transcript be sent to the college or university of your choice.

Things to Save

• Copies of guidance office newsletters
• Cancelled checks or money order receipts
• Admission tickets to tests and correction forms
• All test score reports
• Transcripts of high school grades
• Work copy of the FAFSA and all other financial aid forms
• College Scholarship Services acknowledgment form
• Copies of all correspondence sent to or received from schools, including applications and acceptances.

*Timetable reprinted with permission.
A great way to investigate a health career is through Health Occupations Education. This is a program offered to middle and high school students in many systems across the state, providing instruction that introduces you to health-related careers, medical terminology, communications, and health sciences.

You can discover:
• how diagnoses are made
• how the right patient treatment and care are determined
• how the latest health care technology is delivered and administered.

Health Occupations Students of America (HOSA) is the student organization sponsored by Health Occupations Education. It is a part of the Health Occupations curriculum. HOSA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in a health care profession.

As a member of HOSA (Health Occupations Students of America), you’ll be given greater opportunities to help you decide on a career in health care. Contact your guidance counselor if you wish to find out more about Health Occupations Education and HOSA.

Program Description
Health Occupations Education is a middle and high school program that recruits qualified and motivated students and prepares them for pursuit of an appropriate health career. The program is based on:
• Employment needs of the health care community
• National Health Care Skill Standards
• Postsecondary and collegiate education program requirements
• Individual needs of students
• Health care leadership and technical skills
Rather than career specific, the program takes a comprehensive approach to meet the needs of all students in preparation for any and all health care professions.

Courses
Middle School
- 6828 Exploring Biotechnology
- 7200 Biomedical Technology
- 7210 Health Team Relations
- 7211 Allied Health Sciences I
- 7212 Allied Health Sciences II
- 7221 Medical Sciences I*
- 7222 Medical Sciences II*
- 7299 Health Science Advanced Studies

High School
- 7210 Biomedical Technology
- 7211 Allied Health Sciences I
- 7212 Allied Health Sciences II
- 7221 Medical Sciences I*
- 7222 Medical Sciences II*
- 7299 Health Science Advanced Studies

Enrollment: 2002-2003
- 27,311 students in North Carolina
- 280 programs
- 356 teachers

Nurse Aide Certification
Optional program for listing on state registry
- 4,500 certified
- 200 (70%) of HOE programs

Statewide Membership
- 8,900 members
(Second largest state association in the United States)

State and National Competitive Events
• Administrative Med. Asst.
• Biomedical Debate
• Career Health Display
• Community Awareness
• CPR/First Aid
• Creative Problem Solving
• Dental Assisting
• Dental Terminology
• EMT
• Extemporaneous Health Poster
• Extemporaneous Speaking
• Extemporaneous Writing
• Health Education
• Health Care Concepts
• HOSA Bowl
• Human Growth & Development
• Interviewing Skills
• Job Seeking Skills
• Medical Assisting Clinical
• Medical Laboratory Asst.
• Medical Mathematics
• Medical Reading
• Medical Spelling
• Medical Terminology
• National Health Care Issues Exam
• National Recognition Program
• National Service Project
• Nursing Assisting
• Nutrition
• Outstanding HOSA Chapter
• Parliamentary Procedure
• Pathophysiology
• Personal Care
• Pharmacology
• Physical Therapy
• Prepared Speaking
• Outstanding HOSA Member
• Research & Persuasive Speaking
• Sports Medicine
• Speaking Skills
• Rescue Breathing
• Veterinary Assisting

For more information, contact the North Carolina Department of Public Instruction Career-Technical Education:
Health Occupations Education (919) 807-3894
HOSA (919) 807-3900
Right now you may not know what you want to do with your

future or exactly how to get ready for it. That’s okay! You have plenty of time to figure out what interests you, what you’re good at, and how those things add up to a career. You have already made an excellent start by reading this book.

There are many opportunities in health careers waiting for you in North Carolina, all over the United States, and even the world.

The first place to begin your exploration is right at home. Ask your parents, relatives, and family friends who are health professionals about their jobs and have them explain to you a little bit about what they do. You can ask them if you can come to work one day to observe them and ask questions.

The second place to look is at your school. There are many volunteer and health services organizations, like Health Occupations Student Association (HOSA), which can help you learn about different health professions and allow you to gain hands-on experience in the fields which interest you. In addition, your school counselor has resources on professions and is willing to help you plan your future.

Do not hesitate to ask your family doctor or a local hospital about different opportunities within their offices or departments. Doctors may be willing to let you shadow them for an afternoon or day. At your local hospital, check with the volunteer department or the human resources department about shadowing opportunities or volunteer work you can do throughout the year. Many hospitals have volunteer programs on weekends or summer programs which include placements and rotations in different hospital departments.

An important resource which you can tap into is your local Area Health Education Center (AHEC). AHEC has many programs for middle school, high school, and college students in order to prepare them for higher education and professional schools. Special activities and summer camps can help you build upon skills in math and science, learn test-taking strategies, and obtain certifications in first aid and CPR. The AHEC health careers directors can assist you with tours of health care facilities and universities, advise you in college preparation and financial aid, and steer you to resources that help you plan your future.

Making a decision about your future career might seem like a big job, but with so many resources in your community available for you to use, the decision can be made easier.
Education is the key that unlocks the door to unlimited possibilities. Because you are reviewing this book, you are already in search of the key that will unlock your future. While you know it’s critical to prepare yourself academically for higher education, you also need to think about preparing yourself financially. Probably the most important thing to realize is that continuing your education at a university, college, or community college is affordable.

This Financial Aid section will answer some basic financial aid questions. Once you start here, the best place to continue your search is the College Foundation of North Carolina website, www.CFNC.org. If you don’t have Internet access or prefer talking to a “live” person, you can talk with a college financing specialist by calling toll-free 866-866-CFNC. Review this section, gather your thoughts and questions, then visit the website or contact the call center to learn all you can about making college affordable for you and your family.

College Is Important!

College is an investment. There are up-front costs (years of study, tuition, etc.) and long-term rewards for this investment. Studies indicate that college graduates enjoy significantly higher earnings over their lifetimes than do non-graduates.

Additionally, college graduates experience many other everyday life benefits, ranging from greater health insurance coverage and better housing to longer life expectancy and greater participation in leisure activities. From almost any perspective, college is one of the best investments a person can make in his or her future. (Source: Postsecondary Educational Opportunity, Number 81, March, 1999).

College Is Affordable

Paying for college expenses is a shared responsibility. No one pays the full cost of higher education in America, since state resources and colleges’ own investment resources greatly reduce the price that colleges actually charge their students. And financial aid is available to those who cannot afford to pay the prices colleges do charge.

The family is responsible for the portion of college costs that it can reasonably afford, which is determined by using standard financial aid formulas. Families have choices about how to pay their share - and most families meet college expenses by saving, borrowing, and drawing on current earnings.

To finance major purchases such as a house, a car, or a college education, most people spread the costs out over time. Families may not be able to determine whether something is “affordable” until they see how it breaks down in terms of monthly payments. Most families will look at their expected share of college costs and decide that the best way - and quite possibly the only way - to manage the expense is by spreading it out over time.
Preparing for college can be a challenge and figuring out how to afford it can be scary. College Foundation of North Carolina (CFNC) was created to help students plan and prepare for college admission, and find the best financial aid alternatives.

CFNC is a non-profit partnership between Pathways of North Carolina, College Foundation, Inc. and the North Carolina State Education Assistance Authority. Together, these organizations provide a free complete and comprehensive source of information for students and their families, through their website at www.CFNC.org and call center, (toll-free) 866-866-CFNC.

Pathways of North Carolina

Pathways of North Carolina is a partnership whose goal is to prepare every student in the state for a college education. To accomplish this, Pathways provides tools, information, and services in three areas:

- career exploration and planning,
- academic planning and preparation,
- and financial information.

Funded by the General Assembly and administered by the University of North Carolina, Pathways is a free service. Partners include the Department of Public Instruction, the North Carolina Community College System; North Carolina Independent Colleges and Universities; the University of North Carolina; the North Carolina State Education Assistance Authority (NCSEAA); and the State Occupational Information Coordinating Committee (SOICC).

College Foundation, Inc.

College Foundation, Inc. (CFI) is a non-profit organization that has been offering students and parents financial assistance since 1955. CFI is the central loan originator and servicer for North Carolina’s Federal Family Education Loan Program for post-secondary education. CFI also serves as administrative agent for a number of need-based grant programs for North Carolinians and for North Carolina’s College Savings and Investment Program.

NCSEAA

The North Carolina State Education Assistance Authority (NCSEAA) is a state agency that was established in 1965 to administer grants, loans, work study, and other aid to enable qualified students to continue their education beyond high school. It is responsible for North Carolina’s College Savings and Investment Program, a tax-advantaged college investment program for parents, grandparents, and others.
Financial Aid

Frequently Asked Questions on Financial Aid

1. What is student financial aid?

Financial aid is money from federal, state, and private institutions used to pay college costs. There are two general types of aid: gift aid and self-help aid. Gift aid: The two types of gift aid are grants and scholarships. Generally grants and scholarships are the same thing - aid given to a student for which the student does not have to work or have an obligation to repay. Self-help aid: There are also two kinds of self-help aid: loans and employment.

- Loans - money used to pay current expenses with an obligation for repayment at some future time, usually with interest.
- Employment - part-time campus or off-campus job.

There are multiple sources of financial aid awards. Some examples are:

- Federal programs
- State programs
- College and university programs
- Local, regional, national private programs (foundations, clubs, organizations)

2. What is student financial aid based on?

There are different qualifications for various financial aid programs, merit-based, need-based, and other-based.

- Merit-based: financial aid based on special talents, achievements, or skills of a student. Examples of merit-based awards are academic, drama, music, and athletic scholarships.
- Need-based: financial aid based on the difference between the total cost of attending a specific college program and a family's ability to pay that cost as calculated using standard formulas.
- Other based: financial aid based on neither merit nor need. Examples include grants based on state residence, jobs, campus work, parent loans, some student loans.

3. What are college costs?

College costs vary widely. Most of the difference is in tuition and fees, which are lower at public institutions. Other costs are much the same at public or private institutions. Costs that are generally considered are:

- Tuition
- Required fees
- Room
- Meals
- Books and Supplies
- Personal expenses
- Transportation

North Carolina offers students a variety of excellent college choices, both public and private. Don’t let the costs scare you off; financial aid can offset the costs for many students and families, as the rest of this outline will make clear. For more information on total costs of North Carolina colleges and universities, go to www.CFNC.org.
4. Who pays for college costs?

Paying for college is a shared responsibility among:
- The family
- The state
- The specific college or university
- The federal government
- Private sources

The amount your family has to pay varies depending on the cost of the college you attend and other factors. You may want to visit our College Aid Calculator at www.CFNC.org to help you compute how much your family contribution towards the cost of a particular school will be.

5. What about need-based grants, loans and employment?

Most available financial aid is need-based. Need-based aid is seldom all gift aid; often it is a combination called a “package” of gift, loan, and work; sometimes it is offered in the form of loans and/or work only. Your family is responsible for costs to the extent of its ability to pay college costs. The College Aid Calculator at www.CFNC.org will help you determine how much your family may be responsible for. The purpose of need-based aid is to provide access to college and choice of a college. Every year there is a new determination of eligibility for need-based aid, so annual applications are required (see below).

6. How do I apply for student financial aid?

Use the Free Application for Federal Student Aid (FAFSA).
- Required annually for all types of federal aid (file as soon as possible after January 1 of the senior year in high school and each year thereafter)
- Applications processed centrally by a federal processor
- Application results sent to institutions listed by student on FAFSA
- Student Aid Report sent to student to confirm data
- You can get Title IV (FAFSA) college codes by clicking the college names on our North Carolina Colleges and Costs page, at www.CFNC.org. You’ll find it in the section titled Other Information.

Other forms may also be required by the college or university of your choice (check with each college). Among these forms are:
- Their own institutional applications for need-based aid
- College Scholarship Service PROFILE (a national form used by some colleges and universities for awarding their own need-based student financial aid funds)
- Profile application: Check the North Carolina Colleges and Costs at www.CFNC.org for a list of Profile codes. To get the Profile code, click on the college of your choice from the list. Where available, the code will be listed in the section titled Other Information.
- Specific college merit scholarship applications (often with fall deadlines, so apply early)
- Scholarship applications from sources outside the college or university (foundations, clubs, etc.) can be important also. Find out about these “outside scholarships” by using resources including:
  - Computer programs and search engines
  - High school counselor’s office
  - Fraternal and church groups in your area
Financial Aid

7. Are there some tips for applying for student financial aid?

1. Be sure to complete all required forms by deadlines
2. Complete all questions accurately; estimate if necessary to meet early deadlines
3. Don’t wait until you are admitted to file the FAFSA
4. Keep a photocopy of all documents for your records

8. How is eligibility for need-based aid determined?

Standard formulas compute a Parent’s Contribution and a Student’s Contribution:

\[
\text{Parent’s Contribution} + \text{Student’s Contribution} = \text{Estimated Family Contribution (EFC)}
\]

To be considered for FEDERAL and some STATE financial aid, you must meet the following criteria:

- Complete and submit the Free Application for Federal Student Aid (FAFSA)
- Be a U.S. citizen or eligible non-citizen
- Have a valid Social Security number
- Be enrolled at least half-time or accepted for enrollment in an eligible program and working toward a degree or certificate. You may not receive aid for correspondence or telecommunications courses unless they are part of an associate, bachelor, or graduate degree program.
- Have a high school diploma or General Education Development (GED) Certificate, or pass a test approved by the U.S. Department of Education
- Make satisfactory academic progress
- Register with the Selective Service, if required (males only)

To receive STATE student aid from North Carolina, you also must:

- Maintain legal North Carolina state residency
- Attend an eligible institution in North Carolina
- Fill out applications specific to the state (some state programs have their own applications) - look at programs of interest to you using the CFNC financial aid search

To receive institutional and other need-based aid, be sure to check the specific requirements of the institution or program.
9. What if I have special circumstances or want more aid?

Significant change in your family can lead to adjustments. Significant changes can include:

- Unemployment of a parent
- Death in the family
- Change in parents’ marital status
- Major non-discretionary expenses such as medical bills

Notify the financial aid office at your college of these special circumstances. Be prepared to provide documentation of any change. Adjustments to aid awards - especially need-based awards - are not made based on “negotiations” but on changed circumstances and new information.

10. What are major sources of financial aid (scholarships, grants, loans, employment)?

There are many sources of aid: federal programs, state programs, colleges and university programs, local and other programs. Some are need-based, some are merit-based, and some are based on other factors. You can view information on federal and state sources of aid available by using the Financial Aid Search tool at www.CFNC.org or by contacting a college financing specialist toll-free at 866-866-CFNC.

College-sponsored aid opportunities are plentiful, but these vary widely from college to college. Be sure to research the catalogs and other literature of the colleges and universities you are considering, to find out what may be available.

Local and government organizations also offer many scholarships. Your school counselor or public library will be the best source for information on local financial aid opportunities. Examples of this type scholarship include:

- Churches
- Civic groups
- Parents’ employers
- Veterans’ Administration
- Vocational rehabilitation services
- ROTC scholarships
- Robert C. Byrd Honors Scholarship Program

Ready for more answers?

Now that you have reviewed this section, take the next step by visiting www.CFNC.org or calling toll-free 866-866-CFNC, to get specific answers to your questions, ideas, or concerns. There is help out there to make college more affordable and we want to be your resource for finding that information.

Good luck!
Other Sources of Information

- 300 Ways to Put Your Talent to Work in the Health Field
- The Occupational Outlook Handbook
  www.bls.gov/oco
- The North Carolina Community College System
  www.ncccs.cc.nc.us
- The North Carolina University System
  www.northcarolina.edu
- The College Foundation of North Carolina
  www.CFNC.org
- Federal Financial Aid Information
  www.fafsa.ed.gov
- North Carolina Health Careers Access Program
  http://nchcap.unc.edu
- North Carolina Area Health Education Centers
  www.med.unc.edu/ahec/

Other Web Resources:
- www.collegeboard.org
- www.collegecentral.com
- www.collegegrad.com
- www.collegeview.com
- www.collegexpress.com
- www.finaid.org
- www.jobstar.org
- www.monster.com
- www.channel4.com/brilliantcareers/
This section of the North Carolina Health Careers Manual provides a listing of all the post-secondary educational institutions in the state which offer educational programs in health care.

Information about the colleges and universities in North Carolina that offer programs in health care is on pages 154-164. The four-year colleges and universities are listed first, then the community colleges, and finally, the hospital-based programs. If you are interested in a particular health career, check the page on that occupation in this guide to learn more about which schools offer programs and degrees. If you are interested in specific schools, check this list to learn which health program(s) they offer. For more information, write to the director of admissions at schools that interest you. Be sure to ask for a catalog, an application, information on financial aid, and special information on the health-related programs. Ask your counselor for help if you need it.

Here's an example of a letter requesting information:

Director of Admissions  
Any University/College  
Anywhere, NC 11111

Dear Sir or Madam:  
Please send me information on "Any University/College." I am a high school student interested in a degree in nursing.  
Please send me an application, a catalog, and information on financial aid and your nursing program.

My name and address are:  
Julie Smith  
116 S. Oak Street  
Southtown, NC  11112

Sincerely,  
Julie Smith
Legend

- University of North Carolina
- Private College or University

**PUBLIC INSTITUTIONS**

1. Appalachian State University
2. East Carolina University
3. Elizabeth City State University
4. Fayetteville State University
5. North Carolina Agricultural and Technical State University
6. North Carolina Central University
7. North Carolina School of the Arts
8. North Carolina State University
9. University of North Carolina at Asheville
10. University of North Carolina at Chapel Hill
11. University of North Carolina at Charlotte
12. University of North Carolina at Greensboro
13. University of North Carolina at Pembroke
14. University of North Carolina at Wilmington
15. Western Carolina University
16. Winston-Salem State University

**PRIVATE INSTITUTIONS**

75. Barber-Scotia College
76. Barton College
77. Belmont Abbey College
78. Bennett College
79. Campbell University
80. Catawba College
81. Davidson College
82. Duke University
83. Elon University
84. Gardner-Webb University
85. Greensboro College
86. Guilford College
87. High Point University
88. Johnson C. Smith University
89. Lees-McRae College
90. Lenoir-Rhyne College
91. Livingstone College
92. Mars Hill College
93. Meredith College
94. Methodist College
95. Miller Motte Technical College
96. Montreat College
97. Mount Olive College
98. North Carolina Wesleyan College
99. Pfeiffer University
100. Queens College
101. Southeastern Baptist College
102. St. Andrews Presbyterian College
103. St. Augustine’s College
104. Salem College
105. Shaw University
106. Wake Forest University
107. Warren Wilson College
108. Wingate University
Following are the colleges and universities in the state that offer health careers education, and the degrees available.

<table>
<thead>
<tr>
<th>College Name</th>
<th>Address</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catawba College</td>
<td>2300 W. Innes Street, Salisbury, NC 28144-2488</td>
<td>(1-800)-CATAWBA</td>
<td><a href="http://www.catawba.edu">www.catawba.edu</a></td>
</tr>
<tr>
<td>Duke University</td>
<td>Durham, NC 27708</td>
<td>(919)-684-8111</td>
<td><a href="http://www.duke.edu">www.duke.edu</a></td>
</tr>
<tr>
<td>Appalachian State University</td>
<td>Boone, NC 28608</td>
<td>(828)-262-2000</td>
<td><a href="http://www.appstate.edu">www.appstate.edu</a></td>
</tr>
<tr>
<td>Belmont Abbey College</td>
<td>PO Box 5000, Wilson, NC 27893</td>
<td>(800)-345-4973</td>
<td><a href="http://www.belmont.edu">www.belmont.edu</a></td>
</tr>
<tr>
<td>Bennett College</td>
<td>900 E. Washington St., Greensboro, NC 27401-3239</td>
<td>(336)-273-4431</td>
<td><a href="http://www.bennett.edu">www.bennett.edu</a></td>
</tr>
<tr>
<td>Campbell University</td>
<td>PO Box 1090, Buies Creek, NC 27506</td>
<td>(800)-394-4111</td>
<td><a href="http://www.campbell.edu">www.campbell.edu</a></td>
</tr>
<tr>
<td>Eastern Carolina University</td>
<td>106 Whichard Bldg., Greenville, NC 27858-4353</td>
<td>(252)-757-6640 or 8012</td>
<td><a href="http://www.ecu.edu">www.ecu.edu</a></td>
</tr>
<tr>
<td>Fayetteville State University</td>
<td>1200 Murchison Rd., Fayetteville, NC 28301</td>
<td>(910)-486-1371</td>
<td><a href="http://www.uncfsu.edu">www.uncfsu.edu</a></td>
</tr>
<tr>
<td>Elon University</td>
<td>2700 Campus Box, Elon, NC 27244</td>
<td>(252)-353-3400</td>
<td><a href="http://www.elon.edu">www.elon.edu</a></td>
</tr>
<tr>
<td>Gardner-Webb University</td>
<td>PO Box 997, Boiling Springs, NC 28017-0997</td>
<td>(704)-406-2361</td>
<td><a href="http://www.gardner-webb.edu">www.gardner-webb.edu</a></td>
</tr>
</tbody>
</table>

*Degree or certificate offered in affiliation with professional program at a hospital or separate educational institution.
Degree Coder

(C) Certificate
(B) Bachelor's Degree
(M) Master's Degree
(D) Doctoral Degree
(PD) Post-Doctoral

Greensboro College
815 W. Market Street
Greensboro, NC 27401-1875
(336) 272-7102, ext. 388
www.gboro.college.edu
Athletic Training (B)
Biology (B)
Medical Technology (B)

Guilford College
5800 W. Friendly Avenue
Greensboro, NC 27410
(336) 316-2100
www.guilford.edu
Biology (B)
Health Sciences (B)
Psychology (B)

High Point University
University Station, 833 Montlieu Ave.
High Point, NC 27262-3598
(800) 345-6993
www.highpoint.edu
Athletic Training (B)
Biology (B)
Exercise Science (B)
Psychology (B)
Recreation-Fitness and Training (B)

Lees-McRae College
375 College Drive, Box 128
Banner Elk, NC 28604
(828) 998-5241
www.lmc.edu
Nursing (B)

Lenoir-Rhyne College
Box 7227
Hickory, NC 28603
(828) 327-5721
www.lrc.edu
Athletic Training
Medical Technology
Nursing (B)
Occupational Therapy (B, MS)*
Pre-Medical (B)
Pre-Pharmacy (B)
Sports Medicine (B)

Mars Hill College
Box 370
Mars Hill, NC 28754
(866) 642-4968
www.mhc.edu
Athletic Training (B)
Pre-Professional (B)
Physical Education (B)
Psychology (B)
Social Work (B)

Meredith College
3800 Hillsborough Street
Raleigh, NC 27607
(801) MEREDIT or 637-3348
www.meredith.edu
Dietetic Internship (Post-Bacc.)
Environmental Science (B)
Exercise Sports Science (B)
Foods & Nutrition (B, M)
Psychology (B)
Social Work (B)

Methodist College
5400 Ramsey Street
Fayetteville, NC 28303
(801) 492-4600
www.methodist.edu
Athletic Training (B)
Biology (B)
Physician Assistant (M)
Psychology (B)
Social Work (B)

Miller-Motte Technical College
5000 Market St.
Wilmington, NC 28405
(910) 392-4660
www.miller-motte.com
Medical Assisting (A)
Medical Office Assistant (D)
Surgical Technology (A)
Therapeutic Massage (C)

Mount Olive College
634 Henderson Street
Mount Olive, NC 28355
(919) 658-2502
www.moutolive.edu
Biology (B)
Health Sciences Management (B)
Psychology (B)
Therapeutic Recreation (B)

North Carolina Agricultural and Technical State University (A&T)
1501 E. Markell Street
Greensboro, NC 27411
(336) 334-7946
www.ncat.edu
Biology (B)
Food and Nutritional Sciences (B, M)
Health and Physical Education (B, M)
Nursing (B)
Occupational Safety and Health (B)
Social Work (B, M)
Speech (B)

North Carolina Central University
PO Box 19177
Durham, NC 27707
(919) 667-7533
www.ncsu.edu
Athletic Training (B)
Biology (B, M)
Community Health (B)
Library Science (M)
Nursing (B)
Psychology (B, M)
Social Work (B)
School Health (B)

North Carolina State University
PO Box 7103
Raleigh, NC 27695-7103
(919) 515-2434
www.ncsu.edu
Clinical Laboratory Science (B)*
Health Occupations Education (Undergraduate and Graduate Certificate Program)
Psychology (B, M, D)
Social Work (B)
Speech Communication (B)
Veterinary Medicine (D)

Pfeiffer University
PO Box 960
Misenheimer, NC 28109-0960
(800) 338-2600
www.pfeiffer.edu
Health Care Administration (M)
Psychology (B)
Exercise Science (B)

Queens University of Charlotte
1900 Selwyn Avenue
Charlotte, NC 28274-0001
(704) 337-2212
www.qc.edu
Nursing (B, M)
Music Therapy (B)

St. Augustine’s College
1315 Oakwood Avenue
Raleigh, NC 27610
(919) 516-4000
www.st-aug.edu
Biology (B)
Industrial Hygiene (B)

Salem College
PO Box 10548
Winston-Salem, NC 27108
(336) 721-2600
www.salem.edu
Biology (B)
Chemistry (B)
Mathematics (B)
Medical Technology (B)

Shaw University
118 East Selwyn Avenue
Raleigh, NC 27611
(919) 546-8200
www.shawuniversity.edu
Athletic Training (M)
Biology (B)
Kinesiotherapy (M)
Psychology (B)
Social Work (M)
Therapeutic Recreation (M)
Speech Pathology & Audiology (M)

Southeastern Baptist Theological Seminary
P.O. Box 1889
Winston-Salem, NC 27108
(919) 797-2491
www.sebts.edu
Pastoral Care and Counseling (M)

*Degree or certificate offered in affiliation with professional program at a hospital or separate educational institution.
University of North Carolina - Asheville
CPO #2210, One University Heights
Asheville, NC 28804-3299
(800) 531-9842
www.unca.edu
Environmental Studies (B)
Health Administration Management (B)
Health Promotion (B and minor)
Psychology (B)
Sports Medicine (minor)

University of North Carolina - Chapel Hill
Jackson Hall, Campus Box 2200
Chapel Hill, NC 27599-2200
(919) 966-3231
www.unc.edu
Athletic Trainer (B)
Audiology (M)
Biostatistics (B,M,D)
Biomedical Engineering (M,D)
Clinical Cell
Clinical Laboratory Science (B)
Clinical Psychology (M,D)
Cytotechnology (Post-Bacc Certificate)*
Dental Assisting (Certificate)
Dental Hygiene (B)
Dental Hygiene Education (M)
Dentistry (D)
Environmental Science (B,M,D)
Epidemiology (M,D)
Exercise Physiology (M)
Genetics (D)
Health Education (M,D)
Health Policy &Administration (B,M,D)
Library Science (M,D)
Maternal and Child Health (M,D)
Medicine (PD)
Microbiology and Immunology (M,D)
Molecular and Cellular Pathology (M,D,PD)
Nurse Practitioner (M)
Nursing (B,M,D)
Nursing Home Administrator (M)
Nuclear Medicine (Advanced Certificate)*
Nutrition (B,M,D)
Occupational Therapy (M)
Ophthalmology (PD)
Pharmacy (M,PD)
Pharmacology (M)
Graduate Medical Education (PD)
Physical Therapy (PD)
Physical Therapy (B,M,D)
Psychiatry (PD)
Public Health (B,M,D)
Public Health Nursing (M)
Radiation Therapy (B)
Radiologic Technology (B)
Radiology (PD)
Rehabilitation Psychology and Counseling (M)
Social Work (M,D)
Speech/Language Pathology (M)
Sports Medicine (M)
Therapeutic Recreation (M)

University of North Carolina - Greensboro
1000 Spring Garden Street, PO Box 26170
Greensboro, NC 27402
(336) 334-5000
www.uncg.edu
Biology (B,M)
Exercise and Sport Medicine (B,M,D)
Genetic Counseling (M)
Gerontological Counseling (C)
Gerontology (M)
Health Management (M)
Medical Technology (B)
Nursing (B,M)
Nursing Administration (M)
Nursing Case Management (C)
Nursing Education (M)
Nursing Gerontology (M)
Nutrition (B,M,D)
Psychology (B,D)
Public Health (M)
Public Health Education (B)
Social Work (B,M)
Speech and Language Pathology (M)

University of North Carolina - Pembroke
1 University Drive, PO Box 1510
Pembroke, NC 28372-1510
(800) 949-UNCP
www.uncp.edu
Biology (B)
Health Promotion (B)
Physical Education (B,M)
Nursing (B)
Psychology (B)
Social Work (B)

University of North Carolina - Wilmington
601 South College Road
Wilmington, NC 28403-3297
(910) 228-5571
www.uncw.edu
Athletic Training (B)
Biological Science (B,M)
Health Sciences (B,D)
Health Promotion (M)
Medical Laboratory Technology (B)*
Nursing (B,M)
Psychology (B)
Social Work (B)
Therapeutic Recreation (B)

Wingate University
Box 3059, Wingate, NC 28174-0157
(704) 750-2070
www.wingate.edu
Athletic Training (B)
Pharmacy-PharmD
Physical Education (B)
Psychology (B)

Winston-Salem State University
601 Martin Luther King Jr. Drive
Winston-Salem, NC 27110
(336) 750-2070
www.wssu.edu
Applied Science (B)
Biological Science (B)
Environmental Science (B)
Health Sciences (B)
Life Sciences (B)
Occupational Therapy (B)
Physical Education (B)
Physical Therapy (B)
Psychology (B)
Therapeutic Recreation (B)

Wake Forest University, Wake Forest
University School of Medicine
Medical Center Boulevard
Winston-Salem, NC 27157-1090
(336) 758-8211
www.wfubmc.edu
Biochemistry (D)
Clinical Research (M,D)
Diagnostic Medical Sonography
Epidemiology (M)
Health and Exercise Science (B,M)
Health Services Research (M)
Immunology (D)
Medical Engineering (D)
Neuroscience (D)
Nurse Anesthesia (M)*
Ophthalmology (PD)
Pastoral Counseling (B,M,D)
Pathologist (PD)
Pharmacology (D)
Physician (PD)
Graduate Medical Education (PD)
Psychiatry (PD)
Psychology (B,M)
Radiology (D)

Western Carolina University
Cullowhee, NC 28723
(828) 227-7111
www.wcu.edu
Athletic Training (B)
Communication Disorders (B,M)
Emergency Medical Care (B)
Environmental Health (B)
Health Information Management (B)
Health Sciences (M)
Nursing (B,M)
Nutrition & Dietetics (B)
Physical Education (B,M)
Physical Therapy (B,M)
Psychology (B,M)
Social Work (B)
Recreational Therapy (B)

*Degree or certificate offered in affiliation with professional program at a hospital or separate educational institution.
The North Carolina Community College System is made up of 58 community colleges, offering a host of programs to meet the needs of individuals, businesses and industries. The programs range from three months to two years in length.

The primary emphasis of every community college professional program is on-the-job training. These programs prepare students for entry-level positions in skilled and technical occupations. Diplomas are awarded to graduates of vocational programs one year or more in length, and certificates to graduates of shorter programs. Two-year technical programs lead to an associate degree in applied sciences.

Health programs prepare students for careers in allied health or nursing occupations. They also prepare graduates for state licensure and/or national certification or registration in their field. Students are trained for employment in hospitals, medical clinics, physicians’ offices and other health service agencies. Programs are also available to help adults learn to read, write, or do basic mathematics; to earn a high school diploma or its equivalent; to strengthen academic abilities; and to complete most of the courses needed for the first two years of a bachelor’s degree.

The following pages list the community colleges with health careers training and the programs they offer. Web pages are also listed where available. For more information on the NC Community College System, visit their website at www.nccs.cc.nc.us

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**Alamance Community College**
PO Box 8020
Graham, NC 27253
(336) 578-2002 [www.alamance.cc.nc.us](http://www.alamance.cc.nc.us)
Associate Degree Nursing
Biotechnology
Dental Assisting
Medical Assisting
Medical Laboratory Technology
Medical Office Technology
Nursing Assistant
Phlebotomy

**Asheville-Buncombe Technical Community College**
340 Victoria Road
Asheville, NC 28801
(828) 254-1921 [www.abtech.edu](http://www.abtech.edu)
Associate Degree Nursing (Registered Nursing)
Practical Nursing (D)
Dental Assisting (D)
Dental Hygiene
Emergency Medical Science
Medical Coding (Certificate)
Medical Laboratory Technology
Medical Office Administration (D)
Medical Sonography
Medical Transcription (D)
Phlebotomy (Certificate)
Radiography
Surgical Technology (D)

**Bladen Community College**
PO Box 266
Duncan, NC 28332
(910) 862-2164 [www.bcc.cc.nc.us](http://www.bcc.cc.nc.us)
Associate Degree Nursing
Nursing Assistant
Pharmacy Technology (Diploma)
Practical Nursing

**Blue Ridge Community College**
College Drive
Flat Rock, NC 28731
(828) 692-3572 [www.blueridge.cc.nc.us](http://www.blueridge.cc.nc.us)
Associate Degree Nursing
Central Sterile Processing (Diploma)
Surgical Technology

**Brunswick Community College**
PO Box 30
Supply, NC 28462
(800) 754-1050 [www.brunswick.cc.nc.us](http://www.brunswick.cc.nc.us)
Health Information Technology
Nursing Assistant
Pharmacy Technology (Diploma)
Phlebotomy
Practical Nursing

**Caldwell Community College & Technical Institute**
2855 Hickory Blvd.
Hudson, NC 28638
(704) 728-2200 [www.caldwell.cc.nc.us](http://www.caldwell.cc.nc.us)
Biomedical Equipment Technology
Cardiovascular Sonography
Computed Tomography and Magnetic Resonance Imaging Technology
Emergency Preparedness Technology
Medical Office Technology
Medical Sonography
Nuclear Medicine Technology
Nursing (Associate Degree)
Occupational Therapy Assistant
Ophthalmic Medical Assistant
Pharmacy Technology (Diploma)
Physical Therapy Assistant
Radiology
Speech Language Pathology Assistant

**Cape Fear Community College**
411 N Front Street
Wilmington, NC 28401
(910) 362-7558 [http://cfcc.net](http://cfcc.net)
Associate Degree Nursing (Registered Nursing)
Dental Assisting
Dental Hygiene
Medical Sonography
Occupational Therapy Assistant
Pharmacy Technology
Phlebotomy
Practical Nursing
Radiography
Speech Language Pathology Assistant

**Carteret Community College**
3505 Arendell Street
Morehead City, NC 28557-2989
(252) 222-6000 [www.carteret.edu](http://www.carteret.edu)
Diagnostic Medical Sonographer (Diploma)
Emergency Medical Science (2 years)
Medical Assisting
Nursing Assistant
Practical Nursing
Radiography
Respiratory Care Technology
Therapeutic Massage
Therapeutic Recreation

**Catawba Valley Community College**
2550 Hwy 70 S E
Hickory, NC 28602
(828) 327-7000 x4334 [www.cvcc.edu](http://www.cvcc.edu)
Associate Degree Nursing
Radiography
Dental Hygiene
Emergency Medical Science
Health Information Technology
Respiratory Therapy
Surgical Technology

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www.nchealthcareers.com
Community Colleges

Central Carolina Community College
1105 Kelly Drive
Sanford, NC 27330
(919) 775-5401 www.ccarolina.cc.nc.us
Associate Degree Nursing
Dialysis Technology (Diploma)
Health Care Technology (Certificate)
Human Services Technology
Licensed Practical Nurse Refresher (Certificate)
Medical Assisting
Nursing Assistant (Certificate)
Practical Nursing (Diploma)
Veterinary Medical Technology

Central Piedmont Community College
PO Box 35009
Charlotte, NC 28235
(704) 330-2722 www.cpcc.edu
Associate Degree Nursing (Registered Nursing)
Cardiovascular Technology
Cytotechnology (Certificate)
Dental Assisting
Dental Hygiene
Health Information Technology
Human Services Technology
Medical Assisting
Medical Laboratory Technology
Physical Therapist Assistant
Respiratory Therapy

Cleveland Community College
137 S. Post Road
Shelby, NC 28150
(704) 484-4000 www.clevelandcommunitycollege.edu
Associate Degree Nursing (Registered Nursing)
Medical Office Technology
Nursing Assistant
Phlebotomy
Practical Nursing
Radiologic Technology

Coastal Carolina Community College
444 Western Blvd.
Jacksonville, NC 28546
(910) 938-6394 www.ccastal.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Central Sterile Processing
Dental Assisting
Dental Hygiene
Emergency Medical Science
Medical Laboratory Technology
Medical Office Technology
Nursing Assistant
Practical Nursing
Surgical Technology

College of The Albemarle
PO Box 2327
Elizabeth City, NC 27906-2327
(252) 335-0821 www.albemarle.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Emergency Medical Science
Medical Assisting
Nursing Assistant
Practical Nursing (Diploma)
Surgical Technology

Craven Community College
800 College Court
New Bern, NC 28562
(252) 638-4131 www.craven.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Practical Nursing (Diploma)

Davidson County Community College
PO Box 1287
Lexington, NC 27292
(336) 249-8186 www.davidson.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Health Information Technology
Medical Assisting Technology
Medical Laboratory Technology
Pharmacy Technology
Phlebotomy

Durham Technical Community College
PO Drawer 11307
Durham, NC 27703
(919) 686-3300 www.durhamtech.edu
Associate Degree Nursing (Registered Nursing)
Biotechnology
Clinical Trials Research Associate
Dental Laboratory Technology
Emergency Medical Technology
Health Information Technology
Medical Office Administration
Nursing Assistant I & II
Occupational Therapy Assistant
Pharmaceutical Technology
Phlebotomy
Practical Nursing
Respiratory Care Therapy
Surgical Technology

Edgecombe Community College
2009 W. Wilson Street
Tarboro, NC 27886
(252) 823-5166 www.edgecombe.edu
Practical Nursing (Diploma)
Registered Nurse (AND)
Health Information Technology
Imaging Technology
Medical Assisting Technology
Medical Transcription
Nursing Assistant
Phlebotomy
Respiratory Care Technology
Surgical Technology

Fayetteville Technical Community College
PO Box 35235
Fayetteville, NC 28303-0236
(910) 678-8558 www.faytechcc.edu
Associate Degree Nursing (Registered Nursing)
Certified Nursing Assistant
Culinary Technology
Dental Assisting
Dental Hygiene
Emergency Medical Science
Funeral Service Education
Healthcare Management Technology
Pharmacy Technology
Phlebotomy
Physical Therapist Assistant
Practical Nursing
Radiography
Respiratory Care
Speech Language Pathology Assistant
Surgical Technology

Forsyth Technical Community College
2100 Silas Creek Parkway
Winston-Salem, NC 27103-5197
(336) 723-0371 www.forsythtech.edu
Associate Degree Nursing (Registered Nursing)
Dental Assisting
Dental Hygiene
Cardiovascular Sonography
Medicall Assisting
Medical Sonography
Nuclear Medicine Technology
Practical Nursing
Radiation Therapy
Radiologic Technology (Radiography)
*Certificate Programs for Radiologic Respiratory Therapy
Therapeutic Massage
Tech. graduates: Computerized Tomography
Magnetic Resonance Imaging
Vascular/Cardiovascular Interventional Technology
Respiratory Care (Therapists and Technicians)
Speech Language Pathology Assistant

Gastonia College
201 Highway 321 South
Dallas, NC 28034-1499
(704) 922-6379 www.gaston.edu
Associate Degree Nursing
Dietary Manager
Dietetic Technician
Emergency Medical Science
Medical Assisting
Nursing Assistant
Phlebotomy
Practical Nursing
Therapeutic Massage
Veterinary Medical Technology
Community Colleges

Guilford Technical Community College
PO Box 309
Jamestown, NC 27282
(336) 334-4822  www.gtcc.edu
Dental Assisting
Dental Hygiene
Emergency Medical Science
Medical Assisting Technology
Medical Office Technology
Nursing Education Options:
  Associate Degree, Practical Nursing & Registered Nurse
Physical Therapist Assistant
Respiratory Therapy
Substance Abuse Counseling
Surgical Technology

Halifax Community College
PO Drawer 809
Weldon, NC 27890
(252) 536-4221 (HCCI)
www.hcc.cc.nc.us
Medical Laboratory Technology
Associate Degree Nursing
Dental Hygiene
Practical Nursing Education (LPN)
Medical Office Administration
Nursing Assistant
Phlebotomy

Haywood Community College
185 Friedlander Drive
Clyde, NC 28721
(866) GO-TO-HCC
(828) 627-4513 fax  www.haywood.edu
Associate Degree Nursing
Medical Assisting Technology
Medical Transcription (Certificate)

Isothermal Community College
PO Box 804
Spindale, NC 28160
(828) 286-3636  www.isothermal.edu
Associate Degree Nursing (Registered Nurse)
Nursing Assistant
Practical Nursing

James Sprunt Community College
PO Box 398
Kanansville, NC 28349-0398
(910) 296-2451  www.sprunt.com
Associate Degree Nursing
Practical Nursing
Medical Assisting
Phlebotomy
Offered through a consortium arrangement with other colleges:
Dental Assisting
Dental Hygiene
Health Information Technology
Medical Laboratory Technology
Occupational Therapy Assistant
Pharmacy Technology (Diploma)
Radiography

Johnston Community College
PO Box 2350
Smithfield, NC 27577
(919) 934-3051  www.johnston.cc.nc.us
Associate Degree Nursing
Cardiovascular Sonography
Medical Assisting
Medical Sonography
Phlebotomy (Certificate)
Radiography
Therapeutic Massage

Lenoir Community College
PO Box 188
Kinston, NC 28502
(252) 527-6223  www.lenoir.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Dietetic Technician
Health Care Management Technology
Medical Assisting
Medical Office Technology
Practical Nursing (LPN)
Radiography
Surgical Technology
Therapeutic Massage

Martin Community College
1161 Kehukee Park Road
Williamston, NC 27892
(252) 792-1521  www.martin.cc.nc.us
Dental Assisting
Medical Assisting
Medical Office Administration
Physical Therapist Assistant

Mayland Community College
PO Box 547
Spruce Pine, NC 28777
(704) 765-7351  www.mayland.cc.nc.us
Associate Degree Nursing
Nursing Assistant (certificate)

McDowell Technical Community College
54 College Drive
Marion, NC 28752
(828) 652-6021  www.mcdowelltech.cc.nc.us
Health Information Technology
Practical Nursing
Nursing Assistant
Associate Degree Nursing (Registered Nursing)

Mitchell Community College
500 West Broad Street
Statesville, NC 28677
(704) 878-3200  www.mitchell.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Medical Assisting Technology
Nursing Assistant (Certificate)
Phlebotomy
Surgical Technology (Diploma)

Montgomery Community College
1011 Page Street
Troy, NC 27371
(910) 576-6222  www.montgomery.cc.nc.us
Emergency Medical Science
Health Care Technology (Certificate)
Human Services Technology
Medical Assisting
Nursing Assistant
Practical Nursing

Nash Community College
522 Old Carriage Road, PO Box 7488
Rocky Mount, NC 27804-7488
(252) 443-4011  www.nash.cc.nc.us
Associate Degree Nursing
Emergency Medical Technician
Health Care Management Technology
Licensed Practical Nursing
Medical Office Administration
Nursing Assistant
Occupational Therapy Assistant
Pharmacy Technology (Diploma)
Phlebotomy
Physical Therapist Assisting

Pamlico Community College
PO Box 185
Grantsboro, NC 28529
(252) 249-1851  www.pamlico.cc.nc.us
Electroneurodiagnostic Technology
Health Care Management
Medical Assisting Technology
Nursing Assistant

Piedmont Community College
PO Box 1197
Roxboro, NC 27573
(910) 599-1181  www.piedmont.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Certified Nursing Assistant I,II
Medical Office Administration
Medical Assisting-AAS Degree (1+1 agreement)

Pitt Community College
PO Drawer 7007
Greenville, NC 27835-7007
(252) 321-4200  www.pitt.cc.nc.us
Cardiovascular Sonography
Cardiovascular/Interventional and Vascular Technology
CT/MRI (Imaging)
Diagnostic Medical Sonography (2 years)
Dialysis Technology
Echocardiography (Diploma)
Health Care Management Technology
Health Care Technology
Health Information Technology
Health Unit Coordinator
Medical Assisting (2 years)
Nuclear Medicine (2 years)
Nuclear Medicine (Distance Diploma)
Occupational Therapy Assistant (2 years)
Radiography (2 years)
Radiation Therapy (Diploma)
Respiratory Therapy Technician (2 years)
Therapeutic Massage (2 years)
## Community Colleges

### Randolph Community College
PO Box 1009
Asheboro, NC 27204-1009
(336) 633-0224  www.randolph.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Medical Photography
Nursing Assistant

### Richmond Community College
PO Box 1189
Hamlet, NC 28345
(910) 582-7000  www.richmond.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Human Services Technology
Medical Assisting
Nursing Assistant (Certificate)

### Roanoke-Chowan Community College
109 Community College Road
Ahoskie, NC 27910
(252) 862-1200  www.roanoke.cc.nc.us
Associate Degree Nursing
Health Care Technology (Certificate)
Human Services Technology
Nursing Assistant (Certificate)

### Robeson Community College
PO Box 1420
Lumberton, NC 28359
(910) 738-7101  www.robeson.cc.nc.us
Associate Degree Nursing
Nursing Assistant (Certificate)
Pharmacy Technology (Diploma)
Respiratory Therapy

### Rockingham Community College
PO Box 38
Wentworth, NC 27375
(336) 342-4261  www.rockinghamcc.edu
Associate Degree Nursing (Registered Nursing)
Medical Office Technology
Occupational Therapy Assistant
Phlebotomy
Practical Nursing
Respiratory Care
Surgical Technology

### Sampson Community College
PO Drawer 318
Clinton, NC 28329
(910) 592-8084  www.sampson.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Health Care Technology
Nursing Assistant
Practical Nursing

### Sandhills Community College
3395 Airport
Pinehurst, NC 28374
(910) 692-6165  www.sandhills.edu
Associate Degree Nursing (Registered Nursing)
Emergency Medical Science
Human Services Technology
Medical Laboratory Technology
Medical Office Technology
Nursing Assistant
Practical Nursing
Radiologic Technology (Radiography)
Health Care Technology (Therapists and Technicians)
Surgical Technology
Therapeutic Massage

### South Piedmont Community College
PO Box 126
Polkton, NC 28135
(800) 766-0319  www.spcc.edu
Medical Assisting Technology
Medical Office Administration
Medical Sonography
Nursing Assistant
Phlebotomy
Practical Nursing
Radiography
Registered Nursing
Surgical Technology
Therapeutic Massage

### Southeastern Community College
PO Box 151
Whiteville, NC 28472
(910) 642-7141  www.sccnc.edu
Associate Degree Nursing (Registered Nursing)
Dental Assisting (Courses)
Health Information Technology (Courses)
Medical Assisting Technology (Courses)
Medical Laboratory Technology
Nursing Assistant
Pharmacy Technology
Phlebotomy
Practical Nursing

### Stanly Community College
141 College Drive
Albemarle, NC 28001
(704) 982-0121  www.stanly.edu
Associate Degree Nursing (Registered Nursing)
Biomedical Equipment Technology
Emergency Medical Science
Health Care Management
Medical Assisting Technology
Medical Laboratory Technology
Medical Office Technology
Nursing Assistant
Occupational Therapy Assistant
Physical Therapist Assistant
Practical Nursing (Diploma)
Respiratory Therapy
Radiography

### Surry Community College
630 S. Main Street
Dobson, NC 27017
(336) 386-8121  www.surry.edu
Associate Degree Nursing (Registered Nursing)
Medical Assisting
Medical Office Technology
Practical Nursing

### Southwestern Community College
447 College Drive
Sylva, NC 28779
(828) 586-4091  www.southwest.cc.nc.us
Associate Degree Nursing
Emergency Medical Science
Health Care Technology (Certificate)
Health Information Technology
Human Services Technology
Medical Laboratory Technology
Medical Sonography
Occupational Therapy Assistant
Phlebotomy (Certificate)
Physical Therapist Assistant
Practical Nursing (Diploma)
Radiography
Respiratory Therapy
Therapeutic Massage

### Tri-County Community College
4600 Hwy. 64 East
Murphy, NC 28906
(828) 837-6810  www.tccc.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Medical Assisting
Medical Office Technology
Practical Nursing

### Vance-Granville Community College
PO Box 917
Henderson, NC 27536
(919) 492-2061  www.vgcc.cc.nc.us
Associate Degree Nursing (Registered Nursing)
Human Services Technology
Medical Assisting
Medical Office Technology
Nursing Assistant
Pharmacy Technology (Diploma)
Practical Nursing
Radiologic Technology (Radiography)
Community Colleges

Wake Technical Community College
9101 Fayetteville Road
Raleigh, NC 27603
(919) 662-3500  www.wake.tec.nc.us
Associate Degree Nursing
Dental Assisting
Dental Hygiene
Emergency Medical Science
Medical Assisting Technology
Medical Laboratory Technology
Medical Office Administration
Nursing Assistant
Phlebotomy
Radiologic Technology (Radiography)
Surgical Technology

Wayne Community College
PO Box 8002
Goldsboro, NC 27533-8002
(919) 735-5151  www.waynecc.edu
Associate Degree Nursing (Registered Nursing)
Practical Nursing
Dental Assisting
Dental Hygiene
Geriatric Technology
Human Services Technology
Medical Assisting Technology
Medical Office Administration
Medical Transcription
Phlebotomy
Substance Abuse
Surgical Technology

Western Piedmont Community College
1001 Burkemont Avenue
Morganton, NC 28655
(828) 438-6000  www.wpcc.edu
Associate Degree Nursing
Dental Hygiene
Medical Assisting Technology
Medical Laboratory Technology
Medical Office Technology
Nursing Assistant
Therapeutic Recreation

Wilkes Community College
PO Box 120
Wilkesboro, NC 28697
(336) 838-6100  www.wilkes.cc.nc.us
Associate Degree Nursing
Dental Assisting
Human Services Technology
Medical Assisting Technology

Wilson Technical Community College
PO Box 4305
Wilson, NC 27893
(252) 291-1195  www.wilsontech.edu
Activity Coordinator Training
Associate Degree Nursing
Dialysis Technology
EKG Technician Training
Emergency Medical Science
Hospital Unit Coordinator Training
Industrial Pharmaceutical Technology
Medical Coding and Billing
Medical Terminology and Transcription
Nursing Assistant
Paramedic/EMT Training
Pharmacy Technician Training
Phlebotomy Training
Practical Nursing Education
Surgical Technology

www.nchealthcareers.com
# Hospital-Based Programs

## Degree Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>(C)</td>
<td>Certificate</td>
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<tr>
<td>(D)</td>
<td>Diploma</td>
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<tr>
<td>(AD)</td>
<td>Associate Degree</td>
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</tbody>
</table>

## Alamance Regional Medical Center
- PO Box 202
- Burlington, NC 27216
- (336) 538-7000
- www.armc.com

## Cabarrus College of Health Sciences
- 431 Copperfield Boulevard, NE
- Concord, NC 28025
- (704) 783-1616
- (704) 783-2077 fax
- www.cabarruscollege.edu
- Associate Degree Medical Assistant
- Associate Degree Nursing
- Associate Degree Occupational Therapy Assistant
- Associate Degree Surgical Technology
- Associate Degree Science

## Associate Degree in Health Services Management
- Baccalaureate Completion

## Carolina's College of Health Sciences
- PO Box 32867
- Charlotte, NC 28232
- (704) 355-5043
- www.carolinascollege.edu
- Associate Degree Medical Assistant
- Associate Degree Nursing
- Clinical Laboratory Science (C)
- Emergency Medical Science (AAS)
- Life Support-CPR
- LPN to ADN Transition (AAS Degree)
- Nurse Aide (C)
- Phlebotomy (C)
- Radiologic Technology (AD)
- Surgical Technology (D)

## Associate Degree in Nursing
- Clinical Leadership Program

## Department of VA Medical Center - Durham
- 508 Fulton Street
- Durham, NC 27705
- (919) 286-0411
- www1.va.gov/midatlantic/facilities/durham.htm

## Duke University Medical Center
- PO Box 3112
- Durham, NC 27710-3112
- (919) 684-3586
- www.mc.duke.edu
- Chaplain Residency Program
- Clinical Leadership Program
- Clinical Research Training Program
- Ophthalmic Medical Technician Program
- Pathologist Assistance Program
- Pharmacy Practice Residency
- Physician Assistant Program
- Physical Therapy Program

## Mercy School of Nursing
- 1921 Vail Ave
- Charlotte, NC 28207
- (704) 379-5840
- www.carolinashc.org
- RN Nursing (D)

## Moses Cone Health System
- 1200 N. Elm St.
- Greensboro, NC 27401
- (336) 832-7000
- www.mosescone.com
- Adjunct Chaplaincy Program
- Clinical Pastoral Education
- Chaplain Residency Program
- Radiologic Technology (C)

## NC Baptist Hospitals
- Medical Center Boulevard
- Winston-Salem, NC 27157
- (336) 716-3409
- www.wfubmc.edu
- Chaplain Residency Program

## New Hanover Regional Medical Center
- PO Box 9000
- Wilmington, NC 28402
- (910) 343-7014
- www.nhrmc.org
- Chaplain Residency Program

## Presbyterian Healthcare System
- PO Box 33549, 200 Hawthorne Lane
- Charlotte, NC 28223
- (704) 384-4141
- www.presbyterian.org
- RN Nursing (D)
- Radiologic Technology (C)
- Surgical Technology (C)

## Raleigh School of Nurse Anesthesia
- 23 Sunnybrook Road, Suite 163
- Raleigh, NC 27610
- (919) 250-9740
- http://home.earthlink.net/~rsna
- Nurse Anesthetist (C)

## Rex Healthcare
- 4420 Lake Boone Trail
- Raleigh, NC 27607
- (919) 784-3371
- www.rexhealth.com
- Chaplain Residency Program
- Clinical Pastoral Education (CPE)

## UNC Hospitals
- 101 Manning Drive
- Chapel Hill, NC 27514
- (919) 966-4021
- www.unchpastoralcare.org
- Clinical Pastoral Education (CPE)
- Radiation Therapist (C)

## WakeMed
- 3000 New Bern Avenue
- Raleigh, NC 27610
- (919) 350-6000
- www.wakemed.org

## Watts School of Nursing
- 3643 N Roxboro Road
- Durham, NC 27704
- (919) 470-7348
- www.watsschoolofnursing.org
- RN-Nursing (D)

## Wilkes Regional Medical Center
- 1370 West 'D' Street
- North Wilkesboro, NC 28659
- (336) 651-8100
- www.wfubc.edu
- Radiologic Technology (C)
Hospitals

Hospitals are good places to learn about many health care occupations. Most hospitals welcome and train volunteers, offer tours to school or civic groups, and have information on employment opportunities. Volunteering at a hospital is a good way to get first hand exposure to health care. Many hospitals also offer education loan programs for persons entering certain occupations who are willing to work for several years at the lending hospital after completing their education. Contact either the director of volunteers or the director of human resources to obtain more information about a certain hospital. These people can help you with information about employment opportunities, financial assistance programs, or volunteer opportunities.

Alamance Regional Medical Center
PO Box 202
Burlington, NC 27216
(336) 538-7000
www.armc.com

Albemarle Hospital
1144 North Road St.
Elizabeth City, NC 27906
(252) 335-0531
www.albemarlehosp.org

Alexander Community Hospital
326 Third Street, SW
Taylorsville, NC 28681
(828) 635-4000

Allegany Memorial Hospital
233 Doctors Street, PO Box 9
Sparta, NC 28675
(336) 372-5511
www.amhsparta.org

Angel Medical Center
PO Box 1309
Franklin, NC 28734
(828) 524-8411
www.angelmed.org

Annie Penn Hospital
618 S. Main St.
Reidsville, NC 27320
(336) 951-4000
www.anneipenn.org

Anson Community Hospital
500 Morwen Rd.
Wadesboro, NC 28170
(704) 694-8131

Ashe Memorial Hospital
200 Hospital Avenue
Jefferson, NC 28640
(336) 246-7101
www.ashememorial.org

Avery Health Care System
434 Hospital Drive
Linville, NC 28646
(828) 737-7004
wwwaveryhealthcare.org

Beaufort County Hospital
628 E. 12th St.
Washington, NC 27889
(252) 975-4100
www.beaufortcountyhospital.org

Behavioral Healthcare of Cape Fear Valley
3425 Malrose Road
Fayetteville, NC 28304
(910) 609-3000
www.capefearvalley.com

Bertie Memorial Hospital
PO Box 40, 1403 S. King Street
Windsor, NC 27983
(252) 794-8600
www.utherest.com

Betsy Johnson Regional Hospital
Drawer 1706
Dunn, NC 28335
(910) 892-7161
www.bjrh.org

Bladen County Hospital
501 South Poplar Street, Box 398
Elizabethtown, NC 28337
(910) 602-5100
www.bchn.org

Blowing Rock Hospital
PO Box 148
Blowing Rock, NC 28605
(828) 295-3136

Broughton Hospital
1000 S. Sterling St.
Morganton, NC 28655
(704) 433-2111
www.broughtonhospital.org

Brunswick Community Hospital
PO Box 139
Supply, NC 28462
(910) 755-8121
www.brunswickcommunityhospital.com

Brynn Marr Behavioral Healthcare System
192 Village Dr.
Jacksonville, NC 28546
(910) 577-1400

Caldwell Memorial Hospital
PO Box 1890
Lenoir, NC 28645-1890
(828) 757-5100
www.caldwell-mem.org

Cape Fear Hospital
5301 Wrightsville Avenue
Wilmington, NC 28403
(910) 452-8100
www.nhnhn.org

Cape Fear Valley Health System
PO Box 2000
Fayetteville, NC 28302-2000
(910) 609-4000
www.capefearvalley.com

Carolina HealthCare System
PO Box 32861
Charlotte, NC 28232
(704) 355-2000
www.carolinahcare.org
 Hospitals

Carolinas Medical Center - Mercy
2001 Vail Ave.
Charlotte, NC 28207
(704) 379-5000
www.carolinashealthcare.org

Carolinas Medical Center - Pineville
10628 Park Road
Charlotte, NC 28210
(704) 543-2000
www.carolinashealthcare.org

Carteret County General Hospital
PO Box 1619
Morehead City, NC 28557
(252) 808-6000
www.ccgh.org

Catawba Valley Medical Center
810 Fairgrove Church Rd., SE
Hickory, NC 28602
(828) 326-3000
www.catawbavalleymc.org

Center Point Human Services
725 Highland Avenue
Winston-Salem, NC 27101
(336) 725-7777
www.cphs.org

Central Carolina Hospital
1135 Carthage Street
Sanford, NC 27330
(919) 774-2100
www.centralcarolinahosp.com

Central Prison Hospital
1300 Western Blvd.
Raleigh, NC 27606-2148
(919) 733-0800

Charles A. Cannon Memorial Hospital
PO Box 787
Linville, NC 28646
(828) 737-7000
www.carolinas.org/facilities/hospitals/cannon

Charlotte Institute of Rehabilitation
1100 Blythe Blvd.
Charlotte, NC 28203
(704) 355-4300
www.carolinas.org/services/rehab/CIR/index.cfm

Chatham Hospital
PO Box 649
Siler City, NC 27344
(919) 663-2113
www.chathamhospital.org

Cherokee Hospital
Caller Box C268, Hospital Road
Cherokee, NC 28719
(828) 497-9163

Cherry Hospital
201 Stevens Mill Road
Goldsboro, NC 27530
(919) 731-3200
www.dhhs.state.nc.us/mhddssas/cherry

Chowan Hospital
PO Box 629
Edenton, NC 27932
(252) 482-8451
www.uhsseast.com

Cleveland Regional Medical Center
201 E. Grover Street
Shelby, NC 28150
(704) 487-3000
www.clevelandregional.org

Coastal Plain Hospital & Counseling Center
2301 Medpark Dr.
Rocky Mount, NC 27804
(252) 443-9500
www.nhcs.org/sections/hospitals/h_coastal_plain.htm

Columbus County Hospital
500 Jefferson St.
Whiteville, NC 28472
(910) 642-8011
www.ccchospital.com

Community Care Partners
68 Swerett Creek Rd.
Asheville, NC 28803
(828) 277-4800
www.carepartners.org

Craven Regional Medical Center
PO Box 12157
New Bern, NC 28561
(252) 633-8111
www.cravenhealthcare.org

Crawley Memorial Hospital
PO Box 996
Boiling Springs, NC 28017
(704) 873-0281
www.carolinashealthcare.org

Davie County Hospital
PO Box 1209
Mocksville, NC 27028
(336) 751-8600

Department of VA Medical Center - Asheville
1100 Tunnel Road
Asheville, NC 28805
(828) 298-7911
www1.va.gov/midatlantic/facilities/asheville.htm

Department of VA Medical Center - Durham
508 Fulton Street
Durham, NC 27705
(919) 286-0411
www1.va.gov/midatlantic/facilities/durham.htm

Department of VA Medical Center - Fayetteville
2300 Ramsey Street
Fayetteville, NC 28301
(910) 488-2120
www1.va.gov/midatlantic/facilities/fayetteville.htm

Department of VA Medical Center - Salisbury
1601 Brenner Avenue
Salisbury, NC 28144
(704) 638-9000
www.appc1.va.gov/directory/guide/facility.asp?ID=117
<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Address</th>
<th>City, State</th>
<th>Phone Number</th>
<th>Website</th>
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<tbody>
<tr>
<td>District Memorial Hospital of Southwestern North Carolina</td>
<td>415 Whitaker Lane, Andrews, NC 28901</td>
<td>Andrews, NC</td>
<td>(828) 321-1200</td>
<td><a href="http://www.murphymedical.org">www.murphymedical.org</a></td>
</tr>
<tr>
<td>Dorothea Dix Hospital</td>
<td>820 S. Boylan Avenue, Raleigh, NC 27603</td>
<td>Raleigh, NC</td>
<td>(919) 733-5540</td>
<td><a href="http://www.dhhs.state.nc.us/mhddas/DIX/">www.dhhs.state.nc.us/mhddas/DIX/</a></td>
</tr>
<tr>
<td>Duke University Hospital</td>
<td>Box 3708, Durham, NC 27710</td>
<td>Durham, NC</td>
<td>(919) 684-8111</td>
<td><a href="http://www.mc.duke.edu">www.mc.duke.edu</a></td>
</tr>
<tr>
<td>Duplin General Hospital</td>
<td>PO Box 278, Kenansville, NC 28349</td>
<td>Kenansville, NC</td>
<td>(910) 296-2653</td>
<td><a href="http://www.dgh.org">www.dgh.org</a></td>
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<tr>
<td>Durham Regional Hospital</td>
<td>3643 N. Roxboro Rd., Durham, NC 27704-2763</td>
<td>Durham, NC</td>
<td>(919) 470-4000</td>
<td><a href="http://www.durhamregional.org">www.durhamregional.org</a></td>
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<tr>
<td>Fellowship Hall</td>
<td>PO Box 13890, Greensboro, NC 27415</td>
<td>Greensboro, NC</td>
<td>(336) 621-3381</td>
<td><a href="http://www.fellowshiphall.com">www.fellowshiphall.com</a></td>
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<tr>
<td>FirstHealth Montgomery Memorial Hospital</td>
<td>PO Box 486, Troy, NY 12182</td>
<td>Troy, NY</td>
<td>(910) 572-1301</td>
<td><a href="http://www.firsthealth.org">www.firsthealth.org</a></td>
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<tr>
<td>FirstHealth Moore Regional Hospital</td>
<td>PO Box 3000, Pinehurst, NC 28374</td>
<td>Pinehurst, NC</td>
<td>(910) 215-1350</td>
<td><a href="http://www.firsthealth.org">www.firsthealth.org</a></td>
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<tr>
<td>First Health Richmond Memorial Hospital</td>
<td>925 Long Dr., Richmond, NC 23722</td>
<td>Richmond, VA</td>
<td>(804) 204-1000</td>
<td><a href="http://www.firsthealth.org/services/richmond_memorial.htm">www.firsthealth.org/services/richmond_memorial.htm</a></td>
</tr>
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<td>Forsyth Medical Center</td>
<td>3333 Silas Creek Parkway, Winston-Salem, NC 27103</td>
<td>Winston-Salem, NC</td>
<td>(336) 718-7000</td>
<td><a href="http://www.novanthealth.org">www.novanthealth.org</a></td>
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<td>Franklin Regional Medical Center</td>
<td>PO Box 609, Louisburg, NC 27549</td>
<td>Louisburg, NC</td>
<td>(919) 496-5131</td>
<td><a href="http://www.hma-corp.com/nc1.html">www.hma-corp.com/nc1.html</a></td>
</tr>
<tr>
<td>Frye Regional Medical Center</td>
<td>420 N. Center St., Hickory, NC 28601</td>
<td>Hickory, NC</td>
<td>(828) 322-6070</td>
<td><a href="http://www.fryemedcitr.com">www.fryemedcitr.com</a></td>
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<td>Gaston Memorial Hospital</td>
<td>2525 Court Drive, Gastonia, NC 28053</td>
<td>Gastonia, NC</td>
<td>(704) 834-2000</td>
<td><a href="http://www.gastonhealthcare.org">www.gastonhealthcare.org</a></td>
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<td>Good Hope Hospital</td>
<td>410 Denim Drive, Erwin, NC 28339</td>
<td>Erwin, NC</td>
<td>(910) 897-6151</td>
<td><a href="http://www.goodhopehospital.org">www.goodhopehospital.org</a></td>
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<tr>
<td>Grace Hospital</td>
<td>2201 S. Sterling Street, Morganton, NC 28655</td>
<td>Morganton, NC</td>
<td>(828) 580-5000</td>
<td><a href="http://www.gracecs.org">www.gracecs.org</a></td>
</tr>
<tr>
<td>Granville Medical Center</td>
<td>PO Box 947, Oxford, NC 27565</td>
<td>Oxford, NC</td>
<td>(919) 690-3000</td>
<td><a href="http://www.granvillenewhospital.org">www.granvillenewhospital.org</a></td>
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<tr>
<td>Halifax Regional Medical Center</td>
<td>PO Box 1089, Roanoke Rapids, NC 27870</td>
<td>Roanoke Rapids, NC</td>
<td>(252) 535-8011</td>
<td><a href="http://www.halifaxmedicalcenter.org">www.halifaxmedicalcenter.org</a></td>
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<tr>
<td>Harris Regional Hospital</td>
<td>68 Hospital Rd., Sylva, NC 28779</td>
<td>Sylva, NC</td>
<td>(828) 586-7000</td>
<td><a href="http://www.westcare.org">www.westcare.org</a></td>
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<tr>
<td>Heritage Hospital</td>
<td>111 Hospital Dr., Tarboro, NC 27886</td>
<td>Tarboro, NC</td>
<td>(252) 641-7700</td>
<td><a href="http://www.haymed.org">www.haymed.org</a></td>
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<tr>
<td>High Point Regional Health System</td>
<td>P.O. Box HP-5, High Point, NC 27261</td>
<td>High Point, NC</td>
<td>(336) 878-6029</td>
<td><a href="http://www.highpointregional.org">www.highpointregional.org</a></td>
</tr>
<tr>
<td>Highlands-Cashiers Hospital</td>
<td>PO Drawer 190, Highlands, NC 28741</td>
<td>Highlands, NC</td>
<td>(704) 526-1200</td>
<td><a href="http://www.hchospital.org">www.hchospital.org</a></td>
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<tr>
<td>Highsmith-Rainey Memorial Hospital</td>
<td>150 Robeson Street, Fayetteville, NC 28301</td>
<td>Fayetteville, NC</td>
<td>(910) 609-1000</td>
<td><a href="http://www.capefearvalley.com">www.capefearvalley.com</a></td>
</tr>
<tr>
<td>Holly Hill Hospital</td>
<td>3019 Falls Rd., Raleigh, NC 27610</td>
<td>Raleigh, NC</td>
<td>(919) 250-7000</td>
<td><a href="http://www.hollyhillhospital.com">www.hollyhillhospital.com</a></td>
</tr>
<tr>
<td>Hoots Memorial Hospital</td>
<td>PO Box 68, Yadkinville, NC 27055</td>
<td>Yadkinville, NC</td>
<td>(336) 679-2041</td>
<td><a href="http://www.wfumc.edu/hoots">www.wfumc.edu/hoots</a></td>
</tr>
<tr>
<td>Hugh Chatham Memorial Hospital</td>
<td>PO Box 560, Elkin, NC 28621</td>
<td>Elkin, NC</td>
<td>(336) 527-7000</td>
<td><a href="http://www.hughchatham.org">www.hughchatham.org</a></td>
</tr>
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</table>
Iredell Memorial Hospital’s Health Care System
PO Box 1828
Statesville, NC 28687
(704) 873-5561
www.iredellmemorial.org

J. Arthur Dosher Memorial Hospital
924 Howe Street
Southport, NC 28461
(910) 457-3800
www.dosher.org

James A. Taylor Student Health Service
CB#7470, UNC – CH
Chapel Hill, NC 27599-7470
(919) 966-2281
http://studenthealth.unc.edu

John Umstead Hospital
1003 12th St.
Butner, NC 27509-1626
(919) 575-7211
www.dhhs.state.nc.us/mhddsas/Umstead.htm

Johnston Memorial Hospital
PO Box 1376
Smithfield, NC 27577
(919) 934-8171
www.johnstonmemorial.org

Julian F. Keith Alcohol and Drug Abuse Treatment Center
201 Tabernacle Road
Black Mountain, NC 28711
(828) 669-3400
(828) 669-3451
www.jfkadatc.net

Kindred Hospital-Greensboro
2401 Southside Blvd
Greensboro, NC 27406
(336) 271-2800
www.kindredhealthcare.org

Kings Mountain Hospital, Inc.
706 W. King Street
Kings Mountain, NC 28086
(704) 739-3601
www.carolinanurses.org/facilities/hospitals/kingsmtn/index.cfm

Lake Norman Regional Medical Center
PO Box 3250
Mooresville, NC 28117
(704) 660-4000
www.lnrmc.com

Lenoir Memorial Hospital
100 Airport Road
Kinston, NC 28501
(252) 922-7000
www.lenormemorial.org

Lexington Memorial Hospital
250 Hospital Drive
Lexington, NC 27293-1817
(336) 248-5161
www.lexingtonmemorial.com

Lincoln Medical Center
PO Box 677
Lincolnton, NC 28093
(704) 735-3071
www.lincolmnedical.org

Margaret R. Pardee Memorial Hospital
800 North Justice Street
Hendersonville, NC 28791-3525
(704) 696-1000
www.pardeehospital.org

Maria Parham Medical Center
556 Ruin Creek Rd.
Henderson, NC 27536
(252) 438-4143
www.mphosp.org

Martin General Hospital
310 South McCaskey Road
Williamston, NC 27892
(252) 809-6313
www.martingeneral.com

McCain Correctional Hospital
855 Old Highway 211
Raeford, NC 28376
(910) 944-2351
www.doc.state.nc.us/DOP/prisons/mccain.htm

McDowell Hospital, The
PO Box 730, 430 Rankin Drive
Marion, NC 28752
(828) 659-5000
www.mcdhospital.org

Medical Park Hospital
1950 S. Hawthorne Rd.
Winston-Salem, NC 27103
(336) 718-0600
www.novanthealth.org

Mission Hospitals
509 Biltmore Ave.
Asheville, NC 28801-4690
(828) 213-1111
www.missionhospitals.org

Morehead Memorial Hospital
117 E. Kings Highway
Eden, NC 27288
(336) 623-9711
www.morehead.org

Moses Cone Behavioral Health Center
700 Walter Reed Rd
Greensboro, NC 27403
(336) 852-4821
www.mosescone.com

Moses Cone Health System
1200 N. Elm Street
Greensboro, NC 27401-1020
(336) 476-6737
www.mosescone.com

Southwestern Health System/Murphy Medical Center
4130 U.S. Hwy 64 East
Murphy, NC 28906
(704) 837-8161
www.murphymedical.org

Nash Health Care Systems
2460 Curtis Ellis Dr.
Raleigh, NC 27604
(252) 443-8000
www.nhcsc.org

Naval Hospital - Camp Lejeune
100 Brewster Blvd.
Camp Lejeune, NC 28547
(910) 450-4300
lej-intra.med.navy.mil

Naval Hospital - Cherry Point
PSC Box 8023
Cherry Point, NC 28533
(252) 466-0266
cpoint-www.med.navy.mil/fd
Appendix B

Hospitals

NC Baptist Hospitals
Medical Center Blvd.
Winston-Salem, NC 27157
(336) 716-2011
www.wfubmc.edu

New Hanover Regional Medical Center
2220 S. 17th Street
Wilmington, NC 28402-9000
(910) 343-7000
www.nhnh.org

North Carolina Specialty Hospital
1110 W. Main Street
Durham, NC 27701
(919) 682-9341

Northeast Medical Center
920 Church Street, N.
Concord, NC 28025
(704) 783-1485
www.northeastmedical.org

Northern Hospital of Surry County
PO Box 1101
Mount Airy, NC 27030
(336) 719-7000
www.northernhospital.org

Onslow Memorial Hospital
PO Box 139, 317 Western Blvd.
Jacksonville, NC 28546
(910) 577-2345
www.onslowmemorial.org

Our Community Hospital
PO Box 405
Scotland Neck, NC 27874
(252) 826-4144

Outer Banks Hospital, The
PO Box 849
Nags Head, NC 27959
(252) 449-4500
www.theouterbankshospital.com

Park Ridge Hospital
PO Box 1589
Fletcher, NC 28732
(828) 684-8501
www.parkridgehospital.org

Pender Memorial Hospital
507 Fremont St.
Burgaw, NC 28425
(910) 599-2121
www.pendermemorialhospital.com

Person Memorial Hospital
615 Ridge Rd.
Roxboro, NC 27573
(336) 599-2121
www.personhospital.com

Pitt County Memorial Hospital
PO Box 6028
Greenville, NC 27835
(252) 847-4100
www.pcph.org

Presbyterian Health Care
200 Hawthorne Lane
Charlotte, NC 28204
(704) 384-4000
www.presbyterian.org

Presbyterian Hospital Matthews
1500 Matthews Township Pkwy.
Matthews, NC 28105
(704) 384-6500
www.presbyterian.org

Presbyterian Orthopaedic Hospital
1901 Randolph Rd.
Charlotte, NC 28207
(704) 375-6792
www.presbyterian.org

Pungo District Hospital Corporation
202 E. Water Street
Belhaven, NC 27810
(252) 943-2111

Raleigh Community Hospital
PO Box 28280
Raleigh, NC 27611
(919) 554-3000
www.raleighcommunity.com

Randolph Hospital
PO Box 1048
Asheboro, NC 27204
(336) 825-5151
www.randolphhospital.org

Rex Healthcare
4420 Lake Boone Trail
Raleigh, NC 27607
(919) 783-3100
www.rexhealth.com

Roanoke-Chowan Hospital
PO Box 1385
Ahoskie, NC 27910
(252) 209-3000
www.uhseast.com

Rowan Regional Medical Center
612 Mocksville Ave.
Salisbury, NC 28144
(704) 210-5000
www.rowan.org

Rutherford Hospital, Inc.
288 S. Ridgecrest Ave.
Rutherfordton, NC 28139
(828) 286-5000
www.rutherfordhosp.org

Sampson Regional Medical Center, Inc.
PO Drawer 260
Clinton, NC 28329
(910) 592-8511
www.sampsonrmc.org

Sandhills Regional Medical Center
PO Box 1109
Hamlet, NC 28345
(910) 205-8118
www.sandhills.org

Scotland Memorial Hospital
500 Lauchwood Drive
Laurinburg, NC 28352
(910) 291-7000
www.scotlandhealth.org

Southeastern Regional Medical Center
PO Box 1408
Lumberton, NC 28359
(910) 671-5000
www.srmc.org
North Carolina Health Careers '04-'06
Professional Associations

CLINICAL LABORATORY SCIENCE

American Association of Blood Banks
8101 Glenbrook Road
Bethesda, MD 20814-2749
(301) 907-8977  (301) 907-8995 fax
www.aabb.org

American Board of Cardiovascular Perfusion
207 N. 25th Avenue
Hattiesburg, MS 39401
(601) 582-2227  (601) 582-2271 fax
www.abcp.org

American Society for Clinical Laboratory Science
6701 Democracy Boulevard, Suite 300
Bethesda, MD 20817
(301) 657-2768  (301) 657-2909 fax
www.ascls.org

American Board of Cardiovascular Perfusion
207 N. 25th Avenue
Hattiesburg, MS 39401
(601) 582-2227  (601) 582-2271 fax
www.abcp.org

American Society for Clinical Laboratory Science
6701 Democracy Boulevard, Suite 300
Bethesda, MD 20817
(301) 657-2768  (301) 657-2909 fax
www.ascls.org

American Society for Cytotechnology
1500 Sunday Dr., Suite 102
Raleigh, NC 27607
(919) 787-5181  (919) 787-4916 fax
www.asct.com

American Society of Phlebotomy Technicians
PO Box 1831
Hickory, NC 28603
(828) 294-0078  (828) 327-2969 fax
www.aspt.org

Clinical Laboratory Management Association
999 Old Eagle School Road, Suite 815
Wayne, PA 19087-1704
(610) 995-9580
www.clma.org

National Phlebotomy Association
1901 Brightseat Road
Landover, MD 20785
(301) 386-4200  (301) 386-4203 fax
www.nationalphlebotomy.org

National Society for Histotechnology
4201 Northview Drive, Suite 502
Bowie, MD 20716-2604
(301) 262-6221  (301) 262-9188 fax
www.nsh.org

NC Association of Blood Bankers
P.O. Box 4574
Greensboro, NC 27404
www.ncabb.org

NC Society for American Medical Technologists
Northern Hospital of Surry County, 830 Rockford Street
Mt. Airy, NC 27030
(336) 719-7124  (336) 719-7457 fax
http://www.amtf.com/site/epage/11239_315.htm

NC Society for Clinical Laboratory Science
www.ascls.org

COMPLEMENTARY MEDICINE

Accreditation Commission for Acupuncture and Oriental Medicine
Maryland Trade Center 3
7501 Greenway Center Drive, Suite 820
Greenbelt, MD 20770
(301) 313-0855  (301) 313-0912 fax
www.acamom.org

American Academy of Medical Acupuncture
4929 Wilshire Boulevard, Suite 428
Los Angeles, CA 90010
(800) 521-2262  (323) 237-0959 fax
www.medicalacupuncture.org

American Massage Therapy Association
820 Davis Street
Evanston, IL 60201
(847) 864-0123
(847) 864-1178
www.amtamassage.org

Associated Bodywork and Massage Professionals
1271 Sugarbush Drive
Everage, CO 80439
(800) 458-2267
(800) 667-8260 fax
www.abmp.com

American Association of Oriental Medicine
5530 Wisconsin Avenue, #1210
Chevy Chase, MD 20815
(301) 941-1063  (301) 986-9313 fax
www.aom.org

National Certification Commission for Acupuncture and Oriental Medicine
11 Canal Center Plaza, Suite 300
Alexandria, VA 22314
(703) 548-9004
(703) 548-9079
www.nccaom.org

North Carolina Association of Acupuncture and Oriental Medicine
www.ncaaom.org

North Carolina Board of Massage and Bodywork Therapy
PO Box 2539
Raleigh, NC 27602
(919) 546-0056
(919) 833-1059 fax
www.bmbt.org

DENTISTRY

American Academy of Pediatric Dentistry
211 E. Chicago Ave., Suite 700
Chicago, IL 60611-2626
(312) 337-2169  (312) 337-6329 fax
www.aapd.org

American Dental Education Association
1625 Massachusetts Ave., NW
Washington, DC 20036
(202) 667-9433  (202) 667-0642 fax
www.adea.org
Professional Associations

American College of Prosthodontics
211 East Chicago Ave., Suite 1000
Chicago, IL 60611
(312) 573-1260 (312) 573-1257 fax
www.prosthodontics.org

American Dental Assistants Association
35 E Wacker Drive, Suite 1730
Chicago, IL 60601
(312) 541-1550 (312) 541-1496 fax
www.dentalassistant.org

American Dental Association
211 East Chicago Avenue
Chicago, IL 60611
(312) 440-2500 (312) 440-2800 fax
www.ada.org

American Dental Hygienists' Association
444 North Michigan, Suite 3400
Chicago, IL 60611
(312) 440-8900 (312) 440-6780 fax
www.adha.org

American Society of Dentist Anesthesiologists
723 North Beers Street
Holmdel, NJ 07733
www.asdan.org

Hispanic Dental Association
188 W. Randolph Street, Suite 415
Chicago, IL 60601
(300) 852-7921 (312) 577-0052 fax
www.hdassoc.org

International & American Association for Dental Research
1619 Duke Street
Alexandria, VA 22314-3406
(703) 548-0066 (703) 548-1883 fax
www.dentalresearch.org

NC Dental Society
PO Box 4099
Cary, NC 27519
(800) 662-8754 (919) 677-1397 fax
www.ncdental.org

NC Dental Hygiene Association
PO Box 40787
Raleigh, NC 27629-0787
(919) 850-4322 www.ncdhha.org

NC State Board of Dental Examiners
15100 Weston Parkway, Suite 101
Cary, NC 27513
(919) 678-8223 (919) 678-8472 fax
www.ncdentalboard.org

Dietetics and Nutrition

Aerobics and Fitness Association of America
15250 Ventura Blvd., Suite 200
Sherman Oaks, CA 91403-3297
(877) 968-7263 www.afaaz.com

American Board of Physician Nutrition Specialists
UA-Birmingham, Dept of Nutrition Sciences
1675 University Blvd/WEBB 439
Birmingham, AL 35294
(205) 996-4101 (205) 934-7050 fax
www.ipnec.org/abpns

American College of Nutrition
300 S. Duncan Ave, Suite 225
Clearwater, FL 3755
(727) 446-6086 (727) 446-6202 fax
www.am-col-nutr.org

American Dietetic Association
120 South Riverside Plaza, Suite 2000
Chicago, IL 60606-6995
(800) 877-1600 (312) 899-0008 fax
www.eatright.org

American Society for Clinical Nutrition
9650 Rockville Pike
Bethesda, MD 20814-7110
(301) 530-7110 (301) 571-1863 fax
www.faseb.org/ascn

American Society for Nutritional Services
9650 Rockville Pike
Bethesda, MD 20814-3990
(301) 634-7985 (301) 634-7982 fax
www.nutrition.org

NC Board of Dietetics & Nutrition
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
(919) 861-5580 www.ncbdn.org

NC Dietetic Association, Inc.
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
(919) 861-4529 (919) 787-4916 fax
www.eatrightnc.org

HEALTH INFORMATION & COMMUNICATION

American Health Information Management Association
233 N. Michigan Ave, Suite 2150
Chicago, IL 60601
(312) 233-1100 (312) 233-1090 fax
www.ahima.org

American Medical Writers Association
40 West Gude Dr., Suite 101
Rockville, MD 20850-1192
(301) 294-5303 (301) 294-9006 fax
www.amwa.org

Association of Medical Illustrators
5475 Mark Dabbling Blvd., Suite 108
Colorado Springs, CO 80918
(719) 598-8622 (719) 599-3075 fax
www.medical-illustrators.org
Professional Associations

BioCommunications Association, Inc.
220 Southwind Lane
Hillsborough, NC 27278
(919) 245-0906
www.bca.org

Health and Science Communications Association
39 Wedgewood Drive, Suite A
Jewett City, CT 06751-2428
(860) 376-5915 (860) 376-6621 fax
www.hesca.org

Healthcare Information and Management Systems Society
230 East Ohio, Suite 500
Chicago, IL 60611-3269
(312) 664-4467 (312) 664-6143 fax
www.himss.org

National Association of Medical Communicators
325 West Huron, Suite 711
Chicago, IL 60610
(312) 751-1370 (312) 751-1372 fax
www.ibiblio.org/namc

National Association of Science Writers
PO Box 890
Hedgesville, WV 25427
(304) 754-5077 (304) 754-5076 fax
www.nasw.org

NC Health Information Management Association
165 Lady Bird Circle
Stoneville, NC 27048
(336) 832-7359 (336) 832-7271 fax
www.nchima.org

Medical Group Management Association
104 Inverness Terrace East
Englewood, CO 80112-5306
(877) ASK-MGMA (303) 643-4439 fax
www.mgma.com

National Association of Health Services Executives
8630 Fenton Street, Suite 126
Silver Spring, MD 20910
(202) 628-3953 (301) 588-0011 fax
www.nahse.org

NC Medical Group Managers
P.O. Box 34155
Charlotte, NC 28234
(800) 753-6462 (704) 365-0565 (704) 365-3678 fax
www.ncmgm.org

NC State Board of Examiners for Nursing Home Administrators
3733 National Drive, Suite 228
Raleigh, NC 27612
(919) 571-4164 (919) 571-4166 fax
www.ncbena.org

Medical Office Personnel

American Association for Medical Transcription
100 Sycamore Ave
Modesto, CA 95354
(800) 982-2182 (209) 527-9633 fax
www.aamt.org

Medicine

American Academy of Asthma, Allergy & Immunology
611 E. Wells Street
Milwaukee, WI 53202
(800) 822-2762
www.aaaai.org

American Academy of Dermatology
P.O. Box 4014
Schaumburg, IL 60168
(847) 330-0230 (847) 330-0050
www.aad.org

American Academy of Family Physicians
P.O. Box 11210
Shawnee Mission, KS 66207
(800) 274-2237
www.aafp.org

American Academy of Neurology
1080 Montreal Avenue
St. Paul, MN 55116
(651) 695-1940
www.aan.com

www.nchealthcareers.com
**American Academy of Orthopaedic Surgeons**  
6300 North River Road  
Rosemont, IL 60018-4262  
(800) 346-AAOS  
(847) 823-8125 fax  
www.aaos.org

**American Academy of Otolaryngology - Head and Neck Surgery**  
One Prince Street  
Alexandria, VA 22314-3357  
(703) 836-4444  
(703) 683-5100 fax  
www.entnet.org

**American Academy of Pediatrics**  
141 Northwest Point Blvd  
Elk Grove Village, IL 60007-1098  
(847) 434-4000  
(847) 434-8000 fax  
www.aap.org

**American Academy of Physician Assistants**  
950 N. Washington Street  
Alexandria, VA 22314-1552  
(703) 636-2272  
(703) 684-1924 fax  
www.aapa.org

**Carolina Chapter of the American Association of Clinical Endocrinologists**  
PO Box 27167  
Raleigh, NC 27611  
(919) 833-3836

**American Association of Colleges of Osteopathic Medicine**  
5550 Friendship Blvd., Suite 310  
Chevy Chase, MD 20815-7231  
(301) 968-4100  
(301) 968-4101 fax  
www.aacom.org

**American Association of Colleges of Podiatric Medicine**  
15850 Crabbs Branch Way, Suite 320  
Rockville, MD 20855  
(800) 922-9266  
(301) 948-0957  
(301) 948-1928 fax  
www.aacpm.org

**American Association of Immunologists**  
9650 Rockville Pike  
Bethesda, MD 20814-3994  
(301) 634-7178  
(301) 634-7887 fax  
www.aai.org

**American Association of Medical Assistants**  
20 N. Wacker Drive, Suite 1575  
Chicago, IL 60606  
(800) 228-2262  
www.aama-ntl.org

**American Association of Naturopathic Physicians**  
3201 New Mexico Avenue, NW Suite 350  
Washington, DC 20016  
(866) 538-2267  
(202) 274-1992 fax  
www.naturopathic.org

**American Association of Neurological Surgeons**  
5550 Meadowbrook Drive  
Rolling Meadows, IL 60008  
(847) 378-0500  
(847) 378-0600 fax  
www.aans.org

**American Board of Internal Medicine**  
510 Walnut Street, Suite 1700  
Philadelphia, PA 19106-3699  
(800) 441-2246  
www.abim.org

**American Board of Pediatrics**  
111 Silver Cedar Court  
Chapel Hill, NC 27514  
(919) 929-0461  
(919) 929-9255 fax  
www.abp.org

**American Board of Podiatry Surgery**  
445 Fillmore Street  
San Francisco, CA 94117  
(415) 553-7800  
(415) 553-7801 fax  
www.abps.org

**American Chiropractic Association**  
1701 Clarendon Blvd.  
Arlington, VA 22209  
(800) 986-4636  
(703) 243-2593 fax  
www.acatoday.com

**American College of Cardiology**  
Heart House, 9111 Old Georgetown Road  
Bethesda, MD 20814-1699  
(800) 255-4636  
(301) 897-9745 fax  
www.acc.org

**American College of Emergency Physicians**  
PO Box 619911  
Dallas, TX 75261-9911  
(800) 798-1822  
(972) 580-2816 fax  
www.acep.org

**American College of Obstetricians and Gynecologists**  
409 12th Street, SW, PO Box 96920  
Washington, DC 20090-6920  
(202) 638-5577  
www.acog.org

**American College of Physicians**  
190 Independence Mall West  
Philadelphia, PA 19106-1572  
(800) 523-1546 ext. 2600  
www.acponline.org

**American College of Preventive Medicine**  
1307 New York Avenue, NW, Suite 200  
Washington, DC 20005  
(202) 466-2044  
(202) 466-2662 fax  
www.acpvm.org

**American College of Surgeons**  
633 North Saint Clair Street  
Chicago, IL 60611-3211  
(800) 621-4111  
(312) 202-5001 fax  
www.facs.org

**American Medical Association**  
515 N. State Street  
Chicago, IL 60610  
(312) 464-5000  
www.ama-assn.org

**American Medical Technologists**  
710 Higgins Road  
Park Ridge, IL 60068  
(847) 823-5169  
(847) 823-0458 fax  
www.amt1.com
American Medical Women's Association
801 N. Fairfax Street, Suite 400
Alexandria, VA 22314
(703) 838-0500 (703) 549-3864 fax
www.amwa-doc.org

American Osteopathic Association
142 E. Ontario Street
Chicago, IL 60611-2864
(800) 621-1773 (312) 202-8224 fax
www.osteopathic.org

American Podiatric Medical Association
9312 Old Georgetown Road
Bethesda, MD 20814-1698
(301) 571-9200 (301) 530-2752 fax
www.apma.org

American Society for Reproductive Medicine
1209 Montgomery Highway
Birmingham, AL 35216-2809
(205) 978-5000 (205) 978-5005 fax
www.asrm.com

American Society of Alternative Therapies
PO Box 703
Rockport, MA 01966
(978) 281-4400
www.asat.org

American Society of Anesthesiologists
520 N. Northwest Highway
Park Ridge, IL 60068-2573
(847) 315-6450 (847) 315-6455 fax
www.asahq.org

American Society of Clinical Oncology
1900 Duke St., Suite 200
Alexandria, VA 22314
(703) 299-1050 (703) 299-1044 fax
www.asco.org

American Society of Clinical Pathologists
2100 West Harrison Street
Chicago, IL 60612
(312) 738-1336
www.ascp.org

American Society of Cytopathology
400 W. 9th Street, Suite 201
Wilmington, DE 19801
(302) 429-8802 (302) 429-8807 fax
www.cytopathology.org

American Society of Hematology
1900 M Street NW, Suite 200
Washington, DC 20036
(202) 776-0544 (202) 776-0545 fax
www.hematology.org

American Society of Nuclear Cardiology
9111 Old Georgetown Road
Bethesda, MD 20814
(301) 493-2360 (301) 493-2376 fax
www.asnc.org

American Society of Plastic & Reconstructive Surgery
444 East Algonquin Road
Arlington Heights, IL 60005
(888)-4-PLASTIC
www.plasticsurgery.org

American Thoracic Society
61 Broadway
New York, NY 10006
(212) 315-6440 (212) 315-6455 fax
www.thoracic.org

American Urological Association, Inc.
1000 Corporate Blvd.
Linthicum, MD 21090
1-866-RING-AUA (410) 689-3939 fax
www.urolgyhealth.org

Association for Integrative Medicine
Box 1
Mont Claire, PA 19453
(610) 933-8145
www.integrativemedicine.org

Association of American Indian Physicians
1225 Sovereign Row, Suite 103
Oklahoma City, OK 73108
(405) 946-7072 (405) 946-7651 fax
www.aaiip.com

Association of American Medical Colleges
2450 N. Street, NW
Washington, DC 20037-1126
(202) 828-0400 (202) 828-1125 fax
www.aamc.org

Association of Black Cardiologists, Inc.
6849-B2 Peachtree Dunwoody Road, NE
Atlanta, GA 30328
(678) 302-4222 (678) 302-4223 fax
www.abcardio.org

Association of Indian Pathologists in North America
www.aipna.org

Association of Native American Medical Students
1225 Sovereign Row, Suite 103
Oklahoma City, OK 73108
(405) 946-7072 (405) 946-7651 fax
www.aaiip.com

Association of Physician Assistant Programs
950 N. Washington St.
Alexandria, VA 22314
(703) 383-2272 (703) 684-1924 fax
www.aapa.org

Association of Reproductive Health Professionals
2401 Pennsylvania Ave., NW, Suite 350
Washington, DC 20037
(202) 466-3825 (202) 466-3826 fax
www.arhp.org

Board of Podiatry Examiners of the State of North Carolina
1500 Sunday Drive #102
Raleigh, NC 27607
(919) 861-5583 (919) 787-4916 fax
www.ncbpe.org

College of American Pathologists
325 Waukegan Road
Northfield, IL 60093
(800) 323-4040
www.cap.org

www.nchealthcareers.com
Professional Associations

Infectious Diseases Society of America
66 Canal Center Plaza, Suite 600
Alexandria, VA 22314
www.idsociety.org

International Chiropractic Pediatric Association
327 N. Middletown Rd
Media, PA 19063
(610) 565-2360
www.icpa4kids.com

International Chiropractors Association
1110 N. Glebe Rd, Suite 1000
Arlington, VA 22201
(800) 423-4690 (703) 538-5023 fax
www.chiropractic.org

Midwest Association for Toxicology & Therapeutic Drug Monitoring
(608) 263-7031
www.midwesttox.org

National Arab American Medical Association
801 South Adams Road, Suite 208
Birmingham, MI 48009
(248) 646-3661 (248) 646-0617 fax
www.naama.com

National Dental Association
3517 16th Street NW
Washington, DC 20010
(202) 588-1697 (202) 588-1244 fax
www.ndonline.org

National Association for Chiropractic Medicine
15427 Baybrook Drive
Houston, TX 77062
(281) 280-8262
www.chiromed.org

National Association of Medical Examiners
430 Pryor Street SW
Atlanta, GA 30312
(404) 730-4781 (404) 730-4420 fax
www.thename.org

National Association of Physicians for the Environment
PO Box 250
Catlett, VA 22019
(540) 788-3274 (540) 788-9301 fax
www.easi.org/napa

National Association of Residents & Interns
Hillsboro Executive Center North 350 Fairway Drive, Suite 200
Deerfield Beach, FL 33441-1834
(800) 221-2168 (954) 571-8582 fax
www.nari-assn.com

National Board of Chiropractic Examiners
901 54th Avenue
Greeley, CO 80634
(970) 356-9100
www.nbce.org

National Medical Association
1012 10th Street, NW
Washington, DC 20001
(202) 347-1895 (202) 842-3293 fax
www.nmanet.org

National Hispanic Medical Association
1411 K Street, NW, Suite 200
Washington, DC 20005
(202) 628-5895
www.nhmamd.org

National MedPeds Residents' Association
www.medpeds.org

NC Academy of Family Physicians
PO Box 10278
Raleigh, NC 27605
(800) 872-9482 (NC)
(919) 833-2110 (919) 833-1801 fax
www.ncafpm.org

NC Academy of Physician Assistants
3209 Guess Rd., Suite 105
Durham, NC 27705
(800) 352-2271 (919) 479-9726 fax
www.ncapa.org

NC Board of Chiropractic Examiners
174 Church Street
Concord, NC 28025
(704) 793-1342
www.ncchiroboard.com

NC Chapter, American College of Cardiology
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
(919) 861-5581 (919) 787-4916 fax
www.ncacc.org

NC Chiropractic Association
333 Fayetteville Street Mall, Suite 1500
Raleigh, NC 27601
(919) 832-0611 (919) 832-0612 fax
www.ncchiropractic.com

NC College of Emergency Physicians
PO Box 6524
Raleigh, NC 27628
(919) 787-5859 (919) 783-9563 fax
www.nccep.org

NC College of Internal Medicine
PO Box 6524
Raleigh, NC 27628
(919) 787-5859 (919) 783-9563 fax

NC Dermatology Association
PO Box 27167
Raleigh, NC 27611
(919) 833-3936

NC Foot & Ankle Society
PO Drawer 40399
Raleigh, NC 27629
(919) 872-2224
www.ncfootandankle.org

NC Medical Board
1203 Front Street
Raleigh, NC 27609
(800) 253-9653 (919) 326-1130 fax
www.ncmedboard.org

NC Medical Society
PO Box 27167
Raleigh, NC 27611
(919) 833-3936 (919) 833-2023 fax
www.ncmedsoc.org

North Carolina Health Careers '04-'06
Professional Associations

NC Neurological Society
222 N. Person Street
Raleigh, NC 27601
(919) 833-3836

NC Obstetrical & Gynecological Society
PO Box 27167
Raleigh, NC 27611
(919) 833-3836

NC Pediatric Society
1100 Wake Forest Rd., Suite 150
Raleigh, NC 27604
(919) 839-1156 (919) 839-1158 fax
www.ncpeds.org

NC Society of Anesthesiologists
PO Box 1676
Raleigh, NC 27628
(919) 821-6698 (919) 821-6800 fax
www.socanes.com

NC Society of Eye Physicians & Surgeons
PO Box 27167
Raleigh, NC 27611
(919) 833-3836 (919) 833-2023 fax

NC Society of Otolaryngology and Head & Neck Surgery
PO Box 27167
Raleigh, NC 27611
(919) 833-3836 (919) 833-2023 fax

NC Society of Pathologists
PO Box 27167
Raleigh, NC 27611
(919) 833-3836

NC Society of Plastic & Reconstructive Surgery
PO Box 27167
Raleigh, NC 27611
(919) 833-3836

American Lung Association of North Carolina
3801 Lake Boone Tr.,
PO Box 27985
Raleigh, NC 27611
(919) 832-8326 1-800-LUNG USA
www.lungnc.org

NC Urological Association
PO Box 27167
Raleigh, NC 27611
(919) 833-3836

Old North State Medical Society
291 Huff Drive, PO Box 1354
Jacksonville, NC 28546
(910) 577-3100

Society for Neurosciences
11 Dupont Circle, NW, Suite 500
Washington, DC 20036
(202) 462-6688 (202) 462-9740 fax
www.sfn.org

Society for Vascular Medicine and Biology
900 Cummings Ctr. Ste. 221-4
Beverly, MA 01915
(978) 927-8330 (978) 524-8890 fax
www.svmb.org

Society of General Internal Medicine
2501 M Street, NW, Suite 575
Washington, DC 20037
(800) 822-3060 (202) 887-5405 fax
www.sgim.org

Student National Medical Association
5113 Georgia Avenue, NW
Washington, DC 20011
(202) 882-2881
www.snma.org

MENTAL HEALTH

Addiction Professionals of North Carolina
PO Box 71814
Durham, NC 27722
(800) 723-4851

American Academy of Child & Adolescent Psychiatry
3615 Wisconsin Ave, NW
Washington, DC 20016-3007
(202) 966-7300 (202) 966-2891 fax
www.aacap.org

American Association for Geriatric Psychiatry
7910 Woodmont Ave., Suite 1050
Bethesda, MD 20814-3004
(301) 654-7850 (301) 654-4137 fax
www.aagponline.org

American Association of Pastoral Counselors
9504-A Lee Highway
Fairfax, VA 22031-2303
(703) 385-6967
www.aapc.org

American Counseling Association
5999 Stevenson Avenue
Alexandria, VA 22304
(800) 347-6647 (800) 473-2329 fax
www.counseling.org

American Association of Pastoral Counselors
9504-A Lee Highway
Fairfax, VA 22031-2303
(703) 907-7300
www.psych.org

American Psychological Association
750 First Street, NE
Washington, DC 20002
(800) 374-2721
www.apa.org

Association of Clinical Pastoral Education, Inc.
1549 Clairmont Road, Suite 103
Decatur, GA 30033
(404) 320-1472 (404) 320-0849 fax
www.acpe.edu

Association of Black Psychologists
PO Box 55999
Washington, DC 20040-5999
(202) 722-0808 (202) 722-5941 fax
www.abpsi.org

www.nchealthcareers.com
### Professional Associations

<table>
<thead>
<tr>
<th>Association</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Association of Social Workers</td>
<td>750 First Street, NE, Suite 700, Washington, DC 20002-4241</td>
<td>(202) 408-9600</td>
<td>(202) 336-8310 fax</td>
<td><a href="http://www.naswdc.org">www.naswdc.org</a></td>
</tr>
<tr>
<td>National Center for American &amp; Alaska Native Mental Health Research</td>
<td>PO Box 6508, Mail Stop F800, Aurora, CO 80045</td>
<td>(303) 724-1414</td>
<td>(303) 724-1474 fax</td>
<td><a href="http://www.ucsch.edu/ncaianmhr">www.ucsch.edu/ncaianmhr</a></td>
</tr>
<tr>
<td>National Mental Health Association</td>
<td>2001 North Beauregard Street, 12th Floor, Alexandria, VA 22311</td>
<td>(703) 684-7722</td>
<td>(703) 684-5968 fax</td>
<td><a href="http://www.nmha.org">www.nmha.org</a></td>
</tr>
<tr>
<td>NC Association for Marriage and Family Therapists</td>
<td>PO Box 98073, Raleigh, NC 27624</td>
<td>(877) 862-2638</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NC Chapter, National Association of Social Workers</td>
<td>PO Box 27582, Raleigh, NC 27611-7582</td>
<td>(800) 280-6207</td>
<td>(919) 828-1341 fax</td>
<td></td>
</tr>
<tr>
<td><a href="http://naswnc.org">http://naswnc.org</a></td>
<td></td>
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</tr>
<tr>
<td>NC Council of Child &amp; Adolescent Psychiatry</td>
<td>1904 Dresser Court, Suite 106, Raleigh, NC 2760</td>
<td>(919) 872-1005</td>
<td>(919) 872-8085 fax</td>
<td></td>
</tr>
<tr>
<td>NC Psychiatric Association</td>
<td>4917 Waters Edge Drive, Suite 250, Raleigh, NC 27606</td>
<td>(919) 859-3370</td>
<td>(919) 851-0044 fax</td>
<td></td>
</tr>
<tr>
<td>NC Psychological Association</td>
<td>1004 Dresser Court, Suite 106, Raleigh, NC 27609</td>
<td>(919) 872-1005</td>
<td>(919) 872-8085 fax</td>
<td></td>
</tr>
<tr>
<td>NC Social Work Certification and Licensure Board</td>
<td>PO Box 1043, Asheboro, NC 27204</td>
<td>(800) 550-7009</td>
<td>(336) 625-4246 fax</td>
<td></td>
</tr>
<tr>
<td>NC Substance Abuse Professional Certification Board</td>
<td>PO Box 10126, Raleigh, NC 27605</td>
<td>(919) 832-0975</td>
<td>(919) 833-5743 fax</td>
<td></td>
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### NURSING

<table>
<thead>
<tr>
<th>Organization</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Website</th>
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<tbody>
<tr>
<td>American Academy of Anesthesiologist Assistants</td>
<td>PO Box 13978, Tallahassee, FL 32317</td>
<td>(850) 656-8688</td>
<td>(850) 656-3038 fax</td>
<td><a href="http://www.anesthetist.org">www.anesthetist.org</a></td>
</tr>
<tr>
<td>American Academy of Nurse Practitioners</td>
<td>PO Box 12846, Austin, TX 78711</td>
<td>(512) 442-4262</td>
<td>(512) 442-6469 fax</td>
<td><a href="http://www.aanp.org">www.aanp.org</a></td>
</tr>
<tr>
<td>American Academy of Nursing</td>
<td>600 Maryland Ave., SW, Suite 100 West, Washington, DC 20024-2571</td>
<td>(202) 551-7238</td>
<td>(202) 554-2641 fax</td>
<td><a href="http://www.nursingworld.org/aan">www.nursingworld.org/aan</a></td>
</tr>
<tr>
<td>American Association of Colleges of Nursing</td>
<td>One Dupont Circle, NW, Suite 530, Washington, DC 20036</td>
<td>(202) 463-6930</td>
<td>(202) 785-8320 fax</td>
<td><a href="http://www.aacn.nche.edu">www.aacn.nche.edu</a></td>
</tr>
<tr>
<td>American Association of Critical Care Nurses</td>
<td>101 Columbia, Aliso Viejo, CA 92656</td>
<td>(949) 362-2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Association of Legal Nurse Consultants</td>
<td>401 N. Michigan Ave., Chicago, IL 60611</td>
<td>(877) 402-2562</td>
<td>(312) 673-6655 fax</td>
<td><a href="http://www.aalnc.org">www.aalnc.org</a></td>
</tr>
<tr>
<td>American Association of Nurse Anesthetists</td>
<td>222 South Prospect Ave., Park Ridge, IL 60068-4001</td>
<td>(847) 692-7050</td>
<td>(847) 692-6968 fax</td>
<td><a href="http://www.aana.com">www.aana.com</a></td>
</tr>
<tr>
<td>American Holistic Nurses Association</td>
<td>PO Box 2130, Flagstaff, AZ 86003-2130</td>
<td>(800) 278-AHNA</td>
<td>(520) 526-2752 fax</td>
<td><a href="http://www.ahna.org">www.ahna.org</a></td>
</tr>
<tr>
<td>American Nurses Association</td>
<td>600 Maryland Ave., SW, Suite 100 West, Washington, DC 20024-2571</td>
<td>(800) 274-4ANA</td>
<td>(202) 554-2262 fax</td>
<td><a href="http://www.nursingworld.org">www.nursingworld.org</a></td>
</tr>
<tr>
<td>American Psychiatric Nurses Association</td>
<td>1555 Wilson Blvd, Suite 515, Arlington, VA 22209</td>
<td>(703) 243-2443</td>
<td>(703) 243-3390 fax</td>
<td><a href="http://www.apna.org">www.apna.org</a></td>
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### Professional Associations

<table>
<thead>
<tr>
<th>Association Name</th>
<th>Address</th>
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<tbody>
<tr>
<td>American Society of PeriAnesthesia Nurses</td>
<td>10 Melrose Avenue, Suite 110</td>
<td>(877) 737-9636 (856) 616-9601 fax</td>
<td><a href="http://www.aspan.org">www.aspan.org</a></td>
</tr>
<tr>
<td>Association of Black Nursing Faculty in Higher Education</td>
<td>5823 Queens Cove, Lisle, IL 60532</td>
<td>(630) 969-3609 (630) 969-3895 fax</td>
<td><a href="http://www.abnfinc.org">www.abnfinc.org</a></td>
</tr>
<tr>
<td>Association of periOperative Registered Nurses</td>
<td>2170 South Parker Rd, Suite 300</td>
<td>(800) 755-2676 (303) 750-3482 fax</td>
<td><a href="http://www.aorn.org">www.aorn.org</a></td>
</tr>
<tr>
<td>Association of Pediatric Oncology Nurses</td>
<td>4700 W. Lake Avenue, Glenview, IL 60025</td>
<td>(847) 375-4724 (847) 375-6324 fax</td>
<td><a href="http://www.apon.org">www.apon.org</a></td>
</tr>
<tr>
<td>Association of Women's Health, Obstetric and Neonatal Nurses</td>
<td>2000 L Street, NW, Suite 740</td>
<td>(781) 440-9408 (781) 440-9409 fax</td>
<td><a href="http://www.awhonn.org">www.awhonn.org</a></td>
</tr>
<tr>
<td>Infusion Nurses Society</td>
<td>220 Norwood Park South, Norwood, MA 20662</td>
<td>(781) 440-9408 (781) 440-9409 fax</td>
<td><a href="http://www.ins1.org">www.ins1.org</a></td>
</tr>
<tr>
<td>National Association of Hispanic Nurses</td>
<td>1501 16th Street, NW, Washington, DC 20006</td>
<td>(202) 387-2477 (202) 483-7183 fax</td>
<td><a href="http://www.thehispanicnurses.org">www.thehispanicnurses.org</a></td>
</tr>
<tr>
<td>National Association of Neonatal Nurses</td>
<td>4700 W. Lake Avenue, Glenview, IL 60025-1485</td>
<td>(800) 451-3795 (888) 477-6266 fax</td>
<td><a href="http://www.nann.org">www.nann.org</a></td>
</tr>
<tr>
<td>National Association of Pediatric Nurse Associates and Practitioners</td>
<td>20 Brace Road, Suite 200, Cherry Hill, NJ 08034-1912</td>
<td>(856) 857-9700 (856) 857-1600 fax</td>
<td><a href="http://www.napnap.org">www.napnap.org</a></td>
</tr>
<tr>
<td>National Black Nurses Association, Inc.</td>
<td>8630 Fenton Street, Suite 330, Silver Spring, MD 20910</td>
<td>(301) 589-3200 (301) 589-3223 fax</td>
<td><a href="http://www.nbna.org">www.nbna.org</a></td>
</tr>
<tr>
<td>National Federation of Licensed Practical Nurses, Inc.</td>
<td>605 Poole Drive, Garner, NC 27529</td>
<td>(919) 779-0046 (919) 779-5642 fax</td>
<td><a href="http://www.nfplpn.org">www.nfplpn.org</a></td>
</tr>
<tr>
<td>NC Association of Nurse Anesthetists</td>
<td>605 Poole Drive, Garner, NC 27529</td>
<td>(919) 779-7881 (919) 779-5642 fax</td>
<td><a href="http://www.ncana.com">www.ncana.com</a></td>
</tr>
<tr>
<td>NC Board of Nursing</td>
<td>PO Box 2129, Raleigh, NC 27602</td>
<td>(919) 782-3211 (919) 781-9461 fax</td>
<td><a href="http://www.ncbon.com">www.ncbon.com</a></td>
</tr>
<tr>
<td>NC Licensed Practical Nurses Association</td>
<td>PO Box 11407, Durham, NC 27703</td>
<td>(919) 596-8202</td>
<td></td>
</tr>
<tr>
<td>NC Nurses Association</td>
<td>PO Box 12025, Raleigh, NC 27605-2025</td>
<td>(800) 626-2153 (919) 829-5807 fax</td>
<td><a href="http://www.ncnurses.org">www.ncnurses.org</a></td>
</tr>
<tr>
<td>Society of Urologic Nurses and Associates</td>
<td>East Holly Avenue, Pitman, NJ 08071-0056</td>
<td>(856) 256-2335 (856) 589-7463 fax</td>
<td><a href="http://www.suna.org">www.suna.org</a></td>
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**PHARMACY**

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<th>Association Name</th>
<th>Address</th>
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<tr>
<td>American Association of Colleges of Pharmacy</td>
<td>1426 Prince Street, Alexandria, VA 22314</td>
<td>(703) 739-2330 (703) 836-8982 fax</td>
<td><a href="http://www.aacp.org">www.aacp.org</a></td>
</tr>
<tr>
<td>American Association of Pharmaceutical Scientists</td>
<td>2107 Wilson Blvd., Suite 700, Arlington, VA 22201</td>
<td>(703) 243-2800 (703) 243-9650 fax</td>
<td><a href="http://www.aapspharmaceutica.com">www.aapspharmaceutica.com</a></td>
</tr>
<tr>
<td>American Association of Pharmacy Technicians</td>
<td>PO Box 1447, Greensboro, NC 27402</td>
<td>(336) 333-9068 (816) 531-2177 (816) 531-4990 fax</td>
<td><a href="http://www.pharmacytechnician.com">www.pharmacytechnician.com</a></td>
</tr>
<tr>
<td>American College of Clinical Pharmacy</td>
<td>3101 Broadway, Suite 650, Kansas City, MO 64111</td>
<td>(816) 531-2177 (816) 531-4990 fax</td>
<td><a href="http://www.accp.com">www.accp.com</a></td>
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**Professional Associations**

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<tr>
<td><strong>American Society of Health-System Pharmacists</strong></td>
<td>7272 Wisconsin Ave. Bethesda, MD 20814</td>
<td>(301) 657-3000 (301) 652-8278 fax</td>
<td><a href="http://www.ashp.org">www.ashp.org</a></td>
</tr>
<tr>
<td><strong>National Association of Pharmaceutical Manufacturers</strong></td>
<td>320 Old Country Road Garden City, NY 11530</td>
<td>(516) 741-3699 (516) 741-3696 fax</td>
<td><a href="http://www.napm.co.za">www.napm.co.za</a></td>
</tr>
<tr>
<td><strong>NC Association of Pharmacists</strong></td>
<td>109 Church Street Chapel Hill, NC 27516</td>
<td>(919) 967-2237 (919) 968-9430 fax</td>
<td><a href="http://www.ncpharmacists.org">www.ncpharmacists.org</a></td>
</tr>
<tr>
<td><strong>NC Board of Pharmacy</strong></td>
<td>6015 Farrington Road, Suite 201 Chapel Hill, NC 27517</td>
<td>(919) 942-4454 (919) 967-5757 fax</td>
<td><a href="http://www.ncbop.org">www.ncbop.org</a></td>
</tr>
<tr>
<td><strong>Pharmaceutical Research and Manufacturers of America</strong></td>
<td>1100 Fifteenth Street, NW Washington, DC 20005</td>
<td>(202) 835-3400</td>
<td><a href="http://www.phrma.org">www.phrma.org</a></td>
</tr>
<tr>
<td><strong>Pharmacy Technician Certification Board</strong></td>
<td>2215 Constitution Avenue, NW Washington, DC 20005</td>
<td>(202) 429-7576 (202) 429-7596 fax</td>
<td><a href="http://www.ptcb.org">www.ptcb.org</a></td>
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**PUBLIC HEALTH**

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<tr>
<td><strong>Agency for Healthcare Research and Quality</strong></td>
<td>540 Gaither Road Rockville, MD 20850</td>
<td>(301) 427-1364 (301) 427-1873 fax</td>
<td><a href="http://www.ahrq.gov">www.ahrq.gov</a></td>
</tr>
<tr>
<td><strong>American Association for Health Education</strong></td>
<td>1900 Association Drive Reston, VA 20191</td>
<td>(800) 213-7193 x437 (705) 476-6638 fax</td>
<td><a href="http://www.aahelin.org">www.aahelin.org</a></td>
</tr>
<tr>
<td><strong>American College of Occupational &amp; Environmental Medicine</strong></td>
<td>1114 N. Arlington Heights Road Arlington Heights, IL 60004</td>
<td>(847) 818-1900 (847) 818-9266 fax</td>
<td><a href="http://www.acoeoem.org">www.acoeoem.org</a></td>
</tr>
<tr>
<td><strong>American Public Health Association</strong></td>
<td>800 I Street, NW Washington, DC 20001</td>
<td>(202) 777-APHA (202) 777-2534 fax</td>
<td><a href="http://www.apha.org">www.apha.org</a></td>
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<tr>
<td><strong>American School Health Association</strong></td>
<td>7263 State Rte. 43, PO Box 708 Kent, OH 44240</td>
<td>(330) 678-1601 (330) 678-4526 fax</td>
<td><a href="http://www.ashaweb.org">www.ashaweb.org</a></td>
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**RADIOLOGY**

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<tr>
<td><strong>American Board of Radiology</strong></td>
<td>5255 Williams Blvd, Suite 200 Tucson, AZ 85711</td>
<td>(520) 790-2900 (520) 790-3200 fax</td>
<td><a href="http://www.theabr.org">www.theabr.org</a></td>
</tr>
<tr>
<td><strong>American College of Radiology</strong></td>
<td>1891 Preston White Drive Reston, VA 20191</td>
<td>(800) 227-5463</td>
<td><a href="http://www.acr.org">www.acr.org</a></td>
</tr>
<tr>
<td><strong>American Registry of Diagnostic Medical Sonographers</strong></td>
<td>51 Monroe Street, Plaza East One Rockville, MD 20850</td>
<td>(800) 541-9754 (301) 738-0312 fax</td>
<td><a href="http://www.ardms.org">www.ardms.org</a></td>
</tr>
<tr>
<td><strong>American Registry of Radiologic Technologists</strong></td>
<td>1255 Northland Drive St. Paul, MN 55120-1155</td>
<td>(651) 687-0048</td>
<td><a href="http://www.arrt.org">www.arrt.org</a></td>
</tr>
<tr>
<td><strong>American Society of Radiologic Technologists</strong></td>
<td>15000 Central Ave, SE Albuquerque, NM 87123-3917</td>
<td>(800) 444-2778 (505) 298-5063 fax</td>
<td><a href="http://www.asrt.org">www.asrt.org</a></td>
</tr>
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</table>
Joint Review Committee on Educational Programs in Nuclear Medicine Technology
#1 2nd Avenue East, Suite C
Polson, MT 59860
(406) 883-0003 (406) 883-0022 fax
www.jrcnmt.org

NC Society of Radiologic Technologists, Inc.
605 Poole Dr.
Garner, NC 27529
(919) 779-5539 (919) 779-5642 fax
www.ncsnt.org

Nuclear Medicine Technology Certification Board
2970 Clairmont Road, Suite 935
Atlanta, GA 30329-4421
(404) 315-1739 (404) 315-6502 fax
www.nmtcb.org

Society of Diagnostic Medical Sonography
2745 Dallas Pkwy, Suite 350
Plano, TX 75093
(800) 229-9506 (214) 229-9506 fax
www.sdms.org

Society of Nuclear Medicine
1850 Samuel Morse Drive
Reston, VA 20190-5316
(703) 708-9000 (703) 708-9015 fax
www.snm.org

American Society of Safety Engineers
1800 E. Oakton St.
Des Plaines, IL 60018
(847) 699-2929 (847) 296-3769 fax
www.asse.org

Association of Clinical Research Professionals
500 Montgomery Street, Suite 800
Alexandria, VA 22314
(703) 254-8100 (703) 254-8101 fax
www.acrernet.org

Biomedical Engineering Society
8401 Corporate Drive, Suite 225
Landover, MD 20785
(301) 459-1999 (301) 459-2444 fax
www.bmes.org

Health Physics Society
1313 Dolly Madison Blvd., Suite 402
McLean, VA 22101
(703) 790-1745 (703) 790-2672 fax
www.hps.org

International Biometric Society
1444 I Street, NW, Suite 700
Washington, DC 20005-2210
(202) 712-9049 (202) 216-9646 fax
www.tibs.org

NC Biomedical Association
6300-138 Creedmoor Rd., Suite 272
Raleigh, NC 27612-6730
(919) 688-6890
www.ncbiomedassoc.com

Society of Toxicology
1821 Michael Faraday Drive, Suite 300
Reston, VA 20190
(703) 438-3115 (703) 438-3113 fax
www.toxicology.org

American Academy of Cardiovascular Perfusion
PO Box 3596
Allentown, PA 18106
(610) 395-4853 phone/fax
users.aol.com/OfficeAAGP

American Academy of Emergency Medicine
611 East Wells Street
Milwaukee, WI 53202
(800) 884-2236 (414) 276-3349 fax
www.aaem.org

American Academy of Orthotists and Prosthetists
526 King St, Suite 201
Alexandria, VA 22314
(703) 836-0788 (703) 836-0737 fax
www.oandp.com

American Board of Funeral Service Education
38 Florida Avenue
Portland, ME 04103
(207) 878-6530 (207) 797-7686 fax
www.abfse.org
Professional Associations

American Society of Echocardiography
1500 Sunday Dr., Suite 102
Raleigh, NC 27607
(919) 861-5574 (919) 787-4916 fax
asecho.org

American Society of Electroneurodiagnostic Technologists
426 W. 42nd Street
Kansas City, MO 64111
(816) 931-1120 (816) 931-1145 fax
www.asent.org

American Society of ExtraCorporeal Technology
503 Carlisle Dr., Suite 125
Herndon, VA 20170
(703) 435-8566 (703) 435-0056 fax
www.amsect.org

Association for the Advancement of Medical Instrumentation
1110 North Glebe Rd., Suite 220
Arlington, VA 22201
(703) 925-4890 (703) 276-0793 fax
www.aami.org

Association of Polysomnographic Technologists
One Westbrook Corporate Center, Suite 920
Westchester, IL 60154
(708) 492-0796
www.aptweb.org

Association of Surgical Technologists
7108-C S. Alton Way
Englewood, CO 80112-2106
(303) 694-9193 (303) 694-9169 fax
www.ast.org

Board of Registered Polysomnographic Technologists
8201 Greensboro Drive, Suite 300
McLean, VA 22102
(703) 610-9020 (703) 610-9005 fax
www.brpt.org

Commission on Professionals in Science and Technology
1200 New York Ave, NW, Suite 390
Washington, DC 20005
(202) 326-7080 (202) 842-1603 fax
www.cpst.org

International African-American Orthotic-Prosthetic Coalition
Kosair Children’s O&P Facility, 982 Eastern Parkway
Louisville, KY 40217

National Association of Emergency Medical Technicians
PO Box 1400
Clinton, MS 31727
1-800-346-2368
www.naemt.org

National Funeral Directors Association
1362 S Bishop’s Drive
Brookfield, WI 53005
(800) 228-6332 (262) 789-6977 fax
www.nfda.org

National Registry of Emergency Medical Technicians
PO Box 29233, 6110 Busch Blvd.
Columbus, OH 43229
(614) 888-4484 (614) 888-8920 fax
www.nremt.org

National Society of Genetic Counselors
233 Canterbury Drive
Wallingford, PA 19086-6617
(610) 872-7608
www.nsgc.org

NC Ultrasound Society Central Office
817 Lord Granville Drive
Morehead City, NC 28557
(252) 422-5300 (252) 808-3101 fax
www.ncus.org

North Carolina Funeral Directors Association
5860 Farrington Place, Suite 2
Raleigh, NC 27609
(800) 616-2332 (919) 876-5382 fax
www.ncfda.org

Society of Vascular Technology
4601 Presidents Drive, Suite 260
Lanham, MD 20706-4831
(301) 459-7550 (301) 459-5651 fax
www.svunet.org

THERAPY

American Academy of Audiology
11730 Plaza America Drive, Suite 300
Reston, VA 20190
(800) AAA-2336 (703) 790-8631 fax
www.audiology.org

American Academy of Physical Medicine & Rehabilitation
One IBM Plaza, Suite 2500
Chicago, IL 60611-3604
(312) 464-9700 (312) 464-0227 fax
www.aapmr.org

American Art Therapy Association
1202 Allanson Road
Mundelein, IL 60060-3808
(847) 949-6064 (847) 566-4580 fax
www.arttherapy.org

American Association for Respiratory Care
9425 North MacArthur Blvd, Suite 100
Irving, TX 75063
(972) 243-2272 (972) 484-2720 fax
www.aarc.org

American Dance Therapy Association
2000 Century Plaza, Suite 108
10632 Little Patuxent Parkway
Columbia, MD 21044
(410) 997-4040 (410) 997-4048 fax
www.adta.org

American Music Therapy Association
8455 Colesville Road, Suite 1000
Silver Spring, MD 20910
(301) 589-3300 (301) 589-5175 fax
www.musictherapy.org

American Occupational Therapy Association, Inc.
4720 Montgomery Lane, PO Box 31220
Bethesda, MD 20824-1220
(800) 377-8555 (301) 652-7711 fax
www.aota.org
Professional Associations

American Orthopaedic Society for Sports Medicine
6300 N. River Road, Suite 500
Rosemont, IL 60018
(847) 292-4900 (847) 292-4905 fax
www.sportsmed.org

American Physical Therapy Association
1111 North Fairfax Street
Alexandria, VA 22314-1488
(800) 999-2782 (703) 823-0252 fax
www.apta.org

American Rehabilitation Counseling Association
5999 Stevenson Avenue
Alexandria, VA 22304
(800) 545-2223 (703) 823-0252 fax
www.nchrtm.okestate.edu/arca

American Society of Exercise Physiologists
Department of Exercise Physiology, 1200 Kenwood Avenue
Duluth, MN 55811
(218) 723-6297 (218) 723-6427 fax
www.asep.org

American Speech-Language-Hearing Association
10801 Rockville Pike
Rockville, MD 20852
(800) 638-8255 (301) 571-0457 fax
www.asha.org

American Therapeutic Recreation Association
1414 Prince St., Suite 204
Alexandria, VA 22314
(703) 683-9420 (703) 683-9431 fax
www.atra-tr.org

American Council on Rehabilitation Education
1835 Rohlwing Road, Suite E
Rolling Meadows, IL 60008
(847) 394-1785 (847) 394-2108 fax
www.core-rehab.org

National Council of State Boards of Examiners for Speech-Language Pathology & Audiology
C/o the Executive Secretary, PO Box 326
Wellsburg, WV 26070
(304) 737-2395

National Rehabilitation Association
633 S. Washington Street
Alexandria, VA 22314
(888) 258-4295 (703) 836-0848 fax
www.nationalrehab.org

National Rehabilitation Counseling Association
8807 Sudley Road, Suite 102
Manassas, VA 20110
(703) 361-2077 (703) 361-2489 fax
http://nrca-net.org/

North American Academy of Health, Fitness, and Rehabilitation Professionals
3323 Watt Ave., #158
Sacramento, CA 95821
(888) 610-0923
www.postrehab.com

NC Board of Examiners for Speech & Language Pathologists & Audiologists
PO Box 16885
Greensboro, NC 27416-0885
(336) 272-1828
www.ncboeslpa.org

NC Board of Massage and Bodywork Therapy
PO Box 2539
Raleigh, NC 27602
(919) 546-0050 (919) 833-1059 fax
www.bmbt.org

NC Board of Occupational Therapy
PO Box 2280
Raleigh, NC 27602
(919) 832-1380 (919) 833-1059 fax
www.ncbot.org

NC Board of Physical Therapy
18 W. Colony Place, Suite 140
Durham, NC 27705
(800) 800-8982 (919) 490-6393 (919) 490-5106 fax
www.ncptboard.org

NC Council for Occupational Therapy
PO Box 1782
Raleigh, NC 27619-1782
(919) 785-9700
www.ncota.com

NC Physical Therapy Association, Inc.
316 W. Millbrook Road, Suite 105
Raleigh, NC 27609
(800) 948-2672
www.ncpt.org

www.nchealthcareers.com
NC Recreation and Park Society  
883 Washington Street  
Raleigh, NC 27605  
(919) 832-5868  
www.ncrps.org

NC Recreation Therapy Association  
PO Box 1307  
Chapel Hill, NC 27514-1307  
www.ncrta.org

NC Rehabilitation Counseling Association  
School of Allied Health Sciences, East Carolina University  
Greenville, NC 27858-4353  
(252) 328-4455

NC Society for Respiratory Care  
817 Lord Granville Drive  
Morehead City, NC 28557  
(252) 422-5300  
(252) 808-3101 fax  
www.ncsrc.org

NC Speech, Hearing and Language Association  
PO Box 28359  
Raleigh, NC 27611-8359  
(919) 833-3984  
(919) 832-0445 fax  
www.ncshla.org

American Animal Hospital Association  
PO Box 150899  
Denver, CO 80215-0899  
(800) 883-6301  
(303) 986-1700 fax  
www.aahanet.org

American Academy of Ophthalmology, The Eye M.D. Association  
PO Box 7424  
San Francisco, CA 94120-7424  
(415) 561-8500  
www.aao.org

American Academy of Optometry  
6110 Executive Blvd, Suite 506  
Rockville, MD 20852  
(301) 984-1441  
(301) 984-4737 fax  
www.aaopt.org

American Veterinary Medical Association  
243 N Lindbergh Blvd  
St. Louis, MO 63141  
(800) 365-2219  
(314) 991-4101 fax  
www.avma.org

Association of American Veterinary Medical Colleges  
1101 Vermont Ave., NW, Suite 710  
Washington, DC 20005  
(202) 371-9195  
(202) 842-0773 fax  
www.aavmc.org

Association of Schools and Colleges of Optometry  
6110 Executive Blvd, Suite 510  
Rockville, MD 20852  
(301) 231-5944  
(301) 770-1828 fax  
www.opted.org

Association of Veterinary Technicians in Ophthalmology  
2025 Woodlane Drive  
St. Paul, MN 55125  
(800) 482-4858  
(651) 731-0410 fax  
www.atpo.org

National Association of Opticianry  
8401 Corporate Drive, Suite 605  
Landover, MD 20785  
(800) 229-4828  
(301) 577-3880 fax  
www.nao.org

NC Association of Veterinary Technicians  
PO Box 11648  
Durham, NC 27703  
(888) 622-8832  
www.ncavt.com

NC Veterinary Medical Association  
1611 Jones Franklin Road., #108  
Raleigh, NC 27606  
(919) 851-5850  
(919) 851-5859 fax  
www.ncvma.org

NC Veterinary Medical Board  
PO Box 37549  
Raleigh, NC 27627  
(919) 854-5601  
(919) 854-5606 fax  
www.ncumb.org

Veterinary Hospital Managers Association, Inc.  
48 Howard Street  
Albany, NY 12207  
(518) 433-8911  
(518) 463-8656 fax  
admin@yhma.org

NC State Board of Opticians  
PO Box 25336  
Raleigh, NC 27611-5336  
(919) 733-2019  
(919) 733-0070 fax

NC Veterinary Hospital Managers Association, Inc.
Professional Associations

NC State Board of Optometry
109 N. Graham Street
Walls, NC 28466
(910) 285-3160 (910) 285-4546 fax
www.ncoptometry.org

NC State Optometric Society
PO Box 1206
Wilson, NC 27894
(252) 237-6197 (252) 237-9233 fax
www.nceyes.org

NC State Optometric Society
PO Box 1206
Wilson, NC 27894
(252) 237-6197 (252) 237-9233 fax
www.nceyes.org

GENERAL

American Health Care Association
1201 L Street, NW
Washington, DC 20005
(202) 842-4444 (202) 842-3860 fax
www.ahca.org

American Heart Association
National Center, 7272 Greenville Avenue
Dallas, TX 75231
(800) AHA-USA1
www.americanheart.org

American Hospital Association
One North Franklin
Chicago, IL 60606
(312) 422-3000
www.aha.org

American Library Association
50 East Huron
Chicago, IL 60611
(800) 545-2433 (312) 440-9374 fax
www.ala.org

American Statistical Association
1429 Duke Street
Alexandria, VA 22314-3415
(703) 684-2037 fax
www.amstat.org

Association for Home & Hospice Care of NC
226 W. Millbrook Road
Raleigh, NC 27609
(919) 848-3450
www.homeandhospicecare.org

Association on American Indian Affairs
966 Hungerford Drive, Suite 12-B
Rockville, MD 20850
(240) 314-7155 (240) 314-7159 fax
www.indian-affairs.org

Indian Health Service
801 Thompson Ave.
Rockville, MD 20852
(301) 443-3593 (301) 443-0507 fax
http://info.ihs.gov

Medical Library Association
65 East Wacker Pl., Suite 1900
Chicago, IL 60602
(312) 419-9094 (312) 419-8950 fax
www.mlanet.org

Minority Health Professions Foundation
Harris Building
720 Westview Drive, SW
Suite 136
Atlanta, GA 30310
(404) 756-8923 (404) 756-8934 fax
www.minorityhealth.org

Office of Minority Health Resource Center
PO Box 37337
Washington, DC 20013
(800) 444-6472 (301) 251-1797 fax
www.omhrc.gov

National Academy of Sciences
The Keck Center, 500 5th Street, NW
Washington, DC 20001
(202) 334-2000
www.nas.edu

National Association for Home Care and Hospice
228 Seventh Street, SE
Washington, DC 20003
(202) 547-7424 (202) 547-3540 fax
www.nahc.org

Hispanic Health Council
175 Main Street
Hartford, CT 06106
(860) 527-0856 fax (860) 724-0437
www.hispanichealth.com

Global Health Council
1701 K Street, NW, Suite 600
Washington, DC 20006
(202) 833-5900 (202) 833-0075 fax
www.globalhealth.org

National Indian Health Board
1 Constitution Ave., NW 8-B10
Washington, DC 20001
(202) 742-4262 (202) 742-4285 fax
www.nihb.org

National Rural Health Association
One West Armour Blvd, Suite 203
Kansas City, MO 64111
(816) 756-3140 (816) 756-3144 fax
www.NRHA Rural.org

NC Health Care Facilities Association
5109 Bur Oak Circle
Raleigh, NC 27612
(919) 782-3827 (919) 787-8418 fax
www.nchcfra.org

NC Hospital Association (NCHA, Inc.)
PO Box 4449
Cary, NC 27519-4449
(919) 677-2400 (919) 677-4200 fax
www.ncha.org

Society for the Advancement of Chicanos and Native Americans in Science
PO Box 8526
Santa Cruz, CA 95601-8526
(831) 459-0170
www.sacnas.org
Professional Associations

Special Library Association
1700 18th Street, NW
Washington, DC 20009
(202) 234-4700  (202) 265-9317 fax
Www.sla.org

North Carolina Health Information and Communications Alliance
3200 Chapel Hill/Nelson Blvd
Cape Fear Building, Suite 200
PO Box 13048
Research Triangle Park, NC 27709
(800) 241-4486  (919) 558-2198 fax
www.nchica.org

North Carolina Respiratory Care Board
1100 Navaho Drive, Suite 242
Raleigh, NC 27609
(919) 878-5595  (919) 878-5565 fax
www.ncrcb.org
<table>
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<td><strong>ATR</strong> – Art Therapist Registered</td>
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<td><strong>CCAS</strong> – Certified Clinical Addiction Specialist</td>
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<td><strong>CCS</strong> – Clinical Coding Specialist</td>
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<td><strong>CCS-P</strong> – Clinical Coding Specialist - Physician</td>
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<td><strong>CHES</strong> – Certified Health Education Specialist</td>
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<td><strong>CLS</strong> – Clinical Laboratory Scientist</td>
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<td><strong>CP</strong> – Certified Prosthetist</td>
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<td><strong>CPO</strong> – Certified Prosthetist/Orthotist</td>
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<tr>
<td><strong>CRNA</strong> – Certified Registered Nurse Anesthetist</td>
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<td><strong>CRT</strong> – Certified Respiratory Therapist</td>
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<tr>
<td><strong>CT</strong> – Cytotechnologist</td>
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<tr>
<td><strong>DC</strong> – Doctor of Chiropractic</td>
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<td><strong>DDS</strong> – Doctor of Dental Science</td>
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<td><strong>DMD</strong> – Doctor of Medical Dentistry</td>
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<td><strong>DO</strong> – Doctor of Osteopathy</td>
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<td><strong>DPM</strong> – Doctor of Podiatric Medicine</td>
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<td><strong>DVM</strong> – Doctor of Veterinary Medicine</td>
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Ambulatory Care — health services delivered to individuals who do not spend the night in the hospital

Anatomy — the science of the structure of living organisms

Anesthesia — loss of feeling or sensation, especially the loss of pain sensation induced to permit the performance of surgery or other painful procedures

Autopsy — postmortem examination of a body to determine the cause of death or the nature of pathological change

Biomechanics — the application of mechanical laws to living organisms, specifically the locomotor systems of the human body

Body Mass Index (BMI) — is used to define nutritional status and is derived from the formula: Weight (kg)/Height (m)^2. The standards are the same for both men and women. The acceptable range is 20-25. A BMI of 25 or more is considered overweight and a BMI of 30 or more is considered obese.

Cardiology — the study of the heart and its functions

Cytopathology — the study of cells and disease

Dental sealant — chemical covering applied to tooth surface to aid in the prevention of cavities

Dermatology — the medical specialty concerned with the diagnosis and treatment of skin diseases

Diagnosis — determination of the nature of a cause of disease

Echocardiography — recording of the position and motion of the heart walls or internal structures of the heart by the echo obtained from beams of ultrasonic waves directed through the chest wall

Endodontics — the branch of dentistry concerned with the treatment of conditions that affect the tooth pulp and root

Epidemiology — the study of the relationship of various factors determining the frequency and distribution of diseases in the human community

Forensic — pertaining to or applied in legal proceedings

Genetics — the study of heredity

Geriatrics — the department of medicine dealing especially with the problems of aging and diseases of the elderly

Glaucoma — a group of eye diseases characterized by an increase in intraocular pressure causing pathological changes in the optic disk and typical visual field defects

Hematology — the science dealing with the blood and blood forming tissues

Histochemistry — the branch of histology dealing with the identification of chemical components in cells and tissues

Histology — the department of anatomy dealing with the minute structure, composition, and function of tissues

Hospice — a facility that provides palliative and supportive care for terminally ill patients and their families, either directly or on a consulting basis

Immunohematology — the study of antigen-antibody reactions as they relate to blood disorders
**Immunology** – the branch of biomedical science concerned with the response of the organism to disease, the rejection of foreign substance, and all the effects of disease resistance.

**Inoculation** – introduction of a disease agent into a healthy individual to produce a mild form of the disease followed by immunity.

**Maxilla** – the bone of the upper jaw.

**MCAT** – Medical College Admission Test.

**Microbiology** – the study of microscopic organisms.

**Neonatology** – the study and care of newborn infants up to six weeks of age.

**Neurology** – concerned with the nervous system (brain, cranial nerves, and spinal cord).

**Neuropsychiatry** – the combined specialties of neurology and psychiatry.

**Obstetric** – the branch of medicine dealing with pregnancy and labor.

**Oncology** – the study of cancerous and benign tumors.

**Orthodontics** – prevention and correction of abnormally positioned or aligned teeth.

**Orthopedic** – pertaining to the correction of deformities of the musculoskeletal system.

**Osteopathy** – a system of therapy based on the theory that the body is capable of making its own remedies against disease and other toxic conditions when it is in normal structural relationship and has favorable environmental conditions and adequate nutrition.

**Periodontics** – the study and treatment of gums, oral bones, and tissues.

**Pharmacotherapy** – the use of medicine in treatment of disease.

**Physiology** – the science which treats the functions of the living organism and its parts and of the physical and chemical factors and processes involved.

**Prognosis** – a prediction of the probable course and outcome of a disease.

**Prosthodontics** – concerned with restoring and maintaining mouth function, comfort, and appearance by replacing missing teeth with artificial appliances for the mouth (crowns and bridges, etc.).

**Pulmonary Care** – pertaining to the care of the lungs.

**Radiopharmaceuticals** – radioactive drugs used for diagnostic or therapeutic purposes.

**Rheumatology** – the branch of medicine dealing with disorders marked by inflammation or degeneration of the joints.

**Thoracic** – pertaining to the chest.

**Toxicology** – the science or study of poisons.

**Transfusion** – the introduction of whole blood or blood components directly into the bloodstream.

**Ultrasonography** – the imaging of deep structures of the body by recording the echoes of pulses reflected by tissue planes where there is change in density.

**Urinalysis** – analysis of the urine.

**Vascular** – pertaining to blood vessels.
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North Carolina Health Careers  
c/o Editor  
NC AHEC Program  
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UNC-Chapel Hill  
Chapel Hill, NC 27599-7165

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<td>Overall Design</td>
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Fold along dotted line, tape ends closed, and mail. Thank you.
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Since its creation in 1972, the North Carolina AHEC Program has provided health care students and professionals with much needed resources, training, and technical assistance.

One of AHEC's most popular tools is the North Carolina Health Careers Manual.