



The WNY R-AHEC

# Health Career Resource Guide



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# Why a Career in Healthcare?

- ♥ **Make a difference in the lives of others**
- ♥ **High demand career field**
- ♥ **Work and live anywhere you want**
- ♥ **Many different career opportunities**
- ♥ **Flexible hours**
- ♥ **Flexibility to travel**
- ♥ **Stimulating work environment**

According to the US Bureau of Labor statistics Employment in healthcare occupations is projected to grow 16 percent from 2020 to 2030, much faster than the average for all occupations, adding about 2.6 million new jobs.

# Healthcare Qualities

## **Compassion**

*Practicing empathy & desiring to help.*

## **Communication**

*Ability to listen and consult with patients, families, coworkers and others.*

## **Problem Solving**

*Working through problems calmly and rationally.*

## **Positivity**

*Having a constructive and optimistic attitude.*

## **Multi-tasking**

*Able to work in a busy environment and pay close attention to detail.*

## **Team Work**

*Able to work with many professionals.*



# How to Prepare...

## **Develop Good Work Skills**

*Learn good study habits, time management, and note-taking skills and develop advanced reading and professional communication abilities.*

## **Classes to Consider**

*Science, technology, medicine, and math are beneficial to a health career. This includes biology, chemistry, physics, calculus, and statistics. English classes can help communication ability. Inquire about healthcare career classes at your local BOCES.*

## **Good Grades**

*Keeping good grades is important to earn scholarships, and for acceptance into healthcare programs.*

## **Participate in Extracurricular Activities**

*School clubs, sports, leadership programs, work experience, volunteering, and internships are all great resume builders and show leadership skills and interests when applying for colleges/universities and jobs.*

## **Learn Healthy Habits**

*Learn self-care, get organized, stick to a regular sleep routine, maintain health through nutrition and exercise, and ask for help when needed.*

## **Get Experience**

*Volunteer/intern or shadow a health professional to get real world experience and acquire leadership, problem-solving and time management skills. Acquiring First Aid & CPR/AED and/or Lifeguard certification is a good way to get experience. Contact the American Red Cross or a certified trainer at your school for more information.*

# Healthcare Categories

## **Administrative Fields**

*Administrative roles involve assisting with or managing healthcare organizations. They may develop schedules, manage finances, ensure compliance with laws & regulations, train staff, communicate with physicians and nurses, maintain medical records and insurance data and track medical and office supplies, and more.*

## **Diagnosing/Treating Field**

*Diagnose and advise or apply preventive and curative measures or a treatment plan to illness & injury. Highly selective & competitive and requires significant levels of science/mathematics. A bachelor's degree is required or preferred as well as a post-baccalaureate degree.*

## **Diagnostic Imaging**

*Allows physicians to look inside the body for clues about a medical condition. A variety of machines and techniques can create pictures of the structures and activities inside the body. The type of imaging used depends on the patient symptoms and the area of the body examined. Imaging can include X-rays, CT scans, nuclear medicine scans, MRI scans, ultrasounds, and more.*

## **Laboratory Fields**

*Technicians perform tests on blood, body fluids, tissues and cells to obtain information about a patient's health, to aid in diagnosis, treatment, and prevention of disease. May use microscopes, cell counters, and other high-precision lab equipment.*

## **Medical Equipment and Devices**

*Any instrument, apparatus, implement or machine used for medical purposes. Medical devices are essential for the safe and effective prevention, diagnosis, treatment and rehabilitation of illness and disease. The medical device industry is a broad field. Medical device job specialty areas include: Quality Assurance (QA), Quality Control (QC), Manufacturing, Field Engineering, Research and Development (R&D) Design, Validation and sales.*

## **Patient Care Field**

*Perform direct care and aid in the prevention, treatment, and management of illness and the preservation of physical and mental well-being. Patient care can be direct and indirect. Direct patient care involves helping patients meet basic needs while indirect patient care refers to maintaining the environment in which nursing care is delivered.*

## **Rehabilitating/Therapy Fields**

*Direct, hands-on patient care with the goal of helping the patient return to a healthy and active lifestyle. Offers a controlled environment to help the body heal, regain strength and relearn skills. The rehabilitating & therapy fields can be used to treat a wide range of injuries or conditions.*

# Allied Health

**Allied health workers** are professionals who work in the medical community but are **not doctors, dentists or nurses**. They directly provide services to patients or serve in roles that support healthcare providers.

It is estimated that about 60% of healthcare can be classified as allied health. Occupational therapists, nutritionists and radiologists, behind-the-scenes roles such as pharmacy technicians or medical laboratory scientists and health professionals who work in consultative positions, including genetic counselors and diabetes instructors are all considered allied health professionals.



*Look for the green circle throughout guide to identify Allied health careers*

# STEM Careers

**STEM** is an approach to learning and development that integrates the areas of **science, technology, engineering** and **mathematics**. STEM skills are important to many healthcare careers.

The top STEM healthcare careers can be broken into four major categories:



Medical Imaging Information



Administrative



Technology & Computers



Technicians

When looking at healthcare there is crossover between the medical field and STEM work. At its core, medicine is a science-based practice, requires innovative technology, and grows through the work of engineers and mathematicians. STEM workers continue driving the healthcare field forward through inventive ways of thinking and creative problem-solving skills.



*Look for the red dot throughout the guide to identify a STEM Career*

# Administrative







# Health Education Specialist

**Health education specialists** develop programs to teach people about conditions affecting well-being. Also called health educators, they teach individuals, families and communities about behaviors that promote wellness and maintaining a healthy lifestyle. They may link health systems, health providers, insurers, and patients to address individual and population health needs. Health education specialists may provide training programs for community health workers or other healthcare providers, supervise staff who implement health education programs, collect and analyze data, or advocate for improved health resources and policies. Health education specialists are employed in a variety of settings, including healthcare facilities, nonprofit organizations, and government agencies, or public health departments.

## How to Become a Health Education Specialist-

- Bachelor's degree in health education or health promotion
- Certification may be preferred. (Certified Health Education Specialist (CHES).
- Some positions may require a master's or doctoral degree-may include community health education, public health education, or health promotion.

**In 2021, the average annual salary was \$48,860 in the US and \$50,350 in New York State**

For more information contact the National Commission for Health Education Credentialing  
[www.nchec.org](http://www.nchec.org)



# Medical and Health Service Managers

**Medical and health service managers** plan, direct, and coordinate the business activities of healthcare providers. Most medical and health services managers work in offices in healthcare facilities, including hospitals and nursing homes, and group medical practices. They typically work to improve efficiency and quality in delivering healthcare services. They ensure compliance with new laws and regulations and develop departmental objectives and goals and recruit, train, and supervise staff. Medical and health service managers include health information managers, nursing home administrators, assistant administrators, and clinical managers.

## How to become a Medical Health Service Manager-

- Bachelor's degree in a program such as health administration, nursing, or public policy and social services.
- Master's degrees are common and sometimes preferred.
- Employers may require some work experience in an administrative or a clinical role in a hospital or other healthcare facility.
- Some may begin as medical records and health information technicians, administrative assistants, or financial clerks.

**In 2021, the average annual salary was \$101,340 in the US, and \$155,430 in New York State**

For more information contact the Professional Association of Health Care Office Management (PAHCOM)  
[my.pahcom.com](http://my.pahcom.com)



# Medical Record Specialist

**Medical records specialists** compile, process, and maintain patient files. Medical Record specialists gather medical histories, symptoms, test results treatments, and other health information and enter the details into electronic health records (EHR) systems. Some categorize medical information for insurance reimbursement and provide data to clinicians. They ensure access only to authorized people and retrieve, scan, and transmit files according to established protocols. **Medical coders** assign the diagnosis and procedure codes for patient care, population health statistics, and billing purposes. They might review patient information for preexisting conditions, such as diabetes, to ensure proper coding of patient data. They also work as the liaison between healthcare providers and billing offices.

## How to become a Medical Record Specialist-

- Postsecondary certificate program
- Some may qualify with high school diploma and experience in a healthcare setting.
- Some may need an associate or bachelor's degree.

**In 2021, the average annual salary was \$46,660 in the US, and \$55,350 in New York State**

For more information contact the American Health Information Management Association  
[www.ahima.org](http://www.ahima.org)



# Medical Secretary

**A medical secretary, or medical administrative assistant,** is responsible for handling administrative and clerical tasks at a hospital or clinic. Their duties include accepting calls from patients and either answering their questions or directing their call and coordinating appointments for patients. They process patient information, insurance claims, invoices and payments. Medical secretaries manage the physician's schedule, the office database and patient records. They may write and prepare reports and type and transcribe medical reports.

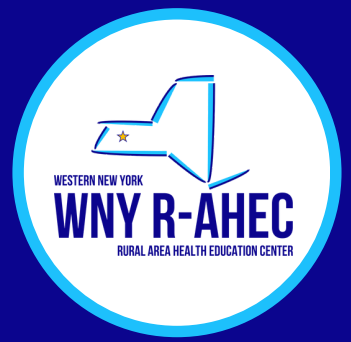
## How to become a Medical Secretary-

- High school diploma or equivalent at minimum **or**
- Certificate from a vocational-technical school **or**
- Associate degree from a community college in medical administration
- Certification is voluntary, but the *International Association of Administrative Professionals* offers Organizational Management and Certified Administrative Professional specialty certification.
- Bachelor's degree needed as an executive medical secretary.

**In 2021, the average annual salary was \$36,580 in the US, and \$42,560 in New York State**

For more information contact the American Society of Administrative Professionals (ASAP)  
[www.asaporg.com](http://www.asaporg.com)

# Diagnosing/Treating



# Audiologist

**Audiologists** diagnose, manage, and treat patients who have hearing, balance, or related problems. They assess the results of examinations, diagnose problems and create treatment plans. They may fit and dispense hearing aids and other assistive listening devices, counsel on ways to communicate, monitor patients, research and educate. Audiologists diagnose conditions such as hearing loss and tinnitus (ringing in the ear). They use a variety of devices to identify the extent and underlying cause of hearing loss. For example, with audiometers they measure the volume and frequency at which a person hears.

## How to become an Audiologist-

- Obtain a bachelor's degree (4 years).
- Complete a doctor of audiology (Au.D.) degree (4-years).
- Get licensed.

**In 2021, the average annual salary was \$78,950 in the US, and \$90,170 in New York State**

For more information contact the American Academy of Audiology  
[www.audiology.org](http://www.audiology.org)

# Dentist

**Dentists** treat patient teeth, gums, and related parts of the mouth. Dentists typically work in private practice. There are many types of dentists including **General Dentists** who perform regular teeth cleanings and routine dental exams; **Pediatric Dentists** specialize in dental care and treatment for children and youth; **Orthodontists** specialize in teeth and jaw alignment using braces, retainers, and other devices; **Periodontists** specialize in treatment and repair diseases and problems of the gums; **Endodontists** specialize in issues troubling the nerve of a tooth; **Oral Surgeons** specialize in the treatment of oral diseases of teeth and jaw. They are trained to perform surgery and works closely with ENT's (Ear, Nose & Throat Doctors) and **Prosthodontists** specialize in repairing teeth and jawbones.

## How to become a Dentist-

- Complete bachelor's degree (4 years) (in relevant areas like biology, health science, or psychology).
- Complete dental school, earning either a DDS (Doctor of Dental Surgery), or DMD (Doctor of Medicine in Dentistry) (4-years). Complete residency for specific specialization (up to three years).

**In 2021, the average annual salary was \$171,530 in the US, and \$206,351 in New York State**

For further information contact the American Dental Association or the Academy of General Dentistry  
[www.ada.org](http://www.ada.org)



# Nurse Practitioner

**Nurse practitioners** coordinate patient care and may provide primary and specialty healthcare. They diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. They may focus on health promotion and disease prevention. Nurse practitioners may order, perform, or interpret diagnostic tests such as lab work and x-rays, and may prescribe medication. They must be registered nurses who have specialized graduate education. Nurse practitioners typically care for a certain population of people such as adult and geriatric health, pediatric health, or psychiatric and mental health. Nurse practitioners consult with physicians and other health professionals when needed. Nurse practitioners work in a variety of healthcare settings, including hospitals, physicians' offices, and clinics.

## How to become a Nurse Practitioner-

- Earn at least a master's degree in Certified Nurse Practitioner (CNP).
- Obtain license in resident state.
- Pass a national certification exam.
- Can choose to earn Doctor of Nursing Practice (DNP) or a Ph.D.

**In 2021, the average annual salary was \$123,780 in the US, and \$ 133,940 in New York State**

For more information contact the American Association of Nurse Practitioners  
[www.aanp.org](http://www.aanp.org)

# Physician

**Physicians** diagnose, treat, and educate patients and address health maintenance. They examine patients, order or perform and interpret diagnostic tests, recommend specialists and document a patient's medical history. They may counsel on diet, hygiene and preventative care. There are two types of physicians; Medical Doctor (M.D.) and a Doctor of Osteopathic Medicine (D.O.). Both use the same methods of treatment, including drugs and surgery but D.O.'s place additional emphasis on the body's musculoskeletal system, preventative medicine, and holistic care. D.O.s are most likely to be primary care physicians.

## How to become a Physician-

- Undergraduate education (4-years)
- Pass the MCAT (exam needed to get into medical school).
- Apply to medical school.
- Complete medical school training (4-years).
- Pass the first two parts of the United States Medical Licensing Examination (USMLE).
- Match with residency.
- Complete residency (often specialized) (4-years). Pass the final part of the USMLE.
- Earn board certification. Get a license.
- (Optional) Fellowship to specialize (up to three years).

**In 2021, the average annual salary was \$213,590 in the US and \$229,190 in New York State**

For more information contact the American Medical Association  
[www.ama-assn.org](http://www.ama-assn.org)

# Physician Specialties

## Allergy & Immunology

Focuses on immune system disorders such as asthma, eczema, food allergies, some autoimmune diseases, and more. Must have prior certification in Internal Medicine or Pediatrics with two years in Allergy and Immunology training. The average salary in the US in 2021 was \$260,307.

## Anesthesiology

Focuses on giving drugs to numb pain or to put a patient to sleep during surgery, childbirth and other procedures. Anesthesiologists monitor vital signs while a patient is under anesthesia. They go through an extra one or two years in a fellowship program. The average salary in the US in 2021 was \$400,000.

## Cardiology

Experts on the heart and blood vessels. Must go through three extra years of internal medicine training and then three years of specialized training. The average salary in the US in 2021 was \$402,200.

## Dermatology

Specialists who diagnose and treat disorders of the skin, hair, nails, and mucous membrane. Services include but are not limited to acne, infections, skin cancer, genetic disorders, hair loss, and scars. Must complete a one or two-year fellowship. The average salary in the US in 2021 was \$356,300.

## Emergency Medicine

Specialize in emergency medicine and focus on immediate decision making and action necessary to prevent death or further disability. After residency must earn an Emergency Medicine Certification. The average salary in the US in 2021 was \$296,187.

## Endocrinology

Specialize in diagnosing and treating conditions related to problems with the body's hormones, hormonal glands, and related tissue. After residency must complete a two to three-year fellowship. The average salary in the US in 2021 was \$238,183.

## Gastroenterology

Specialize in treating digestive system conditions and diseases. After residency must complete three-year fellowship. The average salary in the US in 2021 was \$390,209.

## Internal Medicine

Specialize in prevention, diagnosis, and treatment of internal diseases. Focus on adult medicine, and trained to solve diagnostic problems, manage severe long-term illness, and help patients with multiple complex chronic conditions. After residency must complete one to three years of fellowship. The average salary in the US in 2021 was \$225,960.

## Medical Genetics

Specialize in medicine that involves the interaction between genes and health. Must complete two-year fellowship. The average salary in the US in 2021 was \$85,388.

## Neurology

Specialize in diagnosing, treating, and managing disorders of the brain and nervous system. Must complete 2-year fellowship after residency. The average salary in the US in 2021 was \$254,000.

# Physician Specialties Cont'd

## **Nuclear Medicine**

Specialize in treatments with the use of radioactive materials. Use materials to determine how a patient's organs function. Must complete a two-year residency in nuclear medicine. The average salary in the US in 2021 was \$344,874.

## **Obstetrics & Gynecology (OB/GYN)**

Gynecologists specialize in women's bodies and their reproductive health. Obstetricians specialize in pregnancy and childbirth. After four years of specialized residency, they have to complete a three-year fellowship. The average salary in the US in 2021 was \$294,601.

## **Oncology**

Specialize in the treatment and medical care for those diagnosed with cancer. After residency must complete a fellowship, the length depending on specialty. The average salary in the US in 2021 was \$314,235.

## **Optometry**

Specialize in vision care. This can include sight testing. Instead of medical school, attend optometry school (four years). There is the option to do a specialized clinical residency. The average salary in the US in 2021 was \$129,405.

## **Orthopedic Surgeon**

Specialize in diagnosing and treating conditions of the musculoskeletal system; bones, joints, ligaments, tendons, and muscles. After five years of residency, there are two years of general surgery and three years focused on a specialty. Complete two-year fellowship. The average salary in the US in 2021 was \$501,520.

## **Pathology**

Pathologists study the causes and effects of disease or injury. They specialize in studying fluids, tissues, and organs from the body. They perform tests to help reach diagnoses. Must complete a three-year specialized residency program and optional up to a two-year fellowship to specialize further. The average salary in the US in 2021 was \$285,298.

## **Pediatrics**

Specialize in the treatment of infants, children, adolescents, and young adults typically from birth to 18 years of age. Must complete a three-year specialized residency program. The average salary in the US in 2021 was \$208,048.

## **Physical Medicine and Rehabilitation**

Specialize in the diagnosis and treatment of patients who have a medical condition that could impair a patient's ability to function normally. Must complete a four-year specialized residency program with an optional fellowship program to follow. The average salary in the US in 2021 was \$242,190.

## **Preventative Medicine**

Specialize in public health and clinical care. Experts in the prevention of injury, disease, and death. Must complete a four-year specialized residency; optional up to three-year fellowship program. The average salary in the US in 2021 was \$183,300.

# Physician Specialties Cont'd

## Psychiatry

Specialize in mental health. Conduct psychotherapy and prescribe medications and other medical treatments. Four-year specialized residency program and an optional fellowship to specialize. The average salary in the US in 2021 was \$234,949.

## Surgery

Specialize in evaluating and treating conditions that may require surgery. Must complete a four-year surgical residency with additional, up to three year fellowship to specialize. The average salary in the US in 2021 is \$405,073.

## Urology

Focuses on diseases of the male and female urinary tract (kidneys, ureters, bladder, and urethra). It also focuses on the male reproductive organs (penis, testes, scrotum, prostate, etc.) Up to a six-year residency program required and can further specialize with a fellowship. The average salary in the US in 2021 was \$389,830.

# Physician Assistant

**Physician assistants, or PAs,** work on a team with physicians or surgeons, and other healthcare workers. They review patient history, examine patients, order and interpret diagnostic tests. They diagnose injury and illness, provide treatment such as setting a broken bone, stitching wounds or immunizing patients, prescribe medication and assess and record patient progress. They may educate and counsel patients and their families. Physician assistants work in all areas of medicine, including primary care, family medicine, emergency medicine, surgery, and psychiatry. Their work is dependent on the specialty or type of medical practice where they work. PAs can work in doctor's offices, hospitals, outpatient care centers, educational services, or employment services.

## How to become a Physician Assistant-

- Undergraduate education (4-years)
- Attend an accredited PA program (3-years).
- Acquire healthcare and patient care experience (HCE/PCE).
- Pass the Physician Assistant National Certifying Exam (PANCE).
- Obtain state license and certification.

**In 2021, the average annual salary was \$121,530 in the US, and \$131,810 in New York State**

For further information you can go to the American Academy of Physician Assistant's  
[www.aapa.org](http://www.aapa.org)



# Psychologist

**Psychologists** study cognitive, emotional, and social processes and behavior by observing, interpreting, and recording how people relate to one another and to their environments. They use their findings to help improve processes and behaviors. They conduct scientific studies of behavior and brain function, observe individuals, identify psychological, emotional, behavioral and organizational issues and diagnose disorders. They study behavioral or emotional patterns, discuss issues with clients, and treatment options, supervise clinicians, counsel professionals and interns and educate others. They often gather information and evaluate behavior through controlled laboratory experiments, psychoanalysis or psychotherapy. They may administer personality performance, aptitude or intelligence tests.

## How to become a Psychologist-

- Obtain at least a master's degree-many positions require a doctoral degree.
- Complete a Ph.D. in Psychology or Doctor of Psychology degree.
- Become licensed depending on requirements.

**In 2021, the average annual salary was \$81,040 in the US, and \$102,220 in New York State**

For more information contact the American Psychological Association  
[pages.apa.org](https://pages.apa.org)

# Veterinarian

**Veterinarians** examine animals in clinics and on farms to check for signs of illness or disease and establish the overall health of animals. This can include treating wounds, performing surgery, testing and vaccinating for disease, operating medical equipment such as x-rays and ultra sound machines, advising owners about care, conditions & treatment, prescribing medication and euthanizing animals. Most veterinarians work in private clinics and hospitals. Others travel to farms or work in settings such as laboratories, classrooms, or zoos.

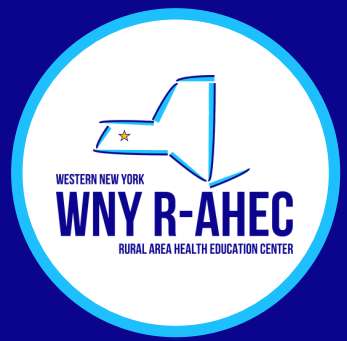
## How to become a Veterinarian-

- Complete a bachelor's degree.
- Earn a Doctor of Veterinary Medicine (4-years).
- Pass the North American Veterinary Licensing examination.
- Pass a state licensing exam if required.

**In 2021, the average annual salary was \$100,370 in the US and \$129,210 in New York State**

For more information contact the American Veterinary Association  
[www.avma.org](https://www.avma.org)

# Diagnostic Imaging



# Diagnostic Medical Sonographer



**Sonographers** operate ultrasound or sonography equipment to create diagnostic images and conduct tests, prepare patients for tests, and monitor them throughout imaging procedures. They read the images, identify abnormalities, and provide test results to doctors. They may also be called ultrasound technologists, ultrasound technicians, or vascular technologists. Sonographers work in hospitals, outpatient clinics, physician offices, imaging centers, and diagnostic laboratories.

## How to become a Diagnostic Medical Sonographer-

- Associate degree. Both associate and bachelor's degree programs are offered **or**
- One-year certificate programs available from colleges and some hospitals.
- Take the American Registry of Diagnostic Medical Sonographers' certification exams (ARDMS) to earn professional certification. *It is not mandatory to become an RDMS to practice but many employers prefer certified sonographers.*

**In 2021, the average salary in the US was \$75,380, and \$85,940 in New York State**

For more information contact the American Registry for Diagnostic Medical Sonography  
[www.ardms.org](http://www.ardms.org)



# MRI Technologist

**MRI technologists** operate magnetic resonance imaging (MRI) scanners to create diagnostic images. They prepare patients for procedures by injecting them with contrast dyes so that the images will show up on the scanner. They position the equipment to get the correct picture. MRI technologists work in healthcare facilities and in hospitals.

## How to become a MRI Technologist-

- Obtain an associate degree.
- May need up to five years of related work experience (often from working as a radiologic technologist).
- Few states require licensure but employers usually prefer to hire certified technologists.
- Certification for MRI technologists is available from the ARRT and from the American Registry of Magnetic Resonance Imaging Technologists

**In 2021, the average annual salary was \$61,980 in the US and \$77,140 in New York State**

For more information contact the American Registry of Magnetic Resonance Imaging Technologists  
[www.armrit.org](http://www.armrit.org)

# Nuclear Medicine Technologist



**Nuclear medicine technologists** prepare radioactive drugs called radioactive tracers and administer them to patients for imaging to help physicians and surgeons diagnose a patient's condition. These radioactive tracers help show function of the internal organs. Nuclear medicine technologists use scanning equipment to capture images to provide to physicians or others who diagnose, care for, and treat patients and to researchers who investigate uses of radioactive drugs. There are three types of nuclear medicine technologists including Nuclear Cardiology Technologist (NCT), Computed Tomography Technologist (CT) and Positron Emission Tomography Technologist (PET).

## How to become a Nuclear Medicine Technologist-

- Complete an associate degree from a nuclear medicine technology program.
- Some complete an additional associate degree or bachelor's in a related field.
- Certification and licensing requirements vary by state.

**In 2021, the average annual salary was \$78,760 in the US, and \$96,080 in New York State**

For more information contact the American Board of Nuclear Medicine  
[www.abms.org/board/american-board-of-nuclear-medicine/](http://www.abms.org/board/american-board-of-nuclear-medicine/)



# Radiologic Technologist

**Radiologic technologists**, also known as radiographers, perform diagnostic imaging examinations, such as X-rays and computed tomography (CT) imaging, on patients. They prepare patients for procedures, take medical history, and shield exposed areas that do not need to be imaged. Some may prepare patients for procedures, which may include preparing a mixture for the patient to drink that allows the soft issue to be viewed on the images. Radiologists work in healthcare facilities, and hospitals.

## How to become a Radiologic Technologist-

- Obtain an associate degree.
- Take a certifying exam to be licensed.
- The American Registry of Radiologic Technologists has information on certification.

**In 2021, the average annual salary was \$61,370 in the US, and \$ 77,140 in New York State**

For more information please contact the American Registry of Radiologic Technologists  
[www.arrt.org](http://www.arrt.org)



# Laboratory Services





# Cytotechnologist

**Cytotechnologists** are lab professionals who evaluate patients cell samples and are trained to notice subtle changes to accurately detect precancerous malignant and infections conditions. They work closely with a pathologist. Cytotechnology is the microscopic study of body cells to detect cancer, viral and bacterial infections and abnormal conditions. Cytotechnologists perform the Pap test, a common test that evaluates cells from the cervix. Cytotechnologists use a microscope to examine cells, interpret whether cells are normal or abnormal and detect changes in cells that indicate cancer, disease and abnormality. They work in hospital labs, private labs and universities.

## How to become a Cytotechnologist-

- Obtain a bachelor's degree in cytotechnology or medical laboratory technology.
- Get certified in cytotechnology.

**In 2021, the average annual salary was \$74,000 in the US, and \$77,061 in New York State**

For more information contact the American Society of Cytopathology  
[cytopathology.org](http://cytopathology.org)

# Medical/Clinical Laboratory Technician



**Medical and clinical laboratory technicians** collect samples of body fluids, such as blood, urine, or tissue, to perform tests. They prepare and perform the tests, analyze samples, as well as diagnose disease and log results. They set up, maintain, calibrate, clean and test sterility of medical laboratory equipment. Clinical laboratory technicians work under medical technologists. They may work in hospitals and doctor's offices.

## How to become a Medical/Clinical Laboratory Technician-

- Obtain an associate's degree in clinical laboratory science.
- Some states require laboratory personnel to be licensed. Although certification is not always required employers typically prefer to hire certified technologists and technicians.

**In 2021, the average annual salary was \$57,800 in the US, and \$72,500 in New York State**

For more information contact The American Society for Clinical Laboratory Science  
[ascls.org](http://ascls.org)

# Medical Laboratory Scientist



**Medical laboratory scientists (MLS)** also known as medical technologists or clinical laboratory scientists work to analyze blood, body fluids, tissues and cells. They perform scientific testing on samples and report to doctors. Data found can play a role in treating cancer, heart disease, diabetes and other medical conditions. Medical laboratory scientists collaborate closely with physicians and medical laboratory technicians in diagnosing and monitoring disease processes, as well as monitoring the effectiveness of therapy. Areas of medical laboratory training include microbiology, chemistry, hematology, immunology, transfusion medicine, toxicology and molecular diagnostics. Medical laboratory scientists differ from technicians in they typically have more education and are able to perform more involved lab work. Medical laboratory scientists typically supervise the work of lab techs who perform routine laboratory testing.

## How to become a Medical Laboratory Scientist-

- Complete a bachelor's degree in medical technology or clinical laboratory science. A bachelor's degree in a science or health related field (chemistry/microbiology) may be considered.
- Complete a clinical laboratory program or internship.
- Become certified as a medical technologist, clinical laboratory scientist, or medical laboratory scientist.

**In 2021, the average annual salary was \$58,000 in the US, and \$72,500 in New York State**

For more information contact the American Society for Clinical Laboratory Science (ASCLS)  
[ascls.org](http://ascls.org)



# Phlebotomist

**Phlebotomists** draw blood for tests, research, or blood donations. They label drawn blood, enter patient information in a database, and maintain needles, blood vials, and other instruments. Phlebotomists work in hospitals, medical and diagnostic laboratories, blood donor centers, and doctors' offices.

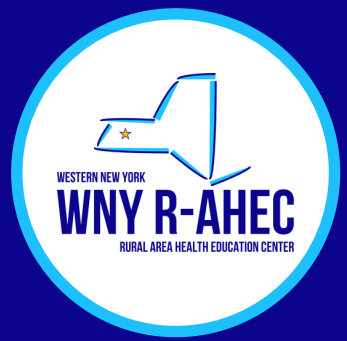
## How do I become a Phlebotomist-

- Obtain a postsecondary nondegree certificate from a phlebotomy program.
- Programs are available from community colleges, vocational schools, or technical schools. These programs usually take less than 1 year to complete.

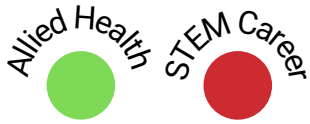
**In 2021, the average annual salary was \$37,380 in the US, and \$45,390 in New York State**

For more information contact the National Phlebotomy Association  
[www.nationalphlebotomy.org](http://www.nationalphlebotomy.org)

# Medical Equipment







# Dispensing Optician

**Opticians** help fit eyeglasses and contact lenses, following prescriptions from ophthalmologists and optometrists. They measure a customer's eyes and face, help customers choose eyewear, and adjust or repair eyewear. They also assist clients with inserting, removing, and caring for contact lenses. Opticians may work in optometrists or physician offices and in stores selling optical equipment.

## How to become a Dispensing Optician-

- High school diploma and on-the-job training **or**
- Associate degree or a certificate from a community college or technical school.

**In 2021, the average salary in the US was \$37,570 and \$56,640 in New York State**

For more information contact the National Academy of Opticianry  
[www.nao.org](http://www.nao.org)



# Hearing Aid Specialist

**Hearing aid specialists** or hearing aid dispensers select and fit hearing aids for customers. They administer and interpret hearing tests. Testing is only for the purposes of fitting and is not an audiological or medical exam. They also ensure that hearing instruments are working properly, and they teach customers how to use hearing aids. They take ear impressions and prepare design and modify ear molds.

## How do I become a Hearing Aid Specialist-

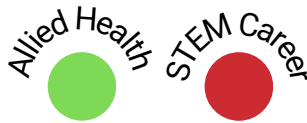
- Minimum requirement of high school diploma or equivalent and on the job training **or**
- Associate Degree **or**
- Certificate from a community college or technical school
- Get licensed according to state requirements.

**In 2021, the average annual salary was \$59,960 in the US and \$62,216 in New York State**

For more information contact the International Hearing Society  
[www.ihinfo.org](http://www.ihinfo.org)



# Medical Equipment Repairer



**Medical equipment repairers** or also known as biomedical equipment technicians, install, maintain, and repair patient care equipment. They may repair a wide range of electronic, electromechanical and hydraulic equipment. They may work on patient monitors, defibrillators, ventilators, anesthesia machines and other life supporting equipment. They may work on medical imaging equipment such as X-rays, CAT scanners, and ultra-sound equipment, voice controlled operating tables and electric wheelchairs. They test and calibrate parts and equipment, repair and replace parts, perform preventative maintenance and repairs, explain and demonstrate how operate medical equipment and manage replacement of equipment.

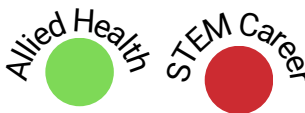
## How to become a Medical Equipment Repairer-

- Obtain an associate degree in biomedical technology or engineering.
- Depending on the area of specialization, repairers may need a bachelor's degree.

**In 2021, the average annual salary was \$49,910 in the US and \$68,450 in New York State**

For more information contact the Association for the Advancement of Medical Instrumentation or the Medical Equipment & Technology Association  
[www.mymeta.org](http://www.mymeta.org)

# Medical Equipment Preparers



**Medical equipment preparers**, also known as sterile processing technician sterilize, prepare, install or clean laboratory or healthcare equipment. They may perform routine laboratory tasks and operate or inspect equipment.

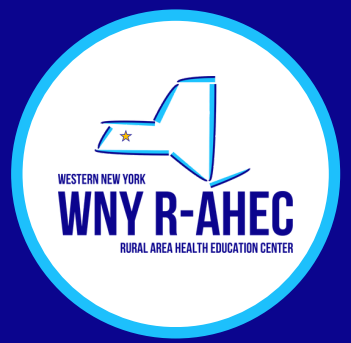
## How do I become a Medical Equipment Preparer-

- High school diploma or equivalent required and 1-12 months of job training or
- Complete a certificate program-some states require an occupational license.

**In 2021, the average annual salary was \$36,240 in the US and \$45,840 in New York State**

For more information contact the Association for the Advancement of Medical Instrumentation (AAMI)  
[www.aami.org](http://www.aami.org)

# Patient Care





# Dietician & Nutritionist

**Dietitians and nutritionists** plan and conduct food service or nutritional programs to help people lead healthy lives. They assess and counsel client nutritional needs, develop meal plans, evaluate plans, and promote healthy lifestyles. They may address topics such as portion control, food allergies, weight loss, or weight gain. They discuss food preparation and meal plans that detail calories, nutrients, and timing of meals. They may help manage blood sugar in diabetes, or supplement extra calories for very ill patients. Dietitians and nutritionists work in many settings, including hospitals, nursing homes, clinics, cafeterias, for state and local governments and more.

## How to become a Dietician/Nutritionist-

- Bachelor's degree or higher in dietetics, food and nutrition.
- Complete 1,200 hours in a supervised internship during undergrad.
- Get licensed if required by state.
- Higher education involves a Master's degree in Nutrition Dietetics (two years).
- Dietitians can be professionally credentialed by the Commission on Dietetic Registration (CDR).

**In 2021, the average annual salary was \$61,650 in the US, and \$72,800 in New York State**

For more information contact the Academy of Nutrition and Dietetics  
[www.eatright.org](http://www.eatright.org)



# Home Health Aide

**Home health and personal care aides** monitor the condition of people with disabilities or chronic illness and often help older adults in need of assistance. Under the direction of a nurse or other healthcare practitioners, aides may be allowed to give a client medication or check vital signs. They assist with daily personal tasks, housekeeping, help organize a client's schedule, arrange transportation, shop for groceries, prepare meals or help keep a client engaged in social networks. Home health aides work in a variety of settings, including clients' homes, group homes, and day services programs. Most aides work full time, although part-time work is common.

## How to become a Home Health Aide-

- Typically need a high school diploma or equivalent, but some positions do not require it.
- Those working in certified home health or hospice agencies may need to complete formal training or pass a standardized test.

**In 2021, the average annual salary was \$29,430 in the US, and \$33,520 in New York State**

For more information contact the American Society of Aging or the National Association for Home Care & Hospice  
[www.asaging.org](http://www.asaging.org) | [www.nahc.org](http://www.nahc.org)



# Medical Assistant

**Medical assistants** complete administrative and clinical tasks in hospitals, offices of physicians and other healthcare facilities. Clinical tasks can include checking vital signs, blood pressure, giving injections and helping with patient examinations. Administrative duties can include scheduling appointments or entering patient information into medical records. Medical assistants work in physician offices, outpatient clinics, and other healthcare facilities.

## How to become a Medical Assistant-

- Programs for medical assisting are available from community colleges, vocational schools, technical schools, and universities and take about one year to complete. These programs usually lead to a certificate or diploma or
- Some community colleges offer 2-year programs that lead to an associate degree or
- Some enter the occupation with a high school diploma and learn through on-the-job training.

**In 2021, the average annual salary was \$37,190 in the US, and \$42,100 in New York State**

For more information contact the American Association of Medical Assistants  
[www.aama-ntl.org](http://www.aama-ntl.org)

# Nursing

**Certified nursing assistants (CNAs)** typically work in home care and long-term care settings. May be referred to as “nursing assistants” and “nursing aides.” CNAs often serve as the primary point of contact between the patient’s family members and the healthcare organization. They assist with the patient’s daily activities such as bathing, dressing, eating, and ambulating.

## How to become a CNA-

- High school diploma or GED
- Completion of state-approved CNA program (3-8 weeks).

**In 2021, the average annual salary was \$30,290 in the US, and \$40,680 in New York State**

For more information contact the National Association of Health Care Assistants (NAHCA)  
[www.nahcacna.org](http://www.nahcacna.org)

**Licensed practical nurses (LPN) or Licensed vocational nurses (LVN)** are responsible for providing basic medical and patient care. They monitor patient health, take blood pressure, insert catheters, start IVs, and change bandages. They help patients bath or dress, discuss care, report patient status to nurses and doctors and record patient health. Tasks may differ depending on the state employed.

## How to become a LPN/LVN-

- Complete a Practical Nursing Program. Can be completed within one year.
- Receive state licensure-pass the National Council Licensure Examination for Practical Nurses (NCLEX-PN).

**In 2021, the average annual salary was \$48,070 in the US, and \$53,750 in New York State**

For more information contact the National Association of Licensed Practical Nurses  
[nalpn.org](http://nalpn.org)

# Nursing Cont'd

**Registered nurses (RNs)** provide and coordinate patient care, educate patients and the public about health conditions and provide advice and emotional support to patients and families. They assess patient condition, administer medication, set up or contribute to a patient's plan of care, collaborate with doctors, operate and monitor medical equipment, help perform diagnostic tests and analyze results, and teach patients and families how to manage illness and injury. In some workplaces, RNs oversee CNAs and LPNs. Once you reach the RN level of nursing, more specialized positions open up, and duties and titles often depend on workplace and patients. Specialty areas of nursing include oncology, geriatric, pediatric, addiction, cardiovascular, critical care, genetics, neonatal, nephrology, public health, rehabilitation and clinical nurse specialist.

## How to become a RN-

- Earn associate and/or bachelor's in nursing.
- In NY it is required to obtain a bachelor's degree within 10 years of completing associates to practice as an RN.

**In 2021, the average annual salary was \$77,600 in the US, and \$93,320 in New York State**

For more information contact the American Nurses Association or the American Society of Registered Nurses  
[www.nursingworld.org](http://www.nursingworld.org) | [www.asrn.org](http://www.asrn.org)

**Advanced practice registered nurses (APRNs)** focus on directing a plan of care. Becoming an APRN often requires further education, such as a Master of Science in Nursing (MSN) or a Doctor of Nursing (DNP) and specific training in one of four recognized APRN roles. These include **nurse practitioners (NP)**, **certified registered nurse anesthetists (CRNA)**, **certified nurse midwives (CNM)**, and **clinical nurse specialists (CNS)**. APRN's perform all the typical duties of an RN, as well as diagnose and treat illnesses, prescribe medication (with physician supervision in some states), advise on public health issues, and provide more advanced interventions. APRN's with an MSN degree work not only in hospitals and long-term care settings but also in private practice and community clinics. **Nurse practitioners** serve as primary and specialty care providers and deliver advanced nursing services to patients and their families. They typically care for a certain population of people such as adult and geriatric health, pediatric health, or psychiatric and mental health. **Nurse anesthetists** administer anesthesia and provide care before, during and after surgical, therapeutic procedures diagnostic and obstetrical procedures. They also provide pain management and some emergency services. **Nurse midwives** provide care to women, including gynecological exams, family planning services, prenatal care and general wellness They deliver babies, manage emergency situations during labor, repair lacerations, and may provide surgical assistant to physicians during cesarean births. They may act as primary maternity care for women. They may also provide care to a patient's partner for sexual or reproductive health issues. **Clinical nurse specialists** provide direct patient care in one of many nursing specialties, such as psychiatric-mental health or pediatrics. Also provide indirect care by working with the other nurses and medical staff to improve the quality of care that patients receive. May serve in a leadership role and educate and advise other nursing staff. May conduct research and may advocate for certain policies.



# Nursing Cont'd

## How to become an APRN-

- Obtain registered nursing (RN) license
- Obtain further education (at least a master's) in one of the specialty roles.
- Some APRN programs may offer a bridge program for associate's or diploma in nursing or a related health science field.
- APRN's may choose to earn a Doctor of Nursing Practice (DNP) or Ph.D.
- Nurse anesthetists must have one year of experience working as an RN in a critical care setting as a prerequisite for admission to an accredited nurse anesthetist program.
- Pass a certification exam from an accredited national organization, such as the American Academy of Nurse Practitioners Certification Board.
- Obtain APRN license.

**In 2021, the average annual salary was \$123,780 in the US, and \$161, 763 in New York State**

For more information contact the American Association of Nurse Anesthesiology, American College of Nurse-Midwives and American Association of Nurse Practitioners or American Nurses Association  
[www.aana.com](http://www.aana.com) | [www.midwife.org](http://www.midwife.org) | [www.aanp.org](http://www.aanp.org) | [www.nursingworld.org](http://www.nursingworld.org)



## Paramedic and EMT

**Paramedics and emergency medical technicians (EMTs)** respond to emergency calls, perform emergency medical services and transport patients to medical facilities. They assess a patient's condition and administer emergency medical care. EMTs perform basic procedures like CPR and use oxygen on a patient while paramedics perform more complex procedures like inserting IV lines, administering drugs, and more. EMTs and paramedics work in ambulance services, fire departments, hospitals, or other rescue services.

## How to become an EMT-

- High school diploma or GED
- Cardiopulmonary resuscitation (CPR) certification & EMT training program (about 150-200 hours).
- Pass the National Registry of Emergency Medical Technicians (NREMT) exam.

## How to become a Paramedic-

- Associate degree (two years) **or**
- Complete 1,200 to 1,800 hours of training for certification.
- Pass the Nation Registry of Emergency Medical Technicians (NREMT) exam and the National Registry Paramedic Cognitive exam.

**In 2021, the average annual salary for EMT was \$36,990 in the US, and \$39,683 in New York State & for a Paramedic was \$46,770 in the US, and \$57,320 in New York State**

For more information contact the National Association of Emergency Medical Technicians  
[naemt.org](http://naemt.org)



# Pharmacist

**Pharmacists** dispense prescription medications to patients and offer expertise in the safe use of prescriptions. They may also conduct wellness screenings, provide immunizations, oversee the medications given to patients, and provide advice on healthy lifestyles. They fill prescriptions, with instructions from physicians, check how prescriptions will interact with other medications and instruct on how and when to take medication and potential side effects. They complete insurance forms and work with insurance companies, oversee pharmacy technicians and interns, keep records, perform administrative tasks and teach other healthcare practitioners about proper medication therapies for patients. Types of pharmacists include community pharmacists, clinical pharmacists, consultant pharmacists and pharmaceutical industry pharmacists.

## How to become a Pharmacist-

- Most programs require at least 2 years of undergraduate study, but not all.
- Most programs require applicants to take the Pharmacy College Admissions Test (PCAT).
- Complete a Doctor of Pharmacy (Pharm.D.) degree.
- Pass the North American Pharmacist Licensure Exam (NAPLEX).
- Pass the Multistate Pharmacy Jurisprudence Exam (MPJE).
- If providing immunizations get certified.

**In 2021, the average annual salary was \$128,570, in the US and 128,260 in New York State**

For more information contact the American Pharmacists Association  
[www.pharmacist.com](http://www.pharmacist.com)



# Psychiatric Aide and Technician

**Psychiatric technicians and aides** care for people who have mental illness and developmental disabilities. Others may work with patients undergoing rehabilitation for drug and alcohol addiction. **Technicians** typically provide therapeutic care and monitor patient condition. They may lead therapeutic and recreational activities, give medications and other treatments, monitor vital signs and restrain patients. **Aides** help patients in their daily activities and ensure a safe and clean environment. Aides may serve meals, help with activities of daily living, monitor patient behavior, help in group activities, and transport patients. Psychiatric technicians and aides work in psychiatric hospitals, residential mental health facilities, and related healthcare settings.

## How do I become a Psychiatric Technician or Aide-

- Technicians typically need a postsecondary certificate.
- Some technicians may have an associate degree in psychiatric or mental health technology or as a nursing assistant or LPN.
- Aides need at least a high school diploma or equivalent.

**In 2021, the average annual salary was \$36,570 for psychiatric technicians and \$30,260 for psychiatric aides, in the US and \$46,810 for psychiatric technicians and \$45,700 for psychiatric aides in New York State.**

For more information contact the American Association of Psychiatric Technicians  
[psychtechs.org](http://psychtechs.org)



# Social Worker

**Social workers** help individuals, groups, and families prevent and cope with problems in their everyday lives. Clinical social workers (LCSWs) diagnose and treat mental, behavioral, and emotional problems. Social workers assess client needs, and help clients adjust to changes and challenges in their life, advocate for community resources, respond to crisis situations such as child abuse and mental health emergencies, monitor client situations, maintain files and records and provide psychotherapy services. They may help with the adoption of a child, a person being diagnosed with a terminal illness or preventing and treating substance abuse. They may help community organizations and policy makers develop or improve social programs, services and conditions.

## How to become a Social Worker-

- Obtain a bachelor's or master's degree in social work from a program accredited by the Council on Social Work Education.
- May need a license. Varies by state.
- Clinical (LCSW) & Master social workers (LMSW) must hold a master's degree.
- Clinical & Master social workers must have at least 2 years of supervised experience in a clinic and pass a state licensing exam.

**In 2021, the average annual salary was \$50,390 in the US, and \$61,680 in New York State**

For more information contact the National Association of Social Workers  
[www.socialworkers.org](http://www.socialworkers.org)

# Veterinary Technologist & Technician

**Veterinary technologists and technicians** perform medical tests that help diagnose injury and illness in animals and are supervised by licensed veterinarians. They observe animal behavior and condition, provide nursing care, emergency first aid, restrain animals during exams or procedures, administer anesthesia, take x-rays and perform laboratory tests, prepare animals and instruments for surgery, administer medications, vaccines, and treatments and record animal history. Veterinary technologists and technicians work in private clinics, laboratories, and animal hospitals. **Technologists** typically work in research related jobs while **technicians** work in clinical practices.

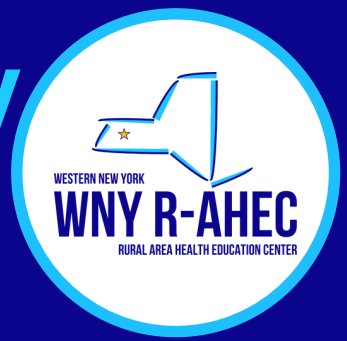
## How to become a Veterinary Technician-

- Obtain a 2-year associate degree in a veterinary technology program.
- Pass a credentialing exam to become registered, licensed or certified dependent on state requirement.

**In 2021, the average annual salary was \$36,850 in the US, and \$45,560 in New York State**

For more information contact the National Association of Veterinary Technicians in America or the American Veterinary Medical Association  
[navta.net](http://navta.net) | [avma.org](http://avma.org)

# Rehabilitating/Therapy





# Occupational Therapist

**Occupational therapists, or OTs**, treat injured, ill or disabled patients through the therapeutic use of everyday activities. They help these patients develop, recover, improve, as well as maintain the skills needed for daily living and working. OTs teach new ways to perform daily tasks, demonstrate how to use assistive technology, educate caregivers on how to best help, create daily routines that promote independence, show strengthening and stretching exercises, and more. OTs can work in hospitals, clinics, private offices, schools, nursing facilities, and home healthcare services.

## How to become an Occupational Therapist-

- Complete bachelor's degree (in relevant areas like biology, health science, or psychology) (four years).
- Earn a graduate degree- either Master of Occupational Therapy (MOT) (two years) or Doctor of Occupational Therapy (OTD) (three years).
- Pass National Board of Certification of Occupational Therapy (NBCOT) to become certified.

**In 2021, the average annual salary was \$85,570 in the US, and \$93,190 in New York State**

For further information contact the American Occupational Therapy Association  
[www.aota.org](http://www.aota.org)



# Physical Therapist

**Physical therapists (PTs)** help injured, or ill people improve movement and manage pain. They work in preventative care, rehabilitation and treatment for patients with chronic conditions, illnesses, or injuries. They review patient medical history, diagnose patient functions, develop plans of care, use exercise, stretching, hands-on therapy, and equipment to ease patient pain, increase mobility and prevent further injury. They may work with people who have problems from back and neck injuries, sprains, strains, and fractures, arthritis, amputations, neurological disorders such as stroke or cerebral palsy, or injuries related to work, sports and other conditions. They may work in private offices, schools, clinics, hospitals, patient's homes, and nursing homes.

## How to become a Physical Therapist-

- Complete a bachelors-may be in recreation/fitness or healthcare related.
- Complete a Doctor of Physical Therapy (DPT) program (three years).
- Pass the National Physical Therapy Examination (NPTE).
- Get a state license to practice. Complete a residency program (1500 hours).
- (Optional) Earn board certification.

**In 2021, the average annual salary was \$95,620 in the US, and \$91,890 in New York State**

For further information contact the American Physical Therapy Association  
[www.apta.org](http://www.apta.org)





# Respiratory Therapist

Respiratory therapists care for patients who have trouble breathing because of conditions such as asthma or COPD. They examine patients, develop treatment plans with doctors, perform diagnostic tests, and educate patients on their treatment plans. Respiratory therapists assess lung capacity and analyze oxygen and carbon dioxide levels, clear airways to improve breathing, connect patients to ventilators, and monitor equipment. They may work in emergency rooms, intensive care units, outpatient clinics, nursing homes, or sleep centers. Some specialize in working with infants and babies, or with seniors.

## How to become a Respiratory Therapist-

- Complete associate degree. Some may consider a bachelor's degree.
- Complete a Credentialing Exam from the National Board for Respiratory Care.
- Earn State Licensure.
- Maintain Certification.

**In 2021, the average annual salary was \$61,830, in the US, and \$83,510 in New York State**

For further information contact the American Association for Respiratory Care  
[www.aarc.org](http://www.aarc.org)



# Speech Pathologist

**Speech-language pathologists** (SLP) assess, diagnose, treat, and help to prevent communication and swallowing disorders. These disorders may result from stroke, brain injury, hearing loss, developmental delay, Parkinson's disease, a cleft palate or autism. Speech-language pathologists may teach how to make sounds and improve voice, improve vocabulary and sentence structure, and counsel individuals. Individuals may be unable to speak at all or have rhythm/fluency issues such as stuttering. SLPs can work in private practice, physicians' offices, hospitals, schools, colleges, universities, rehabilitation centers, long term, and residential health care facilities.

## How to become a Speech-Language Pathologist-

- Get a bachelor's degree in a related field (4 years).
- Obtain a master's degree in SLP (2 years).
- Complete a fellowship (1260 hours).
- Pass the Praxis Examination (a national test that shows you understand the field).
- Get licensed by your state.
- Get certified by the American Speech-Language Hearing Association.

**In 2021, the average annual salary was \$79,060 in the US, and \$98,850 in New York State**

For further information you can go to the American Speech- Language-Hearing Association  
[www.asha.org](http://www.asha.org)

# Schools and Resources



# WNY Schools

## **Bryant & Stratton College-Buffalo & Rochester, NY**

Offers degrees in Health Service Administration, Medical Administrative Assistant, Medical Assisting, Medical Reimbursement & Coding, Physical Therapist Assistant, Nursing & Occupational Therapy Assistant.

## **Canisius College-Buffalo, NY**

Offers degrees in Biology, Clinical Laboratory Science, Health and Wellness, Physician Assistant, Pre-Medical, Pre-Health Professions, Sports and Exercise Health Care, Health and Human Performance and Clinical Mental Health Counseling.

## **Daemen College- Amherst, NY**

Offers degrees in Athletic Training, Biology, Health Promotion, Nursing, Physical Therapy, Physician Assistant, Social Work and Public Health.

## **D'Youville College- Buffalo, NY**

Offers degrees in Biology, Chiropractic, Dietetics, Health Analytics, Healthcare Studies, Health Service Administration, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistant, Public Health and Exercise and Sports Studies.

## **Elmira College- Elmira, NY**

Offers degrees in Registered Nursing, Psychology, Biology, Human Services, Clinical Laboratory, Medical Technology, Audiology/Audiologist and Speech-Language Pathology.

## **Medaille College- Buffalo & Rochester, NY**

Offers degrees in Biology, Health Information Management, Veterinary Technology, Clinical Mental Health Counseling and Psychology.

## **Nazareth College-Rochester, NY**

Offers degrees in Biology, Clinical Laboratory Sciences, Psychology, Communication Sciences and Disorders, Speech/Language Pathology, Social Work, Nursing, Public Health, Physical Therapy, Art Therapy, Music Therapy and Interdisciplinary Specialty Program in Autism.

## **Roberts Wesleyan College-Rochester, NY**

Offers degrees in Nursing, Social Work, Psychology, Nursing Leadership/Administration and Pre-health.

## **Rochester Institute of Technology (RIT)- Rochester, NY**

Offers degrees in Biology, Biomedical Sciences, Biomedical Engineering, Psychology, Biotechnology, Diagnostic Medical Sonography, Medical Illustration, Dietetics and Nutrition, Echocardiography, Psychology, Nutritional Sciences, Healthcare Finance and Health Systems Management.

## **St. Bonaventure University-St. Bonaventure, NY**

Offers degrees in Nursing, Occupational Therapy, Physician Assistant Studies, Public Health, Behavioral Neuroscience, Biology, Clinical Mental Health Counseling, Health & Society, Health Science, Pre-Med/Pre-Health, and Psychology.

# WNY Schools

## **St. John Fisher University- Rochester, NY**

Offers degrees in Nursing, Biology, Psychology, Pharmacy, Pre-Health, Public Health and Mental Health Counseling.

## **Trocaire College- Buffalo & Williamsville, NY**

Offers degrees in Nursing, Healthcare Management, Medical Assisting, Radiologic Technology, Surgical Technology, Echocardiography, Diagnostic Medical Sonography, Massage Therapy, and Biology.

## **University of Rochester- Rochester, NY**

Offers degrees in Biology, Biological Sciences, Biotechnology, Brain and Cognitive Science, Health Profession Education, and includes the School of Medicine and Dentistry, offering various degrees such as Public Health, Pharmacology, and the School of Nursing. Visit <https://www.rochester.edu/academics/programs.html> for a full list of programs.

# SUNY WNY Schools

## **Alfred State College- Alfred, NY**

Offers degrees in Biological Science, Health Sciences, Diagnostic Medical Sonography, Health Information Technology, Healthcare Management, Nursing, Radiologic Technology, Computed Tomography, Human Services, Human Services Management, Magnetic Resonance Imaging and Veterinary Science.

## **Buffalo State- Buffalo, NY**

Offers degrees in Biology, Nutrition and Dietetics, Health Promotion Sciences, Social Work, Psychology and Speech-Language Pathology.

## **Erie Community College (ECC)- Buffalo, NY**

Offers degrees in Administrative Healthcare Assisting, Biotechnological Science, Dental Hygiene, Dental Assisting, Dental Laboratory Technology, Emergency Medical Services Provider, Emergency Medical Technology/Paramedic, Health Information Technology, Medical Assisting, Mental Health Assistant-Substance Abuse Counseling, Nursing, Occupational Therapy Assistant, Radiation Therapy Technology, Respiratory Care, Vision Care Technology, Health and Wellness Promotion, Phlebotomy and ECG Technician, Community Public Health Worker and Human Services.

## **Geneseo- Geneseo, NY**

Offers degrees in Biology, Biochemistry, Biophysics, Neuroscience, Psychology, Pre-Medicine, Pre- Veterinary Medicine, and Sociomedical Sciences.

## **Genesee Community College (GCC)-Batavia, NY**

Offers degrees in Health Studies, Nursing, Physical Therapist Assistant, Respiratory Care, Fitness & Recreation Personal Trainer, Gerontology, Alcohol & Substance Abuse Studies, Veterinary Technology and Medical Administrative Assistant.

# SUNY WNY Schools

## **Jamestown Community College (JCC)- Olean, NY**

Offers degrees in Addiction Counseling, Health Information Technology, Healthcare Studies, Nursing, Occupational Therapy Assistant, Math & Science: Nutrition, Social Sciences and Psychology.

## **Niagara County Community College (NCCC)- Buffalo, NY**

Offers associate degrees in Dietetics, Health Studies, Massage Therapy, Medical Assistant, Nursing, Phlebotomist Physical Therapist Assistant, Radiologic Technology and Surgical Technology.

## **SUNY Fredonia-Fredonia, NY**

Offers degrees in Social Work, Medical Technology, Counseling Psychology, Molecular Genetics, Biology, Music Therapy and Speech Language Pathology.

## **Stony Brook University- Stony Brook, NY**

Offers degrees in Biology, Biomedical Engineering, Clinical Laboratory Sciences, Health and Wellness, Health Medicine and Society Nursing, Social Work, Psychology, and Respiratory Care.

## **SUNY Corning Community College (CCC)-Corning, NY**

Offers degrees in Nursing and Community and Public Health Education.

## **University at Buffalo- Buffalo, NY**

Offers degrees in Bioinformatics, Biological Sciences, Biomedical Engineering, Biotechnology, Exercise Science, Health and Human Services, Medical Technology, Medicinal Chemistry, Neuroscience, Nursing, Nutrition Science, Pharmaceutical Sciences, Pharmacology & Toxicology, Physical Therapy, Occupational Therapy, Psychology, Public Health, Psychology, Speech and Hearing Science.

## Programs & Resources

### **BOCES**

BOCES is a great resource for academic and training programs in many career fields. Health Careers/Occupations are available at local BOCES. To enroll, contact your school guidance counselor for more information and check out the BOCES website; [www.boces.org](http://www.boces.org)

### **Genesee Community College ACE: Accelerated College Enrollment**

These programs offer accelerated high school students the opportunity to enroll in college level courses and to earn college credits from Genesee Community College while still in high school. For more information visit <https://www.genesee.edu/resources/high-school-students/accelerated-college-enrollment/>

### **Roberts Wesleyan Biology & Chemistry Lab Camp**

Biology Lab Camp offers study in microscopy, cell processes, genetics and animals including dissections, classification and survey of human body systems. Chemistry Lab Camp offers study of electrolytes/chemical reactions, atomic spectroscopy/water analysis, acids & amp/bases/titrations, energy/freezing points, lipids/polymers/fingerprints. For more information visit <https://www.roberts.edu/summer-at-roberts/summer-camps/>



# Programs & Resources

## **Rochester Educational Opportunity Center (REOC)**

The REOC program is one of ten Educational Opportunity Centers (EOC) in NYS that serve adult learners. Its mission is to deliver comprehensive; community based academic and workforce development programs and provide support services leading to enhanced employment opportunities, access to further education, personal growth and development. The REOC allows for tuition free learning, career services, college placement and support, counseling, and workforce preparation. For more information visit **[reoc.brockport.edu](http://reoc.brockport.edu)**

## **Rochester Institute of Technology (RIT) College of Health Sciences and Technology (CHST) Summer Programs**

CHST offers camps designed for high school students including Bioscience Exploration: Medical Sciences and Microbiology and Infectious Diseases. **For more information visit <https://www.rit.edu/k12/camp-tiger>**

## **SUNY GCC Career Pathways Health Career Academy Program**

Career Pathways Health Careers Academy is a one-year partnership program between Genesee Valley Educational Partnership and Genesee Community College for highly motivated high school seniors interested in exploring the medical field as a career choice. In addition to earning 15 college credits, students investigate a multitude of health careers through job shadows and internships at a variety of related facilities. For more information visit **[www.genesee.edu/resources/high-school-students/accelerated-college-enrollment/career-pathways-academies/](http://www.genesee.edu/resources/high-school-students/accelerated-college-enrollment/career-pathways-academies/)**

## **University of Rochester Career Exploration and Summer Enrichment Programs**

The University of Rochester School of Medicine and Dentistry has a number of programs for high school and college students which focus on increasing physicians and scientists who have diverse social, ethnic, and socioeconomic backgrounds. Programs for high schoolers include Science and Technology Entry Program (STEP)-UP TO MEDICINE, designed to stimulate interests in medicine and health care professions, What's Up Doc? a 2-week program that gives information on what it's like to be a physician, Mini Medical School-a 3-week program for academically advanced students who have an interest in pursuing a career as a physician, Rochester Early Medical Scholars Program (REMS), which provides early exposure to the medical school curriculum for eligible students, Minority Associations of Pre-Health Students (MAPS) which gives information regarding a career in medicine, networking opportunities and an emphasis on clinical medicine. For more information visit **[www.urmc.rochester.edu/education/md/undergraduate-programs.aspx](http://www.urmc.rochester.edu/education/md/undergraduate-programs.aspx)**

## **Upward Bound**

Upward Bound is a program offered by the U.S. Department of Education and helps to generate skills and motivation necessary for success in education beyond high school among low-income and potential first-generation college students and veterans. The goal of the program is to increase the academic performance and motivation levels of eligible enrollees so that such persons may complete secondary school and successfully pursue postsecondary educational programs. Students must have completed 8th grade, be between the ages of 13 and 19 and have a need for academic support in order to pursue a program of postsecondary education. Genesee Community College offers the TRiO Upward Bound Program. For more information visit **<https://www.genesee.edu/resources/high-school-students/accelerated-college-enrollment/trio-upward-bound/>** or **[www2.ed.gov/programs/trioupbound/index.html](http://www2.ed.gov/programs/trioupbound/index.html)**

## **WNY Rural Area Health Education Center**

WNY R-AHEC's mission is "to improve health and healthcare through education." WNY R-AHEC'S vision is to enrich the health of individuals and communities served, by building collaborative relationships and being a valued educational resource that implements innovative programs with passion and integrity. The Scholars Program offers a unique internship opportunity for students in healthcare professions studies. Students from various health and allied health disciplines will experience community-based training activities. For more information visit **[www.r-ahec.org/](http://www.r-ahec.org/)**

# Financial Resources/Scholarship

**New York State offers at least 95 Scholarships.** *Learn about Scholarships from a school counselor, state and federal agencies/organizations, employers, online searches and more.*

## **Academic Scholarships**

Students can win scholarship money based on standardized test scores and transcripts.

## **Athletic Scholarships**

SNCAA Division I and Division II schools also offer athletic scholarships to student-athletes. Full rides are uncommon however and students need to uphold Scholarship requirements.

## **Community Service Scholarships**

Shared to students who have dedicated their time to serving their communities The Equitable Excellence Scholarship, for instance, awards \$2,500, \$10,000 or \$25,000 to U.S. citizens or legal residents who have made a positive impact on their communities and "demonstrate courage, strength and wisdom as shown by community impact through volunteer service."

## **Scholarships Based on Applicant Identities**

Several scholarship programs have a mission to support traditionally underrepresented students. For instance, the Hispanic Scholarship Fund's awards, which range from \$500 to \$5,000 and African American high school seniors can apply for the renewable Ron Brown Scholarship, which totals \$40,000.

## **Need-Based Scholarships**

Scholarships for individuals with financial need. More than 85% of college students receive some form of financial aid.

## **U.S. Department of Labor's Free Scholarship Search Tool**

Scholarship, fellowships, grants, and other award opportunities that could help relieve some financial burden. Visit <https://www.careeronestop.org/toolkit/training/find-scholarships.aspx> for more information

# Financial Resources/Scholarship



The Health Resources & Services Administration (HRSA) has several **student loan repayment** programs for the health workforce. Visit the following website for available programs. <https://nhsc.hrsa.gov/loan-repayment>

## The National Health Service Corps Scholarship

Apply to this scholarship program if committed to primary care and accepted or enrolled in an accredited US school in an eligible primary care discipline.

### Eligible Disciplines include-

- Physician
- Dentist
- Nurse Practitioner (post-graduate degree with clinical practice focus)
- Certified Nurse-Midwives
- Physician Assistants

The **scholarship** pays tuition, fees, other educational costs, and provides a living stipend in return for a commitment to work at least 2 years at an NHSC-approved site in a medically underserved community. Visit the website: <https://nhsc.hrsa.gov/scholarships> for more information on the National Health Service Corps Scholarship.

## NYS Higher Education Services Corporation-Senator Patricia K. McGee Nursing Faculty Scholarship Program

Senator Patricia K. McGee Nursing Faculty Scholarship Program is offered to increase the number of nursing teachers and adjunct clinical faculty in the vital role of preparing New York State's future nurses. Awards are made on a competitive basis to applicants who are registered professional nurses enrolling in graduate programs that will qualify them as nursing faculty or adjunct clinical faculty.

## Healthcare Workers for Our Future Scholarship

The "Healthcare Workers for Our Future" Scholarship provides a two-year scholarship to approximately 500 selected recipients covering tuition, room and board, and other related expenses in an approved program of study at any approved New York state public or private college or university. Fields of study are eligible to apply include: **Registered Nurse, Respiratory Therapist, Clinical Laboratory Technologist, Radiologic Technology and Surgical Technology.**

Applicants must agree to live in New York State and to work in an approved field in a federally-designated Health Professional Shortage Area (HPSA) in New York State for two years within twelve (12) months of graduation.

For more information and to apply visit: <https://www.governor.ny.gov/programs/healthcare-workers-our-future-scholarship>

## Early Opportunity Program in Medicine (EOPIM)

Early Assurance programs allow for academically talented students, to apply to a specific medical school in the spring of their sophomore year or fall of their junior year, depending on the program. Students who have gained the appropriate experiences (i.e. clinical, community service, and research) to confirm their decision of pursuing a medical career may consider applying to one of these programs. The application process is directly between the student and the medical school.

### Eligibility for EOPIM:

In general, most Early Assurance Medical Programs require you to have at least 5 pre-med courses completed by the end of your second year of undergrad. Some Early Assurance Programs require that you be selected for application by your pre-health advisor. As well, your overall academic performance during those first two years is critically important, so high overall and science GPAs are generally required.

### A few participating schools include-

University at Buffalo  
Canisius College

University of Rochester  
Upstate Medical University

Albany Medical  
Penn State College

For more information contact the school you are considering or your school counselor for assistance



## Learn More...

### **Bureau of Labor Statistics**

*Federally run program and website with further information and statistics of different professions. For more career information visit [www.bls.gov](http://www.bls.gov)*

### **New York Health Careers: Information for Current and Future Health Professionals in New York**

*A resource for healthcare professions & occupations in NYS.  
<http://www.healthcareersinfo.net/professions-occupations/>*

### **Center for Health Workforce Studies**

*Provides information on healthcare in NYS  
<https://www.chwsny.org>*

### **Explore Health Careers.org**

*<http://www.explorehealthcareers.org>*

### **WNY R-AHEC Health Career Resource Guide**



**Want to find out more about healthcare careers? We're here to help!**



**WNY Rural Area Health Education Center**

**20 Duncan St. Warsaw, NY 14569**

**Phone: 585-786-6275**

**TDD: 800-662-1220**

**Fax: 585-786-6280**

**Email: [info@r-ahec.org](mailto:info@r-ahec.org)**