



HEALTHCARE PROFESSIONS

A Complete Guide to Careers in Health



EXPLORE CAREERS IN HEALTHCARE!

We are so happy you are considering a career in healthcare! Healthcare is one of the most rapidly growing employment sectors in the United States. It offers job security, flexibility and a wide array of opportunities and experiences. Training can range from a few months for certification programs to graduate and beyond to become a physician or nurse practitioner, for example.

There are many ways you can try to find the right career in healthcare for you:

- **Job Shadows:** An opportunity to observe someone in the role you are interested in. Shadows can be full or half days generally.
- **Health Career Exploration Camps:** Camps are hosted by AHECs, local colleges and some healthcare facilities to provide some hands-on activities to careers in healthcare and hear from experts in those roles. Camps can include simulation exercises for different scenarios that healthcare staff may experience.
- **Reach out to your guidance counselors:** Work with your counselor to connect with colleges related to admissions requirements for some programs to make sure you are on track for your goal. Connect with occupational training programs on their requirements for participation. Take part in career fair and presentations.

Once you have made a decision to continue your education and training, the next step is planning how to pay for it. You can research the following options:

- Scholarships
- Grants
- Loans
- Loan Repayment Programs

As you continue to explore your path in healthcare, remember we are a resource! We can assist with finding job shadow opportunities and we offer healthcare career exploration camps and a Health Career Scholarship for high school seniors and individuals who making a career change to healthcare.

Once you are in training, we can provide assistance with clinical training opportunities (clinical rotations) and we offer the AHEC Scholars program. AHEC Scholars is two-year program for college students in their final two years of training. Scholars provides additional experience for students that can provide additional distinction as well as earn a stipend for each year of participation!

Interested in learning more? Reach out to us at admin@hmahec.org

Check out our website: www.hmahec.org and Facebook: [@HudsonMohawkAHEC](https://www.facebook.com/HudsonMohawkAHEC)

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AUDIOLOGIST

An Audiologist is an ear doctor who assess and treats people with hearing and balance disorders. Audiology is closely connected to the field of speech-language pathology (SLP), because some speech problems are a direct result of hearing problems.

The NYSDOL reports that an **audiologist in New York earned an average annual salary of \$85,500, (entry level-\$65,500, experienced- \$118,570).**

Where do audiologists work?

- Healthcare facilities- physicians' offices, audiology clinics, and hospitals
- Schools
- Health and personal care stores

What education/training is needed?

- Bachelor's Degree
- Doctoral Degree
- Pass licensing exam for the state(s) you want to work in

Years in higher education: 8

What is the demand for this occupation?

The job outlook is bright with expected employment growth. The Bureau of Labor Statistics projects that the number of **audiology jobs in the U.S. will increase by 20.7% between 2016 and 2026, and in New York by 22.8% during the same time period.** An aging population in the U.S. will increase demand for audiologists as hearing loss and balance impairments are strongly associated with older people.

What colleges in NYS offer training?

- **Syracuse University**, *Syracuse, NY*
- **University of Buffalo-SUNY**, *Buffalo, NY*
- **Elmira College**, *Elmira, NY*
- **Nazareth College**, *Rochester, NY*
- **SUNY Cortland**, *Cortland, NY*



CARE COORDINATORS

Care coordinators facilitate communication between patients, family members, medical staff, administrative staff, social service organizations, and other health care providers. They assess the person's physical, social, psychological, and financial needs. They are often the first contact for provision of information to the patient or physician on behalf of attending physicians and they help patients with complex care needs navigate the health care system. They are familiar with community services and resources available to patients, and refer patients to appropriate health care services or resources.

The average salary for a care coordinator is \$41,000.

Where do care coordinators work?

- Hospitals, health centers and clinics, care management organizations, home health care and other community based organizations

What education/training is needed?

- Bachelor's degree
- Most care coordinators have degrees in social work, nursing, or public health

Years in higher education: 4

What is the demand for this occupation?

Increased demand for this profession can be attributed to changes in health care systems (i.e. coordinating multiple provider organizations), an aging population, and the complex needs of chronic disease patients.

The demand for care coordinators is expected to grow by 32% from 2020-2030.

What colleges in NYS offer training for this profession?

- Lehman College-CUNY, Bronx, NY
- College of St. Rose, Albany, NY
- College at Brockport-SUNY, Brockport, NY
- SUNY Fredonia, Fredonia, NY
- SUNY Buffalo, Buffalo, NY
- University at Albany-SUNY, Albany, NY



FAST FACT

Gender diversity of care management majors in NY: 80% women, 20% men.

CERTIFIED NURSE MIDWIVES

Midwives are health care professionals who provide primary and preventive reproductive health care to women: first exams, pre-conception counseling, gynecological exams, and family planning advice. Midwives also manage pregnancies, deliver babies, and provide prenatal and postpartum care to women and their infants. Midwives also perform newborn evaluation and resuscitation, if necessary, and refer infants for further assessment or treatment at the time of delivery.

The scope of practice for midwives varies depending on the state(s) they work in. In New York, midwives are authorized to prescribe and administer medications, immunizing agents, diagnostic tests and devices, and order laboratory tests.

The NYSDOL reports that **midwives in New York earned an average annual salary of \$120,380, (entry level-\$83,130, experienced- \$161,820).**

Where do midwives work?

- Hospitals
- Clinics
- Private practices
- Midwives assist births and deliver babies wherever they may occur, including hospitals, birthing centers, and clients' homes.

What education/training is needed?

- Bachelor's degree for entry, but some will accept Registered Nurses (RNs) without a Bachelor's Degree, providing a bridge program to a Bachelor of Science in Nursing (BSN) prior to the midwifery portion of the program
- One year of nursing experience
- Three years in a nurse midwifery program
- To meet the examination requirement for licensure as a midwife in New York, an applicant must pass the examination developed and administered by the American Midwifery Certification Board (AMCB).

Certified nurse midwives (CNM) are educated in both nursing (usually as an RN) and midwifery. Certified midwives (CM) are professionally credentialed in midwifery.

Years in higher education: 7-8

What is the demand for this occupation?

The number of midwives in New York has been steadily growing. Health insurance coverage of midwifery services nationwide and in NY will likely contribute to the increasing demand for midwives.

According to the BLS, **the number of nurse midwife jobs will increase nationally by 20.7% between 2016-2026, and will increase in New York by 24.1% during the same period.**

What colleges in NYS offer training for this profession?

- **Columbia University**, School of Nursing, *New York, NY*
- **NYU**, College of Nursing, *New York, NY*
- **SUNY Downstate Medical Center**, College of Health-Related Professions, *Brooklyn, NY*
- **Stony Brook University**, School of Nursing, *Stony Brook, NY*

CERTIFIED NURSING ASSISTANTS

Nursing assistants provide basic patient care under the supervision of a registered nurse, licensed practical nurse, or other medical staff. Nursing assistants may take and record a patient's temperature, pulse, and blood pressure; assist patients with activities of daily living, such as feeding, bathing, dressing, and toileting; help patients to get in and out of bed; and assist with nursing procedures. They also answer calls for assistance and help, deliver messages, serve meals, make beds, and tidy up rooms. Nursing assistants also observe patients' physical, mental, and emotional conditions and report the status or changes to the nursing or medical staff.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **nursing assistants in New York earned an average annual salary of \$38,810, (entry level-\$26,980, experienced- \$51,030).**

Where do nursing assistants work?

- Hospitals
- Assisted living centers
- Nursing homes
- Home care
- Hospice
- Community based long-term care
- Correctional institutions

What education/training is needed?

- G.E.D. or high school diploma
- Nursing assistants who work in nursing homes in New York must be certified, which includes completing an approved 100-hour training program, passing a competency examination, and becoming listed on the New York State Nurse Aide Registry.

Certified nursing assistant training is available in a variety of settings, including high schools (usually through a Board of Cooperative Educational Services (BOCES) program), proprietary schools, community colleges, adult education classes at some universities, and in some instances, nursing homes and nonprofit community organizations.

Years in higher education: 0-1

What is the demand for this occupation?

The need for nursing assistants is growing because as the country's population ages, demand for health care services rises, particularly long-term care for older adults. Between 2016 and 2026, **the number of jobs for nursing assistants is projected to increase by 11.5% nationwide and increase by 15.8% in New York during the same period.**

What colleges in NYS offer training for this profession?

- **Fulton Montgomery Community College, Johnstown, NY**
- **Mohawk Valley Community College, Utica, NY**
- **Schenectady County Community College, Schenectady, NY**

For a list of approved nursing aide training programs from the New York State Education Department, go to: www.op.nysed.gov/prof/nurse/nurseprogs-cna.htm

CHIROPRACTOR

Chiropractors are licensed health professionals who diagnose and treat patients with problems related to the musculoskeletal system, which is made up of bones, muscles, ligaments, and tendons. Chiropractors use spinal manipulation and other techniques to treat patients' ailments, such as back or neck pain.

Chiropractors focus on patients' overall health. Many believe that misalignments of the spinal joints interfere with a person's nervous system and can result in lower resistance to disease and many different conditions of diminished health.

Chiropractors will typically analyze a patient's posture and spine and use manual and mechanical manipulation of the spinal column and vertebrae to treat ailments, such as back or neck pain. They may also conduct additional diagnostic tests, including evaluating a patient's posture or taking x-rays, and advise patients on health and lifestyle issues, such as exercise and sleep habits. A chiropractor may also refer patients to other medical specialists, if needed.

Chiropractors do not prescribe drugs or perform surgery.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **chiropractors in New York earned an average annual salary of \$82,760, (entry level-\$53,890, experienced- \$117,100).**

Where do chiropractors work?

- Most chiropractors are self-employed and work in a solo or group practice
- A small number teach or conduct research at chiropractic institutions
- Hospitals and clinics

What education/training is needed?

- Bachelor's degree
- Four-year Doctor of Chiropractic (DC) degree program
- In order to be licensed as a chiropractor in New York, an individual with a DC degree from an accredited school of chiropractic must pass the National Board of Chiropractic Examiners (NBCE) four-part examination

Years in higher education: 7-8

What is the demand for this occupation?

Employment of **chiropractors nationwide is expected to increase 12.5% between 2016 and 2026, and increase in New York by 20.5% for the same period.** Projected job growth stems from increasing consumer demand for alternative methods of health care. The rapidly growing elderly population will likely increase the demand for chiropractic services, too, due to the prevalence of mechanical and structural problems in this population. Also, the non-surgical, holistic approach used by chiropractors is becoming more accepted and popular across the nation.

What colleges in NYS offer training?

- **New York Chiropractic College, Seneca Falls, NY**
- **D'Youville College, Buffalo, NY**

COMMUNITY HEALTH WORKERS

Community health workers assist individuals and communities to adopt healthy behaviors. They also conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health. Community health workers provide information on available resources, provide social support and informal counseling, and advocate for individuals and community health needs. Additionally, they may collect data to help identify community health needs.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **community health workers in New York earned an average annual salary of \$45,040, (entry level-\$28,280, experienced- \$69,680).**

Where do community health workers work?

- Health facilities- providing case management, client education, interpretive services, follow-up care, and patient navigation
- Government agencies and non-profit groups-providing community organization, health education, insurance enrollment, and preventive care services in the field

They are most often found working in underprivileged, marginalized communities where people may have limited resources and lack of access to quality health care.

What education/training is needed?

- Associate degree or Bachelor's degree

Educational requirements for community health workers vary by location and roles.

Years of higher education: 2-4

What is the demand for this occupation?

The Bureau of Labor Statistics projected that the total number of **community health worker jobs will increase by 26.1% in New York, much higher than the projected increase of 18.1% nationwide between 2016 and 2026.**

What colleges in NYS offer training?

- **Community Health Worker Network (NYC), New York, NY**
- **Community Health Worker Network of Buffalo, Buffalo, NY**
- **LaGuardia Community College, Long Island City, NY**
- **Schenectady County Community College, Schenectady, NY**
- **York College-CUNY, Jamaica, NY**
- **Hostos Community College, Bronx, NY**
- **Kingsborough Community College, Brooklyn, NY**
- **SUNY Downstate Health Sciences University, Brooklyn, NY**



FAST FACT

Community health workers go by many titles. Common titles include health coach, community health advisor, family advocate, health educator, and liaison.

DENTIST

Dentists diagnose and treat problems with teeth and tissues in the mouth, along with giving advice and administering care to help prevent future dental problems. They provide oral health education and instruction on diet, brushing, flossing, and the use of fluorides. They remove tooth decay, fill cavities, examine x-rays, place protective sealants on children's teeth, straighten teeth, extract or repair damaged teeth, and perform corrective surgery on gums and supporting bones to treat gum diseases.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **dentists in New York earned an average annual salary of \$167,090, (entry level-\$106,680, experienced- \$195,520).**

Where do dentists work?

- The vast majority of dentists work in private group or solo practices
- Dental clinics
- Hospitals
- Academic settings

What education/training is needed?

- Bachelor's degree
- Dental school for an additional four years

New York Licensure requirements: Dentists who practice in New York must be licensed and requirements include graduating from an accredited dental education program and passing the National Board Dental Examination. Continuing education is also required for active dentists to maintain licensure.

Years of higher education: 8

What is the demand for this occupation?

According to the BLS, between 2016 and 2026, the number of general **dentist jobs nationwide is projected to increase by 19.4%, and in New York by 22.2% during the same time period.** The demand for dental care in New York and around the country is expected to increase as the population ages.

What colleges in NYS offer training?

- **Columbia University**, College of Dental Medicine, *New York, NY*
- **NYU**, College of Dentistry, *New York, NY*
- **Stony Brook University**, School of Dental Medicine, *Stony Brook, NY*
- **University of Buffalo**, School of Dental Medicine, *Buffalo, NY*



DENTAL ASSISTANT

Dental assistants perform a wide array of clinical and administrative duties under the supervision of a dentist. They assist the dentist during dental examinations and treatments, such as preparing the patient, taking x-rays, sterilizing instruments, assisting with instruments and materials, and instructing patients about general and post-operative oral health care. Dental assistants may also have administrative duties, including scheduling appointments, maintaining patient files, and billing for services.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **dental assistants in New York earned an average annual salary of \$40,680, (entry level-\$27,610, experienced- \$56,580).**

Where do dental assistants work?

- Private dental offices
- Group practices
- Hospitals
- Insurance companies
- Dental suppliers
- Dental manufacturing companies
- Armed services
- Educational institutions
- Public health facilities

What education/training is needed?

To be a certified dental assistant in New York, an individual must complete a dental assistant education program approved by the New York State Education Department or an alternate course of study that is considered equivalent to an approved program. These programs are typically one year in length and are available at community colleges and local Boards of Cooperative Education (BOCES).

Years in higher education: 1

What is the demand for this occupation?

Between 2016 and 2026, the BLS projects the number of **dental assistant jobs will increase by 19.5% nationwide and by 22.8% in New York during the same time period.** Future projections indicate a continued high demand for assisting services.

What colleges in NYS offer training?

- **Hudson Valley Community College**, Troy, NY
- **Monroe Community College**, Rochester, NY
- **Nassau BOCES**, Westbury, NY
- **Onondaga-Cortland-Madison BOCES**, Liverpool, NY
- **Greater Southern Tier BOCES**, Elmira, NY
- **Stony Brook University**, School of Dental Medicine, Stony Brook, NY
- **SUNY- Erie Community College**, Williamsville, NY

DENTAL HYGIENIST

Dental hygienists are licensed health professionals who provide preventive dental care, perform oral health assessments and teeth cleanings, apply cavity preventive agents to teeth, take and develop x-rays, and educate patients on proper oral hygiene techniques. Under the supervision of dentists, dental hygienists in New York are permitted to administer and monitor local infiltration anesthesia and nitrous oxide.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **dental hygienists in New York earned an average annual salary of \$76,960, (entry level-\$55,120, experienced- \$100,390).**

Where do dental hygienists work?

- Dental offices and clinics
- Schools
- Hospitals
- Nursing homes
- Community health clinics and
- Federal, state, and county health departments

What education/training is needed?

- Associate or Bachelor's degree
- Dental hygienists who practice in New York must be licensed. Requirements include graduating from an accredited dental hygiene education program and passing the written and clinical certification examinations, which are administered from a national organization. Continuing education is also required for active dental hygienists in order to maintain licensure.

Years in higher education: 2-4

What is the demand for this occupation?

Growing interest in preventive oral health care is expected to create more demand for dental hygienists. The Bureau of Labor Statistics projects that between the 2016 and 2026, **the number of dental hygienist jobs will increase by 19.7% nationwide and will increase by 22.7% in New York during the same time period.**

What colleges in NYS offer training?

- **Broome Community College-SUNY, Binghamton, NY**
- **NYC College of Technology-CUNY, Brooklyn, NY**
- **Erie Community College-SUNY, Williamsville, NY**
- **Hostos Community College-CUNY, Bronx, NY**
- **Monroe Community College, Rochester, NY**
- **NYU College of Dentistry, New York, NY**
- **SUNY Orange, Middletown, NY**
- **Farmingdale State College-SUNY, Farmingdale, NY**



FAST FACT

More than half of dental hygienists work part time.

DIETITIANS AND NUTRITIONISTS

Dietitians and Nutritionists assess the nutritional needs of patients after consulting with physicians and other healthcare professionals. They are experts in designing nutrition programs to protect health, prevent allergic reactions, and help people avoid symptoms of disease. Dietitians and nutritionists find out what their patient's nutritional needs are, create plans to meet those needs, and report and evaluate their results.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **dietitians and nutritionists in New York earned an average annual salary of \$68,590, (entry level-\$47,930, experienced- \$91,890).**

Where do dietitians and nutritionists work?

Dietitians and nutritionists may work as clinicians, managers, researchers, or consultants and are found in a variety of settings.

- Hospitals
- Nursing homes
- Health clinics
- Home health agencies
- Doctors' offices
- Schools
- Health clubs
- Cafeterias
- Private practices

What education/training is needed?

- Bachelor's degree: while it is possible to be certified as a dietitian and nutritionist with an associate degree from an accredited educational program and more time in an approved work experience, most New York educational programs offer bachelor's or advanced degrees.
- Dietitians and nutritionists who practice in New York must be certified by one of the two national certifying organizations.

What is the demand for this occupation?

The number of **dietitians and nutritionists nationwide is projected to increase more than 14.6% between 2016 and 2026, and more than 21.3% in New York in the same time period.**

This increase is attributable in part to the increasing awareness of the relationship between diet and health. Job opportunities are expected to increase in nursing homes, community health centers, physicians' offices, and home health agencies. An increasing number of dietitians and nutritionists are expected to be self-employed. Fewer new jobs are expected at hospitals.

What colleges in NYS offer training?

- **Buffalo State-SUNY**, Buffalo, NY
- **Cornell University**, Ithaca, NY
- **Long Island University**, Brookville, NY
- **Russell Sage College**, Troy, NY
- **SUNY Oneonta**, Oneonta, NY
- **SUNY Plattsburgh**, Plattsburgh, NY
- **SUNY Morrisville**, Morrisville, NY
- **Schenectady Community College**, Schenectady, NY

Years in higher education: 4-5

EMERGENCY MEDICAL TECHNICIANS (EMT) AND PARAMEDICS

Emergency medical technicians (EMTs) and paramedics (EMTs with advanced training to perform more difficult pre-hospital medical procedures) provide vital care and attention at the scene of an emergency. In an emergency, EMTs and paramedics are dispatched to the scene usually by a 911 operator and often work with police and fire department personnel. Once they arrive, they determine the nature and extent of a person's condition and administer appropriate level of care.

EMTs are trained to care for patients at the scene of an accident and while transporting patients by ambulance to the hospital. EMTs have the emergency skills to assess a patient's condition and manage respiratory, cardiac, and trauma emergencies.

Paramedics provide the most extensive pre-hospital care. In addition to carrying out all the procedures described above, paramedics are responsible for stabilizing patients during a medical emergency, preparing them for transfer to a hospital, if necessary, and for providing medical care in route to a hospital. Paramedics may administer drugs (including narcotics) orally and intravenously, interpret ECGs, perform tracheotomies, and use various monitors and other complex equipment.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **EMTs and Paramedics in New York earned an average annual salary of \$44,920, (entry level-\$27,190, experienced- \$67,870).**

Where do EMTs and Paramedics work?

EMTs and paramedics work from ambulances and other emergency vehicles:

- Indoors and outdoors in an array of settings and
- In all types of weather

What education and training is needed?

- A high school diploma is required to start a training program to become an EMT or paramedic.
- EMTs are certified by the Bureau of Emergency Medical Services (EMS) in New York, which is a part of the New York State Department of Health (NYSDOH).

- To be a certified as an EMT or AEMT (advanced emergency medical technician), you must be 18 by the end of the month the exam is taken.
- Formal training and certification is required through course sponsors approved by NYSDOH.
- Paramedics complete more training than an EMT and some programs may offer an associate degree along with the formal EMT training.
- Candidates for EMT and paramedic certification in New York must pass both written and skills performance state examinations from an approved New York State program.
- To maintain certification in New York, EMTs and paramedics must reregister every three years.

Years in higher education: 0-2

What is the demand for EMTs/Paramedics?

Between 2016 and 2026, the Bureau of Labor Statistics projects **the total number of EMTs and paramedics jobs nationwide will increase by 15.1%, and by 23.4% in New York.**

As population and urbanization increase, emergencies such as car crashes, natural disasters, and violence will continue to create demand for EMTs and paramedics. There will also continue to be demand for part-time, volunteer EMTs and paramedics in rural areas and smaller metropolitan areas.

Growth in the middle-age and elderly population from the large cohort of aging baby boomers will likely lead to an increase in the number of age-related health emergencies, such as heart attacks or strokes. The potential for more of these types of medical emergencies also points to continued growing demand for EMTs and paramedics.

What colleges in NYS offer training?

- **SUNY Broome**, *Binghamton, NY*
- **SUNY Cobleskill**, *Cobleskill, NY*
- **Hudson Valley Community College**, *Troy, NY*
- **Herkimer College-SUNY**, *Herkimer, NY*
- **Finger Lakes Community College**, *Geneva, NY*



EPIDEMIOLOGIST

Epidemiologists are public health professionals who investigate disease patterns, causes, and injury in humans. Epidemiologists seek to reduce the occurrence and risk of negative health outcomes through research, community education, and health policy.

Epidemiologists tend to typically specialize in one or more of the following public health areas:

- Infectious diseases
- Chronic diseases
- Occupational health
- Public health preparedness
- Environmental health
- Behavioral epidemiology
- Maternal and child health
- Injury
- Oral health

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **epidemiologists in New York earned an average annual salary of \$93,480, (entry level-\$63,490, experienced- \$108,470).**

Where do epidemiologists work?

- State and local government
- Hospitals
- Colleges and universities

The work environment of an epidemiologist is typically in an office setting or laboratory, at state and local government health departments. Due to the diversity of the epidemiologic specializations, work environments vary greatly.

What education/training is needed?

- Master's Degree: Most epidemiologists need a minimum of a master's degree in public health.
- Some epidemiologists have completed a doctoral degree in epidemiology or medicine.
- Epidemiologists working in clinical capacities often have an epidemiology degree as well as a medical degree.

Years in higher education: 6-9

What is the demand for this occupation?

Epidemiologist demand outlook is **expected to grow to 8.8% in the United States between 2016 and 2026. The expected growth rate for epidemiologists in New York during the same period is 14.8%.**

What colleges in NYS offer training?

- **Columbia University, New York, NY**
- **University of Rochester, Rochester, NY**
- **SUNY Downstate Health Sciences University, Brooklyn, NY**
- **Icahn School of Medicine at Mt. Sinai, New York, NY**
- **New York Medical College, Valhalla, NY**
- **CUNY Graduate School of Public Health and Health Policy, New York, NY**
- **University at Albany, SUNY, Albany, NY**
- **University of Buffalo, Buffalo, NY**

HEALTHCARE ADMINISTRATORS

Healthcare administrators oversee the staff of a medical facility. They may supervise and manage one department or the whole facility depending on the need and availability of administrators. Responsible for staffing and financial aspects of the medical facility in which they work, healthcare administrators help a facility run smoothly with constantly changing healthcare regulations and cutbacks.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **health care administrators and medical and health service managers in New York earned an average annual salary of \$147,000, (entry level-\$76,380, experienced- \$170,090).**

Where do Healthcare Administrators work?

- Hospitals
- Clinics
- Offices of physicians and group medical practices
- Nursing homes
- Home health care agencies
- Government or community-based organizations

What education/training is needed?

- Bachelor's degree: A bachelor's degree is adequate for some entry-level positions in smaller facilities, at the departmental level within health care organizations, and in health information management.
- Master's degree: many have a master's degree in health services administration, long-term care administration, health sciences, public health, public administration, or business administration.

Years in higher education: 4-6

What is the demand for this occupation?

Between 2016 and 2026, the Bureau of Labor Statistics projects a **20.5% increase of jobs**

for medical and health services managers nationwide and a 22.3% increase in New York during the same time period.

The health care industry continues to expand and diversify, requiring managers and administrators to help ensure smooth business operations and improve quality and efficiency of health care, while controlling costs. Additional demand for medical and health services managers will stem from the need to recruit workers and increase employee retention; comply with changing health care policies and regulations; implement new technologies, such as computerization of patient records; and help improve health services for patients and medical staff by emphasizing preventive care.

What colleges in NYS offer training?

- **Ithaca College**, *Ithaca, NY*
- **Cornell University**, *Ithaca, NY*
- **Hofstra University**, *Hempstead, NY*
- **Clarkson University**, Union College Capital Region Campus, *Schenectady, NY*
- **SUNY Canton**, *Canton, NY*
- **SUNY Brockport**, *Brockport, NY*
- **Russell Sage College**, *Albany, NY*
- **Utica College**, *Utica, NY*
- **Syracuse University**, *Syracuse, NY*

HEALTH EDUCATORS

Health educators teach people about behaviors that promote wellness and encourage people to make healthy decisions. Health educators promote and improve individuals' and community health by identifying disease risk behaviors and developing programs that help people adopt and maintain healthy behaviors. Health educators also serve as a resource to assist other health care professionals and organizations in program development and implementation.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **health educators in New York earned an average annual salary of \$57,640, (entry level-\$36,960, experienced- \$67,980).**

Where do Health Educators work?

- Local, state, or federal government agencies
- Hospitals
- Schools, colleges
- Workplaces
- Public health settings
- Individual and family services agencies
- Outpatient care centers

What education/training is needed?

- Bachelor's degree is needed for entry-level positions.
- Most health educators hold Master's degrees.
- There are some formal programs in health education, but many health educators graduate from educational programs in nursing, public health, or related fields. Some employers may require the certified health education specialist credential.
- New York does not license health educators. Special certification is available for a certified health education specialist (CHES) from the National Commission for Health Education Credentialing, Inc.

Years in higher education: 4-5

What is the demand for this occupation?

Between 2016 and 2026, the Bureau of Labor Statistics projects that **the total number of health educator jobs in New York will increase by 24.0%, and by 14.5% nationwide.**

What colleges in NYS offer training?

- **Graduate School of Public Health and Health Policy**, CUNY, *New York, NY*
- **Hofstra University**, *Hempstead, NY*
- **New York Medical College**, School of Health Sciences and Practice, *Valhalla, NY*
- **Ithaca College**, *Ithaca, NY*
- **SUNY-Buffalo College**, *Buffalo, NY*
- **SUNY-Cortland**, *Cortland, NY*
- **Lehman College**, *Bronx, NY*

HOME HEALTH AIDES

Home health aides work in the homes of people who need assistance in caring for themselves. They often help people who are disabled, chronically ill, or cognitively impaired. They also help older adults who may need assistance or people recovering from an illness who may live alone or need more assistance than their families can provide. Home health aides usually work under the supervision of a registered nurse or other health care practitioner to provide basic patient care.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **health home aides in New York earned an average annual salary of \$29,290, (entry level-\$23,960, experienced- \$37,510).**

Where do Home Health Aides work?

- Home health aides are usually employed by home health agencies and work in patients' homes. Home health aides often visit multiple patients on the same day.
- Some home health aides work in small group homes or larger care communities.

What education/training is needed?

- High school diploma.
- Home health aides in New York must complete a 75-hour Department of Health training program. These training programs are available in a variety of settings, including high schools typically working through a Board of Cooperative Educational Services (BOCES), vocational-technical schools, nursing care facilities, community colleges, and some home health agencies.
- The National Association for Home Care and Hospice offers certification for home health aides. <http://www.nahc.org>.

Years in higher education: Not needed

What is the demand for this occupation?

For the decade between 2016 and 2026, the Bureau of Labor Statistics projects a **47.3% rise nationwide in the number of Home Health Aides positions, and a 52.4% increase in the number of Home Health Aide positions in New York during the same time period.**

Demand for Home Health Aides is growing significantly, attributable in part to the aging of the country's population. Elderly and disabled clients increasingly rely on home care as a less expensive alternative to nursing homes or hospitals. Clients who need help with everyday tasks and household chores, rather than medical care, can reduce their medical expenses by living in their homes and receiving medical care from a Home Health Aide.

What colleges in NYS offer training?

- **Fulton-Montgomery Community College,**
Johnstown, NY
- **Schenectady Community College,**
Schenectady, NY
- **Finger Lakes Community College,**
Canandaigua, NY

LICENSED PRACTICAL NURSE

Licensed practical nurses (LPNs) are health professionals who work under the supervision of a registered nurse (RN) or a physician and provide basic patient care. Their duties may include taking vital signs and monitoring patients' health, administering medications, carrying out prescribed medical treatments, supervising nursing aides, observing and reporting patient progress to RNs and physicians, and educating and supporting patients and their families.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **licensed practical and vocational nurses in New York earned an average annual salary of \$49,860, (entry level-\$36,030, experienced- \$63,230).**

Where do Licensed Practical Nurses work?

- Nursing homes
- Private physician practices
- Hospitals, and a variety of other health care settings

What education/training is needed?

- LPNs must complete an accredited education program, which are typically about one year in length and include clinical practice in a hospital or other health care setting and classroom study that covers basic nursing content.
- Some LPN educational programs are available to high school students, usually through a local BOCES. Most LPN programs are offered to adults as academic or continuing education courses through a BOCES, community or junior college, and some four-year colleges.

Graduates of LPN education programs must pass an exam, known as the NCLEX-PN, to get a license and work as an LPN in New York and in all U.S. states.

Years in higher education: 1-2 years

What is the demand for this occupation?

The number of **jobs for LPNs nationwide is expected to increase 12.3% between 2016 and 2026, and increase in New York by 18.4% during the same time period.** As the population ages, growing demand for LPNs is expected to increase, especially in long-term care settings. Additionally, as technology advances allow more offices, clinics, and ambulatory settings to offer services that were once only available in hospitals, these settings may increase the use of LPNs.

What colleges in NYS offer training?

- **Capital Region BOCES, Albany, NY**
- **Champlain Valley BOCES, Plattsburgh, NY**
- **Herkimer BOCES, Ilion, NY**
- **Maria College, Albany, NY**
- **Mildred Elley, Albany, NY**
- **WSWHE BOCES, Hudson Falls, NY**
- **Samaritan Hospital, Troy, NY**

MEDICAL ASSISTANTS

Medical assistants perform administrative and clinical tasks to keep the offices of physicians, podiatrists, chiropractors, and other health practitioners running smoothly. Medical assistants aid office staff and health care practitioners in daily operations.

Administrative duties include: answering telephones, scheduling appointments, greeting patients, updating and filing patient medical records, arranging for hospital admissions, and some billing and bookkeeping tasks.

Clinical duties vary according to what is allowed by each state's law. Clinical responsibilities may include such tasks as taking medical histories from patients and recording their vital signs, explaining treatment procedures to patients, preparing patients for examinations, and providing assistance during exams.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **medical assistants in New York earned an average annual salary of \$38,590, (entry level-\$28,530, experienced- \$50,930).**

Where do Medical Assistants work?

- Offices of physicians and other health care providers
- Hospitals

What education/training is needed?

- High school diploma
- Formal educational programs in medical assisting are offered in vocational-technical high schools, postsecondary vocational schools, community and junior colleges, as well as some colleges and universities. These programs generally last one or two years, culminating in a certificate, diploma, or associate degree.

Years in higher education: 1-2

What is the demand for this occupation?

Between 2016 and 2026, the Bureau of Labor Statistics projects that **the number of medical assistant jobs in the U.S. will increase by 29.0%, and will increase in New York by 35.1% during the same period.**

Helping to drive this excellent job growth is the increasing number of group practices, clinics, and other health care facilities that need a high proportion of support personnel, particularly medical assistants who can handle both administrative and some clinical duties. In addition, medical assistants work mostly in primary care, a consistently growing sector of the health care industry.

What colleges in NYS offer training?

- **Erie Community College**, *Williamsville, NY*
- **Mildred Elley School**, *Albany, NY*
- **Niagara County Community College**, *Sanborn, NY*
- **Columbia Green Community College**, *Hudson, NY*
- **Onondaga Cortland Madison BOCES**, *Cortland, NY*

MEDICAL BILLERS

Medical billers calculate health care provider charges, develop bills, and prepare them to be mailed to patients. By reviewing medical and hospital records and making or verifying calculations, they ensure that even the most complicated bills are accurate. Medical billers are responsible for timely submission of medical claims to insurance companies. Medical billers may also be responsible for crediting patient accounts, appealing reimbursement denials, and tracking accounts receivables for providers.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **medical billers in New York earned an average annual salary of \$31,030, (entry level-\$32,300, experienced- \$63,940).**

Where do Medical Billers work?

- Hospitals
- Nursing homes
- Physician offices
- Skilled nursing facilities
- Home health agencies
- Health clinics

Billing clerks are typically employed in an office environment, although a growing number—particularly medical billers—work from home or a separate office, either as independent contractors or with firms that specialize in medical billing.

What education/training is needed?

- High school diploma: however, many employers prefer to hire workers who have a degree or have completed some college courses such as communication, accounting, and basic computer courses
- Medical billers can obtain training in a variety of ways, including on-the-job or through certificate or associate degree education programs and web-based learning
- Many community colleges and other colleges offer certificate programs in medical billing

Traditionally, billers have either been trained on-the-job or have been medical coders who do both the coding and billing. However, the shortage of coders and the growing demand for skilled medical billing specialists have employers looking for professionals who know billing basics.

Years in higher education: 0-2

What is the demand for this occupation?

The medical billing occupation is expected to see strong growth in the health care industry as numerous recent state and federal reforms will make health care available to many more people. The BLS projects that between 2016 and 2026, **the number of jobs for Billing and Posting Clerks will increase by 14.1% nationwide. The New York State Department of Labor projects that the number of jobs will increase by 22.4% in New York during the same period.**

What colleges in NYS offer training?

- **Schenectady Community College**, Schenectady, NY
- **Hudson Valley Community College**, Troy, NY
- **Mohawk Valley Community College**, Utica or Rome campus

MEDICAL CODERS

Medical coders are health information technicians who assign codes used for the billing and reimbursement of health services.

Medical coders may also review patient information for preexisting conditions such as diabetes, retrieve patient records for medical personnel, and work as a liaison between the health clinician and billing offices.

This is one of the few health-related occupations in which there is little or no direct contact with patients.

Medical coders are part of a larger Bureau of Labor Statistics (BLS) occupational category, "Medical Records and Health Information Technicians." Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **medical coders in New York earned an average annual salary of \$57,847, (entry level-\$43,194, experienced- \$76,940).**

Where do Medical Coders work?

- Hospitals
- Physician offices
- Clinics
- Nursing homes
- Health care consulting firms
- Insurance companies

What education/training is needed?

- Associate degree: Some schools may link medical coding with medical billing for a combined degree. The education programs in medical coding generally take between two and three semesters and consist of courses in medical terminology, anatomy and physiology, computer skills, and coding data sets.
- Many employers favor technicians who have become Registered Health Information Technicians (RHIT).

Years in higher education: 2

What is the demand for this occupation?

Between 2016 and 2026, the BLS projects that the **total number of medical records and health information technician jobs in New York will increase by 20.9%, and increase by 13.5% nationwide.**

Employment growth for medical coders will result from the increase in the number of medical tests, treatments, and procedures that will be performed as the population ages. In addition, because of state and federal health care reform legislation, more Americans are expected to get health insurance and the use of electronic health records is also expected to grow, increasing the need for medical coders.

What colleges in NYS offer training?

- **Bryant and Stratton College**
- **Mohawk Valley Community College, Utica or Rome campus**
- **Schenectady Community College, Schenectady, NY**
- **Herkimer Community College, Herkimer, NY**
- **Hudson Valley Community College, Troy, NY**

MEDICAL AND CLINICAL LAB TECHNOLOGIST

Medical and clinical laboratory technologists and technicians collect samples and perform tests to analyze body fluids, tissue, and other substances.

Medical technologists perform more complex tests and procedures than technicians do, and they typically supervise technicians.

Medical and clinical laboratory technologists examine blood and other body fluids, analyze samples, and determine concentrations of compounds. They also collect and study blood samples for use in transfusions by identifying the number of cells, the cell morphology or the blood group, blood type, and compatibility with other blood types. In their work, they operate sophisticated laboratory equipment and computerized instruments. They may also supervise or train medical laboratory technicians.

The NYSDOL reports **medical and clinical laboratory technologists and technicians in New York earned an average annual salary of \$65,560, (entry level-\$36,560, experienced- \$96,820).**

Where do Medical Clinical Lab Technologists work?

- Hospital clinical laboratories
- Commercial or reference laboratories
- Public health laboratories
- Pharmaceutical or chemical industries
- Biotechnology companies
- Forensic and law enforcement laboratories
- Veterinary clinics
- Research and teaching institutions
- Transplant and blood donor centers
- Fertility clinics
- The cosmetics or food industry

More than half of medical and clinical laboratory technologists work in hospitals. Most of the remaining jobs were in physician offices and in medical and diagnostic laboratories. A small number work in educational services and other ambulatory health care services.

What education/training is needed?

- Bachelor's degree

Years in higher education: 4

What is the demand for this occupation?

The Bureau of Labor Statistics forecasts that **employment for medical laboratory technologists will grow 16% between 2014 and 2024**, much faster than the average for all occupations.

What colleges in NYS offer training?

- **SUNY Plattsburgh**, *Plattsburgh, NY*
- **SUNY Buffalo**, *Buffalo, NY*
- **Albany College of Pharmacy and Health Sciences**, *Albany, NY*
- **SUNY Fredonia**, *Fredonia, NY*
- **The College of St. Rose**, *Albany, NY*
- **SUNY Brockport**, *Brockport, NY*

MEDICAL AND CLINICAL LAB TECHNICIAN

Medical and clinical laboratory technicians focus on collecting, processing and analyzing biological specimens; performing laboratory procedures; maintaining instruments; and relating findings to common diseases or conditions.

They frequently perform less complex tests and laboratory procedures than technologists and usually work under the supervision of medical or clinical laboratory technologists or a laboratory manager.

The median salary (half earned more than this amount and half earned less) for medical laboratory technicians was \$38,970 in May 2015, according to the Bureau of Labor Statistics. The lowest 10% earned less than \$25,890, and the highest 10% earned more than \$60,810.

Where do Medical and Clinical Laboratory Technicians work?

- Hospital clinical laboratories
- Commercial or reference laboratories
- Public health laboratories
- Pharmaceutical or chemical industries
- Biotechnology companies
- Forensic and law enforcement laboratories
- Veterinary clinics
- Research and teaching institutions
- Transplant and blood donor centers
- Fertility clinics
- The cosmetics or food industry

What education/training is needed?

Associate degree from an approved program and pass a certification exam, which you can take through one of two agencies:

- American Society for Clinical Pathology Board of Certification
- American Medical Technologists

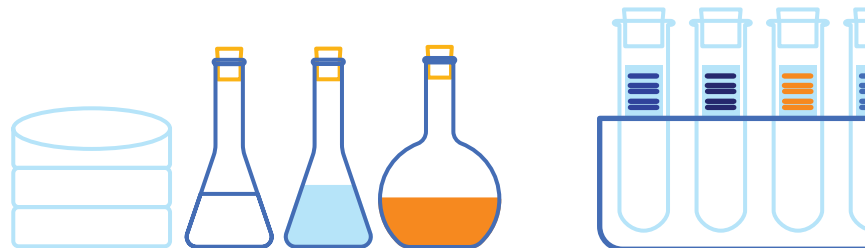
Years in higher education: 2

What is the demand for this occupation?

The BLS projects that **between 2016 and 2026 in the U.S., the number of jobs will increase 14.0% for technicians. In New York, the number of jobs and by 18.8% for technicians during the same period.**

What colleges in NYS offer training?

- **Monroe Community College**, Rochester, NY
- **Nassau Community College**, Garden City, NY
- **SUNY Orange Community College**, Middletown, NY
- **Bronx Community College**, Bronx, NY
- **Broome Community College**, Binghamton, NY
- **Dutchess Community College**, Poughkeepsie, NY
- **Onondaga Cortland Madison BOCES**, Syracuse, NY



NURSE ANESTHETIST

Certified registered nurse anesthetists are advanced practice nurses who safely provide more than 40 million anesthetics for surgical, obstetrical and trauma care. They administer every type of anesthetic, work in every type of practice setting and provide care for every type of operation or procedure – from open-heart surgery to pain management programs.

Nurse anesthetists provide anesthetics to patients in collaboration with surgeons, anesthesiologists, dentists, podiatrists and other qualified health care professionals. As advanced practice registered nurses, they are given a high degree of autonomy and professional respect.

A nurse anesthetist takes care of a patient's anesthesia needs before, during and after surgery or the delivery of a baby.

The average annual salary in 2015 was approximately \$160,250, according to the Bureau of Labor Statistics (BLS).

Where do Nurse Anesthetists work?

Nurse anesthetists practice in every setting in which anesthesia is delivered:

- Traditional hospital surgical suites
- Obstetrical delivery rooms
- Critical access hospitals
- Ambulatory surgical centers
- The offices of dentists, podiatrists, ophthalmologists, plastic surgeons
- Pain management specialists
- Military, Veterans Affairs' and Public Health Service health care facilities

What education/training is needed?

- Registered nurse (RN) with a Bachelor of Science degree and at least one year of experience in an acute care setting
- Acceptance by an accredited nurse anesthesia program
- These graduate programs range in length from two to three years. All programs include clinical training in university-based or large community hospitals. The average student nurse anesthetist completes almost 2,500 clinical hours and administers about 850 anesthetics

- Upon graduation, you must pass a national certification exam to begin practicing
- As a certified registered nurse anesthetist, you will be required to continue your education by obtaining a minimum of 40 hours of approved continuing education every two years, documenting your practice and maintaining your state licensure

Years in higher education: 6-7

What is the demand for this occupation?

The job outlook for advanced practice registered nurses is good. The BLS notes that **jobs are expected to grow 31% between 2014 and 2024, much faster than the average.**

What colleges in NYS offer training?

- **Albany Medical College**, Nurse Anesthetist Program, *Albany, NY*
- **Columbia University**, School of Nursing Program in Nurse Anesthetist, *New York, NY*
- **SUNY Health Science Center at Brooklyn**, Nurse Anesthetist Program, *Brooklyn, NY*
- **SUNY Buffalo**, Nurse Anesthetist Program, *Buffalo, NY*

NURSE PRACTITIONER

Nurse practitioners (NPs) are registered nurses (RNs) with advanced training in a practice specialty. NPs specialize in areas such as acute care, adult health, women's health, family health, school health, community health, oncology, gerontology, psychiatry, geriatrics, pediatrics, palliative care, mental health, and others.

NPs serve as primary and specialty care providers, providing a blend of nursing and health care services to patients and families. NPs may diagnose and treat patients, as well as prescribe medications for a wide array of acute and chronic illnesses.

New York currently requires NPs to have a collaborative agreement in place with a physician, yet NPs are autonomous and do not practice under the supervision of the collaborating physician.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **nurse practitioners in New York earned an average annual salary of \$122,550, (entry level-\$85,520, experienced- \$162,460).**

Where do Nurse Practitioners work?

- Physician's and specialist's private practices
- Health clinics
- Community health centers, hospitals
- Nursing homes, and home health agencies
- NPs may also be educators, administrators, or researchers and work in schools or offices

What education/training is needed?

- Bachelor's degree-prepared RNs, and must maintain licensure as an RN
- In addition, NPs must have advanced education and clinical training to practice
- NPs must earn a Master's degree in nursing while specializing in one or more areas of care

Years in higher education: 6-8

What is the demand for this occupation?

Between 2016 and 2026, the BLS estimates that the number of **jobs available for NPs will increase by 36.1% nationally, and by 41.6% in New York.**

Today, NPs are working in more specialties and in more settings, and their range of expertise and skills has become more widely understood, accepted, and in demand. **Experts agree that there are excellent opportunities for increases in the NP workforce nationwide as primary care and preventive care become even more important priorities due to the federal Affordable Care Act.**

What colleges in NYS offer training?

- **SUNY, Binghamton University**, Decker School of Nursing, *Binghamton, NY*
- **SUNY Institute of Technology at Utica/Rome**, *Utica, NY*
- **SUNY Upstate Medical University**, *Syracuse, NY*
- **SUNY University at Buffalo**, Buffalo, NY
- **Russell Sage College**, *Troy, NY*
- **St. John Fisher University**, *Rochester, NY*
- **SUNY Brockport**, *Brockport, NY*
- **University of Rochester**, *Rochester, NY*

OCCUPATIONAL THERAPISTS

Occupational therapists (OTs) treat patients with injuries, illnesses, or disabilities through the therapeutic use of everyday activities. They help people with chronic or new disabilities develop, recover, and improve the skills needed for daily living and working, and help patients learn or regain the skills they need to live as independently as possible and lead productive, satisfying lives.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **occupational therapists in New York earned an average annual salary of \$89,920, (entry level-\$60,450, experienced- \$127,860).**

Where do Occupational Therapists work?

- Almost half of OTs nationwide work in offices with physical and speech therapists (audiologists)
- Hospitals
- Schools
- Nursing homes
- Mental health clinics
- Rehabilitation facilities, and with home health services

What education/training is needed?

- Bachelor's Degree
- Master's Degree from an education program accredited by the American Occupational Therapy Association (AOTA).
- Some schools offer a dual degree program in which the student earns a bachelor's degree and a master's degree in five years.
- Occupational therapists must be licensed. In order to obtain a license to practice as an OT in New York, applicants must graduate from an accredited educational program, have satisfactorily completed at least six months of supervised experience, and pass a national certification examination administered by the National Board of Certification in Occupational Therapy, Inc. (NBCOT).

Years in higher education: 6-8

What is the demand for this occupation?

Between 2016 and 2026, the BLS projects that the number of **OT jobs will increase by 23.8% nationwide and will increase by 26.9% in New York during the same period.**

The strong growth of the OT workforce is attributed in part to the rising number of aging and older Americans who will need rehabilitative services for disabling conditions. In addition, technological advances are improving the survival rate for patients with critical or chronic health problems and offering new methods of effective treatment as well, all of which may increase demand for OTs' rehabilitative services.

What colleges in NYS offer training?

- **Ithaca College**, *Ithaca, NY*
- **Russell Sage College**, *Troy, NY*
- **University at Buffalo**, *Buffalo, NY*
- **Utica College**, *Utica, NY*
- **Clarkson University**, *Potsdam, NY*
- **LeMoyne College**, *Syracuse, NY*
- **Nazareth College**, *Rochester, NY*

OCCUPATIONAL THERAPY ASSISTANT

Occupational therapy assistants (OTAs) work under the direction of occupational therapists to provide rehabilitative services to patients with physical, emotional, or developmental impairments. They help patients develop, recover, and improve the skills needed for daily living and working through the therapeutic use of everyday activities.

Following a treatment plan developed by an occupational therapist, OTAs may assist patients with activities and exercises designed to improve strength and endurance, balance and coordination, mobility, hand and leg functions, self-care skills, and judgment and problem-solving abilities in daily life.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **occupational therapy assistants in New York earned an average annual salary of \$63,270, (entry level-\$42,960, experienced- \$81,680).**

Where do Occupational Therapy Assistants work?

- Hospitals
- Nursing homes
- Rehabilitation centers
- Occupational therapists' offices
- Health clinics
- Public schools

What education/training is needed?

- To meet the professional education requirement for authorization as an OTA, one must complete a post-secondary program in occupational therapy of at least two years duration that is satisfactory to the New York State Education Department, or a two-year associate degree program for OTAs that is either approved by the New York State Education Department or accredited by the American Occupational Therapy Association (AOTA).

Years in higher education: 2

What is the demand for this occupation?

The U.S. Bureau of Labor Statistics projects that the number of **OTA jobs in New York will increase by 29.7% between 2016 and 2026, and will increase nationwide by 28.9% during the same time period.**

The strong growth of the OTA workforce is attributed in part to the rising number of aging Americans who will need rehabilitative services for disabling or chronic conditions. In addition, technological advances are increasing the survival rate for patients with critical or chronic health problems and offering new methods of effective treatment as well, all of which will increase demand for occupational therapy rehabilitative services.

What colleges in NYS offer training?

- **Erie Community College**, *Williamsville, NY*
- **Jamestown Community College**, *Jamestown, NY*
- **Maria College**, *Albany, NY*
- **Bryant and Stratton College**, *Greece Campus, Rochester, NY*
- **Bryant and Stratton College**, *Syracuse Campus, Syracuse, NY*
- **Cayuga College**, *Fulton, NY*

OPHTHALMOLOGIST

Ophthalmologists are medical doctors who specialize in eye and vision care and function, including diagnosing and treating eye diseases and injuries. Eye M.D.s, as ophthalmologists are often called, are specially trained to provide the full spectrum of eye care, from prescribing corrective glasses and contact lenses and medications, to performing complex and delicate surgical procedures of the eye, including laser eye surgery, to prevent the occurrence of eye diseases and correct vision problems.

Ophthalmologists are part of a larger Bureau of Labor Statistics (BLS) occupational category, “physicians and surgeons”. According to the 2019 BLS, **the average salary for full time, ophthalmologists nationwide was \$295,431.**

Where do Ophthalmologists work?

- The majority of ophthalmologists work in private practice
- Most of them have affiliations with hospitals.

What education/training is needed?

- Students applying to medical school must have at least 90 undergraduate credits, and a Bachelor’s Degree is preferred
- Medical school applicants must take the Medical College Admission Test (MCAT)
- Four years of medical school
- One year of internship
- Every Eye M.D. does a three- to four-year residency (hospital-based training) in ophthalmology. During the residency, Eye M.D.s receive special training in all aspects of eye care, including prevention, diagnosis, and medical and surgical treatment of eye conditions and diseases.

Often, an Eye M.D. spends an additional one to two years more beyond residency training in a subspecialty, that is, a specific area of eye care, such as glaucoma or pediatric ophthalmology.

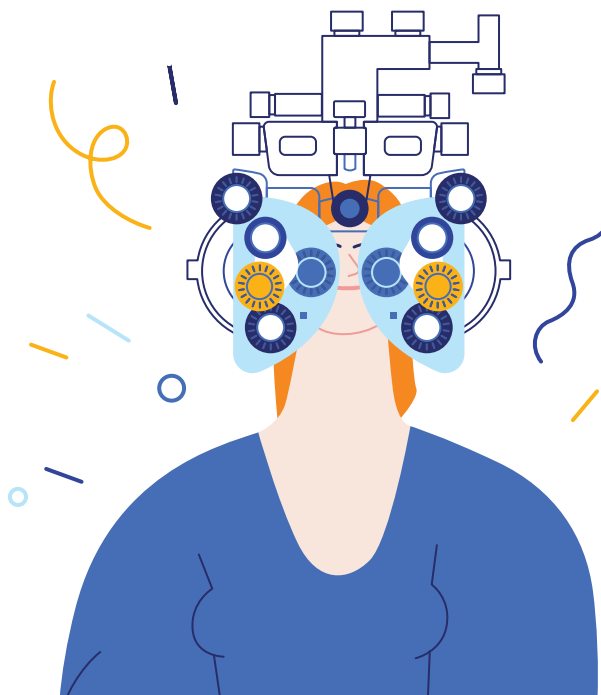
Years in higher education: 12-15

What is the demand for this occupation?

The **increase in the number of older adults in the U.S. population will drive overall growth in the need for physician services** as these consumers are likely to demand high levels of care using the latest technologies, diagnostic tests, and therapies.

What colleges in NYS offer training?

- **Albany Medical College**, Albany, NY
- **University at Buffalo-SUNY**, Buffalo, NY
- **SUNY Upstate Medical University**, Syracuse, NY
- **University of Rochester Medical Center**, Flaum Eye Institute, Rochester, NY



OPTICIAN

Opticians design, measure, fit, and adapt eyeglasses, frames, and contact lenses for clients according to prescriptions from ophthalmologists or optometrists. Opticians measure a client's eyes, including the distance between the centers of the pupils and between the eye surface and a lens to determine the best fit for each individual. Opticians will prepare a work order for an optical laboratory containing instructions for grinding and mounting specific lenses in frames. They will verify exactness of finished lenses and adjust frame and lens position to fit the client. An optician may shape or reshape frames until a precise fit is achieved.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **opticians in New York earned an average annual salary of \$54,670, (entry level-\$25,050, experienced- \$85,170).**

Where do Opticians work?

- Physician offices
- Optical stores
- Retail and department stores

What education/training is needed?

- Most workers entering this occupation receive their training on the job, mainly through formal apprenticeship programs that may last two years or longer.
- To be licensed as an optician in New York, individuals must graduate from a two-year ophthalmic dispensing education program registered or approved by New York State Education Department or satisfactorily complete an NYSED approved two-year apprenticeship training program. Applicants must also pass a written and a practical exam. Additional requirements are necessary to dispense contact lenses.

Years in higher education: 2

What is the demand for this occupation?

The Bureau of Labor Statistics projects that **the number of opticians will increase by 18.3% in New York between 2016 and 2026 and by 15% nationwide in the same period.**

Middle age is a time when many individuals use corrective lenses for the first time, and older adults generally require more vision care than others. As the share of these older age groups in the population increases, more opticians will be needed to provide services to them. However, the number of job openings for opticians will be limited because the occupation is small. Also, new technology is allowing opticians to work faster, limiting the need for more workers. Also moderating the need for optician services is the growing use of laser surgery to correct vision problems.

What colleges in NYS offer training?

- **Erie Community College**, *Williamsville, NY*
- **NYC College of Technology**, *Brooklyn, NY*
- **ASA College**, *New York, NY*

OPTOMETRISTS

Optometrists, also known as doctors of optometry, or ODs, are health care professionals who specialize in vision and eye care, but are not medical doctors. They examine people's eyes to diagnose vision problems, such as nearsightedness and farsightedness, and they test patients' depth and color perception and ability to focus the eyes. Optometrists may prescribe eyeglasses or contact lenses, or they may prescribe or provide other treatments, such as vision therapy or low-vision rehabilitation. Optometrists may also provide patients with preoperative and postoperative care for cataract, laser vision correction, and other eye surgeries. Optometrists also test for glaucoma and other eye diseases and diagnose conditions caused by systemic diseases such as diabetes and high blood pressure, referring patients to other health practitioners as needed.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **optometrists in New York earned an average annual salary of \$136,530, (entry level-\$86,310, experienced- \$188,050).**

Where do Optometrists work?

- Private offices, sometimes solo or with one or more partners
- Hospitals
- Retail stores
- Eye care centers

What education/training is needed?

- Optometrists need a Doctor of Optometry degree, which requires the completion of a four-year program at an accredited optometry school, preceded by at least three years of pre-optometric study (biology, chemistry, physics, English, mathematics) at an accredited college or university.
- All states require optometrists to be licensed. To be licensed in NY, optometrists must complete a professional program in optometry registered by the New York State Department of Education and accredited by the American Optometric Association Council on Optometric Education and also pass a licensure exam administered by the National Board of Examiners in Optometry.

Years in higher education: 8

What is the demand for this occupation?

The Bureau of Labor Statistics projects that between 2016 and 2026, **the number of optometrist jobs in New York will increase by 26.1% and increase nationwide by 17.9%.**

A growing population that recognizes the importance of good eye care and an increasing number of health insurance plans that include vision care will help generate greater demand for optometrists. In addition, increased incidences of diabetes and hypertension in the general population as well as in the elderly will generate greater demand for optometric services as these diseases often affect eyesight.

What colleges in NYS offer training?

- **SUNY College of Optometry**, *New York, NY*
- **New England College of Optometry**, *Boston, MA*
- **Salus University**, *Pennsylvania College of Optometry, Elkins Park, PA*
- **Massachusetts College of Pharmacy and Health Sciences**, *Worcester, MA*

ORTHOTIST AND PROSTHETISTS

People lose limbs or suffer orthopedic impairment for many reasons, including accidents, combat injuries, birth defects and disease. Health care workers who specialize in orthotics and prosthetics (O&P) help these patients regain their mobility by fitting them with artificial limbs (prostheses) and orthopedic braces (orthoses).

At the highest level, O&P practitioners perform a detailed assessment to determine the patient's O&P needs and assess the patient's functional status, including muscle development, gait, sensory function, range of motion, joint stability and skin integrity.

There is a **wide salary range of \$33K to \$95K based on job title and years of experience.**

Where do Orthotists and Prosthetists work?

- Private practice
- Hospitals
- Rehabilitation centers
- Specialty clinics
- Laboratories devoted to the fabrication, modification and repair of O&P devices

What education /training is needed?

- Bachelor's Degree
- Orthotists and Prosthetists Master's program. O&P masters students come from a wide variety of undergraduate majors

Years in higher education: 5-6

What is the demand for this occupation?

The U.S. Department of Education lists O&P training as a "national priority with a practitioner deficit." **The need for O&P services is rising rapidly, due in part to increasing obesity, diabetes and an aging population.** The ability to provide the most cost-effective and clinically appropriate O&P care will be dependent on having a large enough pool of well-educated certified orthotists and prosthetists.

What colleges in NYS offer training?

- **Columbia University**, *New York, NY*
- **New York University**, *New York, NY*
- **SUNY at Stonybrook**, *Stonybrook, NY*
- **SUNY at Buffalo**, *Buffalo, NY*
- **Hofstra University**, *Hempstead, NY*
- **University of Rochester**, *Rochester, NY*
- **Cornell University**, *Ithaca, NY*
- **SUNY at Albany**, *Albany, NY*
- **St. John Fisher University**, *Rochester, NY*
- **Ithaca College**, *Ithaca, NY*



PEDIATRICIAN

Pediatricians are doctors concerned with the physical, emotional and social well-being of children from infancy to young adulthood. Although it is a specialty in itself, pediatrics also has multitude of subspecialties ranging from neonatology, oncology and hematology to developmental-behavioral pediatrics and psychiatry. For most kids, interaction with a primary care pediatrician starts in infancy, far before they've developed communication skills.

Earnings Pediatricians are among the higher paying occupations. Total compensation for pediatricians varies by type of practice, years in practice, geographic region of practice, hours worked, skill, and professional reputation.

Average annual salary varies across New York State, depending on location. **Pediatricians in New York earned an average annual salary of \$184,554, (entry level-\$65,585, experienced- \$276,002).**

Where do Pediatricians work

- Hospitals
- Healthcare Clinics
- Private Practices
- Schools
- Day Camps and Summer Camps

What Education/training is needed?

- Formal education and training requirements for physicians are among the most demanding of any occupation. After completing four years of undergraduate education and receiving a degree, medical school applicants must take the Medical College Admission Test (MCAT). Acceptance to medical school is highly competitive.
- Once in medical school, students will complete four years of graduate medical education.
- After successfully completing medical school, a pediatric residency will follow for 3 years.
- To be licensed as a physician in New York, an individual must graduate from an accredited medical school, complete an accredited residency program, and pass medical licensing examinations.

Years in higher education: 11

What is the demand for this Occupation?

There are currently an estimated 29,600 pediatricians in the United States. The **pediatrician job market is expected to grow by 15.2% between 2016 and 2026.**

Pediatricians willing to work in rural or low-income areas, which usually lack adequate numbers of doctors, have the best employment opportunities.

What colleges in NYS offer training?

- **Albany Medical College, Albany, NY**
- **Weill Cornell Medicine, New York, NY**
- **NY Medical College, Valhalla, NY**
- **SUNY Upstate Medical University, Syracuse, NY**
- **University at Buffalo-SUNY, Buffalo, NY**
- **University of Rochester, Rochester, NY**

PERSONAL CARE AIDE

Personal Care Aides assist the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals.

Personal care aides often assist patients with errands, cooking and housekeeping.

According to the BLS as of May 2019, **personal care aides make an average of \$12.15 per hour and \$25,280 per year. However, the highest 10% of workers often make over \$34,000 annually.**

Where do Personal Care Aides work?

- Duties are performed at the place of residents of the patient or
- A non-residential care facility

What education is needed?

- High school diploma or GED.

Years in higher education: 0

What is the demand for this occupation?

The BLS predicts the job outlook will increase greatly by 34% between 2019 and 2029.



PHARMACIST

Pharmacists are licensed health care professionals who distribute prescription drugs. As specialists in the use and clinical effects of drugs, they also advise patients, as well as physicians and other health practitioners, on the selection, dosages, interactions, and side effects of medications.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **pharmacists in New York earned an average annual salary of \$121,480, (entry level-\$74,070, experienced- \$162,900).**

Where do Pharmacists work?

- Community pharmacies
- Grocery stores and department stores
- Hospitals
- Home care agencies
- Mail-order pharmacies, and
- Pharmaceutical industry

What education/training is needed?

- Undergraduate coursework typically includes courses such as math and natural sciences, as well as chemistry, biology, and physics.
- For some Pharm.D. programs, applicants must already have a Bachelor's degree.
- For most graduate programs, applicants also must take the Pharmacy College Admissions Test (PCAT).
- Pharmacists must have a Doctor of Pharmacy (Pharm.D.) degree from an accredited school.
- Pharm.D. programs usually take four years to finish, beyond the bachelor's, although some programs offer a three-year option.

Years in higher education: 7-8

What is the demand for this occupation?

The Bureau of Labor Statistics projects that **for the time period of 2016 to 2026, the number of pharmacist jobs will increase 5.6% nationally, and will increase 8.0% in New York during the same period.**

What colleges in NYS offer training?

- **Albany College of Pharmacy and Health Sciences**, Albany, NY
- **St. John Fisher University**, Wegmans School of Pharmacy, Rochester, NY
- **Binghamton University-SUNY**, Binghamton, NY
- **D'Youville College**, School of Pharmacy, Buffalo, NY
- **University of Buffalo-SUNY**, School of Pharmacy and Pharmaceutical Sciences

FAST FACT

In New York, pharmacy technicians can assist pharmacists in filling prescriptions and a pharmacist can supervise up to two pharmacy technicians.



PHARMACY TECHNICIAN

Pharmacy technicians work under the supervision of pharmacists, assisting them in providing medication to patients. Their duties may include ordering, stocking, preparing, and packaging medications. Pharmacy technicians receive written or electronic prescriptions or refill requests and they field phone calls from physicians or patients about prescriptions. They verify the accuracy of information on the prescription and may prepare the medication by counting or measuring or mixing the drug. They also prepare prescription containers and labels.

The responsibilities of pharmacy technicians as well as the number of pharmacy technicians that a pharmacist can supervise vary by state. In New York, pharmacy technicians can assist pharmacists in filling prescriptions and a pharmacist can supervise up to two pharmacy technicians.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **pharmacy technicians in New York also earned an average annual salary of \$35,790, (entry level-\$24,860, experienced- \$50,530).**

Where do Pharmacy Technicians work?

- Retail pharmacies
- Pharmacy departments within hospitals
- Grocery stores, department stores, and retail stores
- A small number of pharmacy technicians work at mail-order or online pharmacies, clinics, and pharmaceutical wholesalers

What education/training is needed?

- A high school diploma
- Most pharmacy technicians are trained on the job, but employers favor applicants who have formal training, certification, or previous experience.
- Strong customer service skills are important.
- Some pharmacy technicians attend postsecondary education programs offered at many community colleges and vocational schools and earn certificates. These education programs typically last one year or less.
- While pharmacy technicians in over half of the states are registered, licensed, or certified, there are no such requirements in New York.

Years in higher education: up to 1

What is the demand for this occupation?

Between 2016 and 2026, the Bureau of Labor Statistics (BLS) projects **the number of pharmacy technician jobs in New York will increase by 15.7%.**

Increased demand for pharmacy technicians is attributed to their role in filling prescriptions. The growing number of older adults — who use more prescription drugs than younger people — will spur demand for pharmacy technicians.

What colleges in NYS offer training?

- **New York Institute of Medical Careers, Woodside, NY**
- **New York City College of Technology, Brooklyn, NY**
- **Onondaga Cortland Madison BOCES, Liverpool, NY**
- **Access Careers, Hempstead, NY**

PHLEBOTOMIST

Phlebotomists collect blood for donation or for testing, so the blood can be analyzed in a clinical laboratory. Blood tests are used to diagnose illness, evaluate the effectiveness of medications and determine whether a patient is receiving proper nutrition.

Phlebotomists are paid hourly. Wages vary depending on the phlebotomist's location, shift, education and experience. The average phlebotomist earns **\$25,177 to \$30,470 a year.**

Where do Phlebotomists work?

- Clinical laboratories
- Hospitals
- Community health centers
- Nursing homes
- Doctor's offices
- Blood donation centers and other health care facilities

What education/training is needed?

- High school diploma or G.E.D.
- Completion of the training program which includes study in anatomy, blood collection procedures, proper storage and handling of blood samples and safety precautions.
- Many employers will hire only phlebotomists who have successfully passed the certification exam. To take the exam, you must complete a training program and demonstrate 100 successful venipunctures and 25 skin punctures.
- The National Phlebotomy Association requires 200 hours of training, which includes clinical experience. Students also must pass the national certification exam with a score of 70% or better. Continuing education is required to maintain certification.
- Some states also require phlebotomists to be licensed. New York does not require licensing.

Years in higher education: Up to 1

What is the demand for this occupation?

The BLS projects **employment of phlebotomists to grow 23% from 2018 to 2028.**

What colleges in NYS offer training?

There are more than 200 accredited phlebotomy training programs at community colleges and vocational schools nationwide.

- **BOCES Health Careers Center, Albany, NY**
- **Bryant and Stratton College, Albany, NY**
- **Mildred Elley, Albany, NY**



PHYSICAL THERAPISTS

Physical therapists (PTs) are licensed health care professionals who help people with injuries or illnesses improve their movement and manage their pain. PTs are often an important part of rehabilitation and treatment for patients with chronic conditions or injuries that limit their ability to move well or comfortably or do functional activities as well as they would like in their daily lives.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **physical therapists in New York earned an average annual salary of \$90,880, (entry level-\$63,980, experienced- \$124,870).**

Where do Physical Therapists work?

- Hospitals
- Outpatient clinics
- Private offices that have specially equipped facilities
- Rehabilitation facilities
- Nursing homes
- Home health agencies and
- Schools

What education/training is needed?

- PTs are required to have a postgraduate professional degree. Physical therapy programs usually award a Doctor of Physical Therapy (DPT) degree, although a small number award a Master of Physical Therapy (MPT) degree. Doctoral programs typically last three years; MPT programs require two or three years of study.
- In order to be licensed as a physical therapist in New York, an applicant must complete an accredited education program in physical therapy and pass the National Physical Therapy Examination administered by the Federation of State Boards of Physical Therapy.

Years in higher education: 7-8

What is the demand for this occupation?

The Bureau of Labor Statistics projects that **jobs for PTs will increase by 32.7% in New York between 2016 and 2026, and increase by 28% nationwide during the same time period.** Job prospects may be favorable in rural areas as many PTs tend to cluster in highly populated urban and suburban areas.

The increasing older adult population in the U.S. will drive growth in the demand for physical therapy services because this age group is staying active in sports and exercise later in life than previous generations did. In addition to various sports- and exercise-related injuries, the active baby boom generation is just entering the prime age for arthritis, heart attacks, and strokes, increasing the demand for physical therapy services and rehabilitation care.

What colleges in NYS offer training?

- **Nazareth College, Rochester, NY**
- **University at Buffalo-SUNY, Buffalo, NY**
- **Ithaca College, Ithaca, NY**
- **SUNY Upstate Medical University, Syracuse, NY**
- **Utica College, Utica, NY**
- **Russell Sage College, Troy, NY**
- **Clarkson University, Potsdam, NY**

PHYSICAL THERAPY ASSISTANTS

Physical Therapist Assistants (PTAs) work under the direction of a physical therapist (PT) to provide services that relieve pain and improve mobility for patients who are recovering from physical injuries, diseases, or disabilities.

PTAs may assist PTs by performing routine treatments such as helping patients with stretching exercises or using exercise equipment, applying hot or cold packs, administering traction and massage, and training in gait and balance skills. They may also teach patients to use braces and crutches. PTAs may monitor and record treatment responses and report concerns to the supervising physical therapist. They might also have clerical duties, such as ordering supplies or processing insurance forms.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **physical therapy assistants in New York earned an average annual salary of \$54,870, (entry level-\$29,930, experienced- \$78,040).**

Where do Physical Therapy Assistants work?

- Physical therapy practices and offices
- Hospitals
- Nursing homes
- Home health agencies
- Rehabilitation centers

What education/training is needed?

- PTAs must complete a two-year physical therapist assistant program that is registered with NYS or accredited by the American Physical Therapy Association (APTA) to be certified in NY.
- Most states require PTAs to be licensed.
- PTAs must also pass the National Physical Therapist Assistant Examination administered by the Federation of State Boards of Physical Therapy and meet all criteria for licensure in New York, including clinical experience.

Years in higher education: 2

What is the demand for this occupation?

The Bureau of Labor Statistics projects that **between 2016 and 2026 employment for PTAs will grow by 31.0% nationwide and by 34.0% in New York during the same time period.**

The increasing older adult population in the U.S. will drive growth in the demand for physical therapy services. In addition to various sports- and exercise-related injuries, the active baby boom generation is just entering the prime age for arthritis, heart attacks, and strokes.

PTs are expected to increasingly use PTAs to reduce the cost of services. Once a patient is evaluated and a treatment plan is designed by the PT, the PTA can often provide many parts of the treatment.

What colleges in NYS offer training?

- **Broome Community College**, Binghamton, NY
- **Genesee Community College**, Batavia, NY
- **Herkimer County Community College**, Herkimer, NY
- **Onondaga Community College**, Syracuse, NY
- **SUNY Canton**, Canton, NY

PHYSICIANS

Physicians diagnose and treat diseases, illnesses, injuries, and physical and psychological problems. They examine and treat patients; obtain medical histories; and order, perform, and interpret diagnostic tests. They may also counsel patients on diet, hygiene, and preventive health care.

There are two types of physicians, the Medical Doctor (MD), or allopathic physician, and the Doctor of Osteopathy (DO). Both types of physicians may use all accepted treatment methods including drugs and surgery, but DOs generally place special emphasis on the body's musculoskeletal system, incorporate more preventive medicine, and utilize holistic health care practices.

Earnings of physicians and surgeons are among the highest of any occupation and can vary based on the type of practice, years in practice, geographic region of practice, hours worked, skill, and professional reputation.

Average annual salary varies greatly across New York State, depending on location. **Physicians in New York earned an average annual salary of \$179,110, (entry level-\$61,100, experienced- \$227,750).**

Where do Physicians work?

- Private offices
- Clinics
- Surgeons and anesthesiologists usually work in hospitals or surgical outpatient centers
- Research laboratories
- Medical schools
- Veterans Administration hospitals

What education/training is needed?

- Formal education and training requirements for physicians are among the most demanding of any occupation. After completing four years of undergraduate education and receiving a degree, medical school applicants must take the Medical College Admission Test (MCAT). Acceptance to medical school is highly competitive.
- Once in medical school, students will complete four years of graduate medical education.
- After successfully completing medical school, a residency for 2-4 years will follow.

- To be licensed as a physician in New York, an individual must graduate from an accredited medical school, complete an accredited residency program, and pass medical licensing examinations.

Years in higher education: 10-15

What is the demand for this occupation?

It is projected that **employment of physicians and surgeons nationwide will grow 11.4% between 2016 and 2026. In New York, it is expected to rise by 19.3% and varies based on specialty.**

What colleges in NYS offer training?

- **Albany Medical College**, Albany, NY
- **Weill Cornell Medicine**, New York, NY
- **NY Medical College**, Valhalla, NY
- **SUNY Upstate Medical University**, Syracuse, NY
- **University at Buffalo-SUNY**, Buffalo, NY
- **University of Rochester**, Rochester, NY

PHYSICIAN ASSISTANT

Physician assistants (PAs) are health care professionals who practice medicine under the supervision of physicians and surgeons. Working as members of a health care team, PAs take medical histories, examine and treat patients, order and interpret laboratory tests and x-rays, instruct and counsel patients, make diagnoses, and prescribe certain medications.

Many PAs work in primary care specialties, such as general internal medicine, pediatrics, and family medicine. Other specialty areas such as general and thoracic surgery, emergency medicine, orthopedics, and geriatrics. PAs specializing in surgery provide preoperative and postoperative care and may work as first or second assistants during major surgery.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **physician assistants in New York earned an average annual salary of \$123,080, (entry level-\$89,590, experienced- \$160,960).**

Where do Physician Assistants work?

- Doctors' offices
- General medical and surgical hospitals
- Outpatient care centers, including health clinics and health maintenance organizations
- Federal or state government institutions
- Colleges and schools

What education/training is needed?

- Bachelor's Degree and some prior health care work experience, such as being a registered nurse, emergency medical technician (EMT), or paramedic.
- PA education programs usually take at least two years and typically lead to a Master's degree.
- To be licensed as a PA in New York, an individual must be a graduate of an ARC-PA accredited or New York State Education Department approved PA education program and must pass the Physician Assistant National Certification Examination (PANCE).

Years in higher education: 6-7

What is the demand for this occupation?

Bureau of Labor Statistics predicts that **from 2016 to 2026, the number of PA jobs nationwide will increase by 37.3% and in New York will increase by 43.4%.**

Job opportunities for PAs should be very good for many years, particularly in rural and inner-city hospitals and clinics. Also, as more physicians enter specialty areas of medicine, there will be a greater need for primary health care providers, such as PAs.

What colleges in NYS offer training?

- **Albany Medical College**, Albany, NY
- **SUNY Upstate Medical Center**, Syracuse, NY
- **Clarkson University**, Potsdam, NY
- **Rochester Institute of Technology**, Rochester, NY
- **Daemen College**, Amherst, NY
- **D'Youville College**, Buffalo, NY

PSYCHIATRIC NURSE PRACTITIONER

Psychiatric Nurse Practitioner is a specialty area in the field of nurse practitioners.

Psychiatric nurse practitioners are NPs specially trained to work in the mental health field. They assess patients, study their mental history and perform comprehensive mental health testing. PMHNPs also make diagnoses and create treatment plans, much like a doctor would do.

Please refer to the nurse practitioner description (on page 27) for more information on training, earning potential and demand for this profession.

Where do Psychiatric Nurse Practitioners work?

- Hospitals
- Psychiatric facilities
- Outpatient clinics
- Substance abuse programs
- Private psychiatric or mental health



PSYCHIATRIST

Psychiatrists are primary mental health physicians who assess, diagnose, and treat mental illnesses and emotional and substance abuse disorders through personal counseling (psychotherapy), psychoanalysis, hospitalization, and medication.

Psychiatrists may work with people with chronic mental illness, such as schizophrenia or those seeking short-term treatment for specific problems such as phobias. Psychiatrists are uniquely qualified to assess both the physical and mental aspects of psychological symptoms. Psychiatrists may specialize in areas such as child, adolescent, forensic, or geriatric psychiatry.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **psychiatrists in New York earned an average annual salary of \$216,280, (entry level-\$73,530, experienced- \$263,190).**

Self-employed psychiatrists, usually have higher median incomes than salaried psychiatrists. Earnings vary according to years in practice, geographic region, hours worked, and professional reputation.

Where do Psychiatrists work?

- Private practices
- Community mental health centers
- Psychiatric hospitals
- Government agencies

What education/training is needed?

- Bachelor's Degree: like other physicians, psychiatrists must complete a pre-medicine undergraduate college education program.
- Four years of medical school.
- After medical school, psychiatrists must complete a four-year residency program that emphasizes the biologic, psychologic, and social components of mental illnesses. Psychiatry residents are trained in psychiatry, general medical care, neurology, and emergency care.
- To be licensed in New York, a psychiatrist, like all other physicians, must be a graduate of an accredited medical school, complete an accredited residency program in psychiatry, and pass specific medical licensing examinations.

Years in higher education: 13-14

What is the demand for this occupation?

According to BLS, **the number of psychiatrists should grow by 11.2% nationwide between 2016 and 2026. In New York in the same period, psychiatrist jobs are expected to grow by 16.2%.**

Research indicates that demand for psychiatrists is strong and the need for more psychiatrists will continue to grow. While the supply of psychiatrists is decreasing, the U.S. population is facing a wide array of challenges, which is driving demand for mental health services higher.

What colleges in NYS offer training?

- **Albany Medical College, Albany, NY**
- **Upstate Medical University-SUNY, Syracuse, NY**
- **University of Rochester, Rochester, NY**

PSYCHOLOGIST

Psychologists study behavior, mental processes and emotions by observing, interpreting, and recording how people relate to one another and the environment.

To help treat patients, psychologists may also collaborate with physicians and/or psychiatrists, who are able to prescribe medications. In some therapy and consulting contexts, psychologists may work with couples and families to help them improve their relationships, or with business people to help them improve communication skills and increase productivity. They may also work with athletes and performers to help them reduce stress and improve performance. Psychologists also work as teachers, trainers and mentors of college students and future psychologists.

Psychologists may specialize in a variety of areas such as clinical psychologist, developmental psychologist, forensic psychologist and school psychologist, just to name a few.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **psychologists in New York earned an average annual salary of \$97,190, (entry level-\$41,940, experienced- \$129,910).**

Yearly salary and earnings for either category of psychologists can vary greatly depending on a psychologist's specialty, employment setting, and years of experience and in practice.

Where do Psychologists work?

- Private practice
- Hospitals
- Nursing homes or other health care settings
- Educational settings such as schools
- Government and industry

What education/training is needed?

- Bachelor's Degree
- Master's or doctorate degree, and a license, are required for most psychologists.
- In New York, psychologists earn a doctorate degree in psychology from a program registered or accepted as equivalent by the New York State Education Department. Psychologists with doctorate degrees with the letters Ph.D., Psy.D. and Ed.D. have all met the same educational requirements.

- In addition, New York psychologists complete two years of supervised experience, including one year after the doctorate degree. They must also pass a national licensing exam.

Acceptance to graduate psychology programs is highly competitive. A doctorate degree (Ph.D.) generally requires about five years of full-time graduate study, culminating in a dissertation based on original research. A Doctor of Psychology degree (Psy.D.) is often based on practical work and examinations in lieu of a dissertation.

Years in higher education: 6-9

What is the demand for this occupation?

According to the BLS, **employment of clinical, school, and counseling psychologists is expected to grow in the U.S. by 14.3% between 2016 and 2026, and is expected to grow in New York by 15.6% during the same time period.**

Employment for psychologists is projected to grow because of increased demand for their services in schools, hospitals, social service agencies, VA hospitals, mental health centers, substance abuse treatment clinics, consulting firms, and private companies.

Also spurring demand for psychologists will be the rising health care costs associated with unhealthy lifestyles, such as smoking, alcoholism, and obesity, which have made prevention and treatment more critical. The growing number of elderly in the U.S. will also increase the demand for psychologists who can help people deal with the mental and physical changes that occur as individuals grow older. There also will be increased need for psychologists to work with veterans.

Job opportunities will be the best for psychologists with a doctoral degree in an applied specialty, such as neuropsychology, school psychology, or clinical psychology. Those psychologists with master's degrees will also have good prospects as industrial-organizational psychologists.

What colleges in NYS offer training?

- **SUNY Cortland**, Cortland, NY
- **Clarkson University**, Potsdam, NY
- **College of St. Rose**, Albany, NY
- **Cornell University**, Ithaca, NY
- **Colgate University**, Hamilton, NY
- **Fredonia College-SUNY**, Fredonia, NY
- **Geneseo-SUNY**, Geneseo, NY
- **Maria College**, Albany, NY
- **SUNY Plattsburgh**, Plattsburgh, NY



PODIATRIST

Podiatrists specialize in the prevention, diagnosis, and treatment of foot and ankle problems. They use medical and surgical interventions to treat foot deformities, growths, and injuries, as well as foot problems associated with diseases such as diabetes, heart disease, or arthritis. Podiatrists also perform corrective surgery and arthroscopy.

Since many serious diseases may first manifest as foot problems, podiatrists may be the first provider to recognize medical problems such as heart disease, diabetes, or arthritis. Podiatrists will consult with and refer patients to other health practitioners when they detect symptoms of these disorders. Some podiatrists specialize in podiatric surgery, orthopedics, sports medicine, pediatrics, geriatrics, or diabetic foot care.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **podiatrists in New York earned an average annual salary of \$157,841, (entry level-\$72,610, experienced- \$190,600).**

Where do Podiatrists work?

- Offices of podiatry, either their own or with other podiatrists or health practitioners
- Hospitals (including Veterans hospitals)
- Health clinics
- Nursing homes
- Rehabilitation facilities

What education/training is needed?

- Bachelor's Degree
- Four-year training to obtain a Doctor of Podiatric Medicine (DPM) degree.
- After completing a DPM degree, podiatry students are required to complete a three-year residency.

Years in higher education: 11

What is the demand for Podiatrists?

The Bureau of Labor Statistics projects that **between 2016 and 2026, the number of podiatrists will increase nationwide by 10.3% and will increase in New York by 19.2%.**

Demand for podiatrists may be growing because of the rising number of injuries sustained by a more active and increasingly older population in the U.S. Also, demand for podiatrists will increase because of the rising number of Americans who are overweight or obese or are diagnosed with diabetes. People who experience a lot of weight gain may have intense pressure on the foot and ankle, and therefore may also need the services of podiatrists. People with diabetes have circulatory problems that create the need for them to seek the aid of podiatrists.

What colleges in NYS offer training?

- **NY College of Podiatric Medicine, New York, NY**
- **Temple University, Philadelphia, PA**
- **Kent State, College of Podiatric Medicine, Independence, OH**

RADIOLOGIC TECHNOLOGIST AND TECHNICIAN

Radiologic technologists and technicians perform diagnostic imaging examinations. Radiologic technologists use imaging modalities such as computed tomography, magnetic resonance imaging (MRI), and mammography, while radiologic technicians perform imaging examinations like x-rays.

Radiologic technologists perform more complex imaging procedures. Radiologic technicians perform diagnostic imaging examinations. Radiologic technicians, sometimes referred to as radiographers, produce x-ray films (radiographs) of parts of the human body for use in diagnosing medical problems. They prepare patients for radiologic examinations and position patients so that the parts of the body can be appropriately radiographed. They also position radiographic equipment at the correct angle and height over the appropriate area of a patient's body.

According to the 2019 BLS, the average salary for **full time radiologic technologists nationwide was \$63,120, varying by specialty and geographic region.** Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **radiologic technologists in New York earned an average annual salary of \$70,620, (entry level-\$46,100, experienced- \$98,230).** The Bureau of Labor Statistics does not yet publish employment and earnings data for radiologic technicians.

Where do Radiologic Technologists and Technicians work?

- Hospitals
- Physicians' offices
- Diagnostic imaging centers

What education/training is needed?

- Formal training programs in radiography lead to a certificate, an associate degree, or a bachelor's degree
- An associate degree is the most prevalent form of educational attainment among radiologic technologists and technicians

Radiologic technologists may attend accredited programs in a variety of settings, including at hospitals, community colleges, and four-year colleges. The majority of radiologic technology education programs are two years in length.

Years in higher education: 2-4

What is the demand for this occupation?

According to the Bureau of Labor Statistics, **between 2016 and 2026, the number of radiologic technologist jobs is expected to increase by 18.3% in New York and by 12.3% nationwide.**

The aging of the population combined with increased availability and use of new and improved imaging technologies are expected to drive demand for radiologic technologists and technicians.

What colleges in NYS offer training?

- **Hudson Valley Community College, Troy, NY**
- **Broome Community College, Binghamton, NY**
- **Fulton Montgomery Community College, Johnstown, NY**
- **North Country Community College, Saranac Lake, NY**
- **Alfred State College, Alfred, NY**
- **Mohawk Valley Community College, Utica, NY**

RECREATIONAL THERAPISTS

Recreation therapists (also known as therapeutic recreation specialists) provide treatment services and recreation activities to individuals with disabilities or illnesses. Recreational therapists use a variety of techniques, including arts and crafts, sports, games, dance and movement, drama, music, activities with animals, and community outings to aid the physical, mental, and emotional well-being of their clients.

In acute care settings, recreational therapists treat and rehabilitate individuals with specific health conditions, usually in collaboration with physicians, nurses, psychologists, social workers, and physical and occupational therapists.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **recreational therapists in New York earned an average annual salary of \$56,220, (entry level-\$36,260, experienced- \$78,690).**

Where do Recreational Therapists work?

- Nursing care facilities
- Hospitals
- Residential care facilities
- State and local government agencies

What education/training is needed?

- A bachelor's degree in therapeutic recreation is the usual educational requirement for recreational therapists.
- New York does not require recreational therapists to be licensed, however most employers prefer to hire those who have been certified. Individuals wishing to demonstrate proficiency in their occupation may receive certification through the National Council for Therapeutic Recreation Certification: www.nctrc.org.

Years in higher education: 4

What is the demand for this occupation?

The Bureau of Labor Statistics estimated that **between 2016 and 2026, the total number of recreational therapist jobs in New York will increase by 11.1% and will increase in the U.S. overall by 6.5%.**

Growing demand will likely result as the number of older adults in the U.S. continues to grow. This generation will need recreational therapists to help treat age-related injuries and illnesses, such as strokes, as well as to help maintain or improve age-related declines in physical and mental abilities.

What colleges in NYS offer training?

- **The College at Brockport**, *Brockport, NY*
- **SUNY Cortland**, *Cortland, NY*
- **Utica College**, *Utica, NY*
- **St. Thomas Aquinas College**, *Sparkill, NY*

REGISTERED NURSES

Registered nurses (RNs) treat and educate patients and the public about various medical conditions, and provide advice and emotional support to patients and their families. RNs record patients' medical histories, help perform diagnostic tests, operate medical machinery, and help with patient follow-up and rehabilitation. RNs can also supervise patient care, administer medicines and treatments, plan programs to meet community needs, and conduct research or quality improvement projects.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **registered nurses in New York earned an average annual salary of \$87,840, (entry level-\$56,980, experienced- \$123,860).**

Where do Registered Nurses work?

- Hospitals
- Physicians' offices
- Home healthcare services
- Nursing care facilities
- Outpatient care centers
- Insurance companies
- Schools
- Universities
- Correctional facilities
- Manufacturing plants
- Cruise ships

What education/training is needed?

To become an RN, the two main types of educational programs are:

- A Bachelor's of Science degree in nursing (BSN) offered by a college or university
- An associate degree in nursing (ADN) offered by a community college or junior college

Years in higher education: 2-6

What is the demand for this occupation?

The BLS projects that **the number of RN jobs in the U.S. between 2016 and 2026 will increase by 14.8% and will increase in New York by 20.1%.** Growth in employment of RNs is expected to continue to be strong primarily because of technological advancements; an increased emphasis on preventative care; and the large, aging baby-boomer population, which will demand more health care services as these older adults live longer and more active lives.

What colleges in NYS offer training?

There is an expansive list of colleges in NYS that offer training. In the northeast region they include:

- **SUNY Adirondack**, *Queensbury, NY*
- **Clinton Community College**, *Plattsburgh, NY*
- **Columbia-Greene Community College**, *Hudson, NY*
- **Fulton-Montgomery Community College**, *Johnstown, NY*
- **Hudson Valley Community College**, *Troy, NY*
- **Maria College**, *Albany, NY*
- **Mohawk Valley Community College**, *Utica or Rome campus*
- **North Country Community College**, *Saranac Lake, NY*

RESPIRATORY THERAPIST

Respiratory therapists assess, treat, and care for patients with breathing difficulties or other cardiopulmonary problems caused by asthma, smoking, pneumonia, heart failure, cystic fibrosis, chest injuries, and other disorders. They work with all types of patients, ranging from premature infants whose lungs are not fully developed to elderly people whose lungs are diseased.

Practicing under the direction of a physician, respiratory therapists assume primary responsibility for all respiratory care, therapeutic treatments, and diagnostic procedures. They also supervise respiratory therapy technicians.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **respiratory therapists in New York earned an average annual salary of \$76,990, (entry level-\$55,440, experienced- \$99,670).**

Where do Respiratory Therapists work?

- Acute care hospitals (where about 75% of respiratory therapists are employed)
- Diagnostic laboratories
- Sleep disorder centers
- Rehabilitation, long-term acute care and skilled nursing facilities
- Patients' homes
- Patient transport systems
- Physicians' offices
- Convalescent and retirement centers
- Educational institutions
- Wellness centers

What education/training is needed?

- An associate degree is the minimum educational requirement, but a bachelor's or master's degree may be important for advancement

Years in higher education: 2-5

What is the demand for this occupation?

The BLS projects that **between 2016 and 2026, the number of respiratory therapist jobs in New York is expected to increase by 26.8%, and nationwide by 23.4% during the same time period.** With an increased need for respiratory care as a result of illnesses associated with aging, the demand for respiratory therapists is expected to be strong and job opportunities will remain good.

What colleges in NYS offer training?

- **Erie Community College**, *Williamsville, NY*
- **Genesee Community College**, *Batavia, NY*
- **Hudson Valley Community College**, *Troy, NY*
- **Mohawk Valley Community College**, *Utica and Rome Campus*
- **SUNY Upstate Medical University**, *Syracuse, NY*
- **Sullivan County Community College**, *Loch Sheldrake, NY*

SOCIAL WORKER

There are two main types of social workers: direct-service social workers who help people solve and cope with problems in their everyday lives, and clinical social workers, who diagnose and treat mental, behavioral, and emotional issues. Direct-service social workers assess their clients' needs and situations and develop plans to improve their clients' well-being. Clinical social workers, also called licensed social workers, may diagnose and treat mental, behavioral, and emotional disorders, including anxiety and depression.

Both direct-service social workers and clinical social workers may specialize in a number of areas:

- Child and family
- School
- Medical and public health
- Mental health and substance abuse

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **social workers, all other in New York earned an average annual salary of \$61,470, (entry level-\$37,980, experienced-\$91,860). Child, family and school social workers, a distinct specialty, earned an annual salary of \$57,570 across New York state. While mental health and substance abuse social workers earned an annual average of \$61,400. Finally, the mean salary for health care social workers in New York State was \$61,620.**

Where do Social Workers work?

- Private practice, either solo or in a group with other social workers or mental health professionals
- Hospitals
- Outpatient mental health and substance abuse centers
- School districts
- Nursing and residential care facilities

What education/training is needed?

- A Bachelor's degree in social work (BSW) is the most common minimum requirement to qualify for a job as a social worker; however, majors in psychology, sociology, and related fields may qualify for some entry-level jobs, especially in small community agencies.

- A Master's degree in social work (MSW) is usually required for positions in health and school settings and is required for clinical work, as well. MSWs generally take two additional years to complete after obtaining a Bachelor's degree. Some programs allow those with a BSW to earn their MSW in one year. MSW programs prepare students for work in their chosen specialty and develop the skills to do clinical assessments, manage a large number of clients, and take on supervisory duties.
- All programs require students to complete supervised fieldwork or an internship.
- A BSW is not required to enter MSW programs. In fact, a degree in almost any major is acceptable. However, coursework in psychology, sociology, economics, and political science are recommended.

Years in higher education: 4-10

What is the demand for this occupation?

According to the BLS, **between 2016 and 2026, health care social workers are projected to grow 20.1% in the U.S. and 27.3% in New York; and all other social workers are projected to grow 8.3% in the U.S. and 8.8% in New York.**

Growth in the social work professions will be due to an increase in demand for health care and social services in a variety of ways. For example, more social workers will be needed in schools to respond to rising student enrollments; and employment of health care social workers is expected to grow as baby boomers age and they require help to find the health care they need.

What colleges in NYS offer training?

- **Binghamton University-SUNY, Binghamton, NY**
- **Buffalo State College-SUNY, Buffalo, NY**
- **College at Brockport-SUNY, Brockport, NY**
- **College of St. Rose, Albany, NY**
- **SUNY Fredonia, Fredonia, NY**
- **SUNY Plattsburgh, Plattsburgh, NY**
- **Siena College, Loudonville, NY**



SPEECH LANGUAGE PATHOLOGIST

Speech-language pathologists, sometimes called speech therapists, assess, diagnose, treat, and help to prevent disorders related to speech, language, cognitive-communication, voice, swallowing, and fluency in people of all ages. Speech-language pathologists work with people who cannot produce speech sounds or cannot produce them clearly; those with speech rhythm and fluency problems, such as stuttering or slurred speech or other speech impairment; people with voice disorders, such as inappropriate pitch or harsh voice; those with problems understanding and producing language; those who wish to improve their communication skills by modifying an accent; and those with cognitive communication impairments, resulting from brain injury, stroke, or attention, memory, and problem-solving disorders.

Speech-language pathologists often work with audiologists because some speech problems are a direct result of hearing problems.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **speech-language pathologists in New York earned an average annual salary of \$96,770, (entry level-\$54,940, experienced- \$149,470).**

Where do Speech Language Pathologists work?

- In the U.S., nearly half of all speech-language pathologists work in schools
- Health care and social assistance facilities
- Some speech-language pathologists also work in patients' homes

What education/training is needed?

- In New York, speech-language pathologists are required to have a graduate degree in speech-language pathology. Master's level programs in speech-language pathology include coursework in basic communication processes, audiology, scientific areas of speech-language pathology and language, as well as a supervised practice of at least 400 hours.
- Most master's programs require an undergraduate Bachelor's degree in speech-language pathology, audiology, or a relevant or more generic degree, such as communications disorders.

Years in higher education: 6

What is the demand for this occupation?

The Bureau of Labor Statistics projects that the number of **jobs for speech-language pathologists nationwide will increase by 17.8% between 2016 and 2026, and will increase by 21.6% in New York during the same time period.**

What colleges in NYS offer training?

- **Buffalo State College-SUNY**, Buffalo, NY
- **College of St. Rose**, Albany, NY
- **Ithaca College**, Ithaca, NY
- **Nazareth College**, Rochester, NY
- **SUNY Plattsburgh**, Plattsburgh, NY
- **SUNY Fredonia**, Fredonia, NY
- **University at Buffalo-SUNY**, Buffalo, NY
- **SUNY Cortland**, Cortland, NY

SUBSTANCE USE AND BEHAVIORAL HEALTH COUNSELORS

Substance use, behavioral disorder and mental health counselors advise people who have alcoholism or other types of addiction (drugs, gambling, etc.), eating disorders, mental health issues or other mental or behavioral problems. They provide support and treatments to help the client recover from addiction or modify problem behaviors by helping them identify behaviors and issues related to their addiction. They may also teach clients how to cope with stress and life's problems in ways that help them recover.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **substance abuse, behavioral disorder, and mental health counselors in New York earned an average annual salary of \$54,280, (entry level-\$32,140, experienced- \$80,710).**

Where do Substance Use and Behavioral Health Counselors work?

- Outpatient care centers
- Individual and family service agencies
- Residential treatment facilities
- Mental health centers
- Community health centers
- Prisons
- Private practice: Some work in a private practice alone or with other mental health professionals
- Hospitals
- Public health programs

What education/training is needed?

- Most positions require at least a Bachelor's degree. Although educational requirements can vary from a high school diploma and certification to a Master's degree for substance abuse and behavioral disorder counselors.
- A Master's degree and an internship is typically required to become a mental health counselor.

- New York substance abuse counselors are credentialed by the New York State Office of Alcoholism and Substance Abuse Services (OASAS). The official title is Credentialed Alcoholism and Substance Abuse Counselor (CASAC).

Years in higher education: 2-6

What is the demand for this occupation?

Employment of substance abuse, behavioral disorder, and mental health counselors is projected to grow 23 percent from 2020 to 2030, much faster than the average for all occupations.

What colleges in NYS offer training?

- **The College at Brockport-SUNY, Brockport, NY**
- **SUNY Plattsburgh, Clinical Mental Health Counselor, Plattsburgh, NY**
- **Clinton Community College, Plattsburgh, NY**
- **Corning Community College, Corning, NY**
- **Fulton Montgomery Community College, Johnstown, NY**
- **Hudson Valley Community College, Troy, NY**
- **College of St. Rose, Albany, NY**

SURGICAL TECHNOLOGISTS

Surgical technologists (also called operating room technicians) assist in surgical operations under the supervision of surgeons, registered nurses, or other surgical personnel. Surgical technologists are members of operating room teams, which most commonly include surgeons, anesthesiologists, and circulating nurses.

Surgical technologists prepare the operating room by setting up surgical instruments and equipment. They prepare patients for surgery and transport patients to the operating room. They will position patients on the operating table and cover them with sterile surgical drapes. They may remove a patient's sutures and apply dressings. Surgery technologists also observe patients' vital signs, check charts, and help the surgical team by passing instruments and other sterile supplies. They may hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments. They may also operate some diagnostic equipment and handle specimens taken for analysis. After an operation, surgical technologists may help transfer patients to the recovery room and clean and restock the operating room.

Average annual salary varies greatly across New York State, depending on location. The NYSDOL reports that **surgical technologists in New York earned an average annual salary of \$57,420, (entry level-\$38,720, experienced- \$79,820).**

Where do Surgical Technologists work?

- Almost three-quarters of surgical technologists work in hospitals in operating rooms and delivery rooms
- Outpatient surgery centers
- Physician offices
- Dental offices

What education/training is needed?

- Surgical technologists receive their training in programs offered by community and junior colleges, vocational schools, universities, hospitals and the military. A program can take from 12 months (for a certificate) to two years (for an associate degree) to complete.

Years in higher education: 1-2

What is the demand for this occupation?

Growth in employment of surgical technologists will occur as the volume of surgeries goes up. The large population of baby boomers in the U.S. is aging and older people usually require more operations, including joint replacements and heart-related procedures. Technological advances have created a variety of new surgical procedures and will allow surgical technologists to assist with more procedures. Also, advances in medical technology have made surgery safer, and more operations are being done to treat a variety of illnesses and injuries.

What colleges in NYS offer training?

- **Niagara County Community College, Sanborn, NY**
- **Onondaga County Community College, Syracuse, NY**
- **Mohawk Valley Community College, Utica, NY**
- **Hudson Valley Community College, Troy, NY**
- **Monroe Community College, Rochester, NY**

MEDICAL GLOSSARY

ACUTE CARE A branch of health care where a patient is treated for a brief but severe episode of illness, for conditions that are the result of disease or trauma and during recovery from surgery. Often takes place in a hospital.

ADDICTION MEDICINE The branch of medicine that concentrates on helping people overcome repetitive behaviors that can range from drug and alcohol dependency to tobacco use and eating disorders.

ALLERGY & IMMUNOLOGY The study and treatment of the body's reaction to foreign and non-foreign substances such as hay fever, asthma, hives and other abnormal responses to allergens that range from dust and food to animals and chemicals.

ANESTHESIOLOGY The medical specialty concerned with the pain relief before, during and after surgery.

BEHAVIORAL HEALTH CARE Behavioral health is the scientific study of the emotions, behaviors and biology relating to a person's mental well-being, their ability to function in everyday life and their concept of self.

CARDIOVASCULAR DISEASE A group of disorders of the heart and blood vessels.

COMMUNITY BASED ORGANIZATIONS Community based organization refers to organization aimed at making desired improvements to a community's social health, well-being, and overall functioning. Community organization occurs in geographically, psychosocially, culturally, spiritually and digitally bounded communities.

CRITICAL CARE MEDICINE Critical Care is a branch of medicine concerned with the provision of life support or organ support systems in patients who are critically ill who usually also require intensive monitoring.

DERMATOLOGY The study and treatment of disorders and diseases of the skin, from warts to acne to skin cancers.

EMERGENCY MEDICINE The evaluation and treatment of unexpected injury and illness.

ENDOCRINOLOGY, DIABETES, & METABOLISM

The treatment of the glands, hormones and related disorders, including diabetes and disorders of the pancreas, pituitary gland, ovaries, testes, thyroid and adrenal glands.

FEDERALLY QUALIFIED HEALTH CENTER

Community-based health care centers that receive funds from the HRSA (Health Resources and Service Administration) Health Center Program to provide primary care services in underserved areas.

GASTROENTEROLOGY The study and treatment of conditions of the digestive system. Including disorders of the stomach, intestines, bowels and other structures, such as the liver, gall bladder, pancreas and esophagus.

HEMATOLOGY The treatment of blood and blood system diseases such as cancer, lymphoma, serious anemia, and sickle cell disease.

HOME CARE SERVICES Homecare is health care or supportive care provided by a professional caregiver in the individual's home where the patient or client is living, rather than a hospital or nursing home.

INFECTIOUS DISEASE The treatment of the disease process dealing with the suppression of the immune system.

INTERNAL MEDICINE A broad-based medical field in which physicians rely on their knowledge of major organs to diagnose and treat patients. Internists treat a variety of afflictions, from colds and heart problems to infectious diseases. Internists often serve as a patient's primary doctor, coordinating that person's healthcare.

LONG-TERM CARE Long-term care is a variety of services which help meet both the medical and non-medical needs of people with chronic illness or disability who independently complete their activities of daily living (ADLs) such as bathing, dressing, grooming and toileting.

NEONATAL-PERINATAL MEDICINE

A field of medicine devoted to the care and treatment of infants up to six weeks old. Can include treatment of a fetus or a newborn and the mother.

NEPHROLOGY The study and care of the kidneys and urinary system such as kidney disorders, diabetes, and renal failure. Treatments can range from dialysis to kidney transplants.

NEUROLOGY The study and treatment of diseases of the nervous system.

OBSTETRICS AND GYNECOLOGY

OB/GYN is the field of medicine devoted to conditions specific to women. Obstetrics is the care of a woman during pregnancy and during and after childbirth. Gynecology is the study and care of the female reproductive system

ONCOLOGY A branch of medicine that specializes in the diagnosis and treatment of cancer. It includes medical oncology (the use of chemotherapy, hormone therapy, and other drugs to treat cancer), radiation oncology (the use of radiation therapy to treat cancer), and surgical oncology (the use of surgery and other procedures to treat cancer).

OPHTHALMOLOGY The medical specialty devoted to care of the eye and the treatment of diseases that affect eyes and vision.

ORTHOPEDICS The treatment of deformities, diseases and injuries of the bones, joints and muscles. Sports medicine is a subspecialty.

OTOLARYNGOLOGY (EAR, NOSE, AND THROAT)

A division of medical science that focuses on the ears, nose and throat (ENT) and include hearing loss, tonsillitis and nasal obstructions.

PATHOLOGY The study of the causes and effects of disease or injury. There are several subspecialties in pathology, including chemical pathology, forensic pathology, hematology pathology and neuropathology.

PEDIATRICS The field of medicine dedicated to the care of infants, children and teenagers with a focus on preventing illness and treating children for a variety of conditions.

PODIATRY The study, prevention, and treatment of problems of the foot.

PRIMARY CARE The day-to-day healthcare given by a healthcare provider. Typically this provider acts as the first contact and principal point of continuing care for patients within a healthcare system and coordinates other specialist care that the patient may need.

PSYCHIATRY The diagnosis, treatment, and prevention of mental, emotional, and behavioral disorders.

PULMONARY DISEASE The field of medicine devoted to the study and treatment of diseases of the respiratory system such as pneumonia, bronchitis, emphysema, asthma, cancer and other disorders of the lungs and respiratory system.

RADIOLOGY The use of radioactive equipment, including X-ray machines, to diagnose and treat diseases and injuries.

RHEUMATOLOGY The study and care of the joints and the muscular and skeletal systems ranging from athletic injuries to arthritis, lupus and rheumatic fever.

SUBSTANCE USE DISORDER

Substance use disorder (SUD) is a complex condition in which there is uncontrolled use of a substance despite harmful consequences. People with SUD have an intense focus on using a certain substance(s) such as alcohol, tobacco, or illicit drugs, to the point where the person's ability to function in day-to-day life becomes impaired.

SURGERY A wide range of surgical procedures including the use of minimally invasive surgical techniques. Surgical intervention or treatment of injuries and disease responsive to operative or manual treatment

UROLOGY The study and treatment of the urinary tract, prostate and bladder.

The information shared in this resource was pulled from a variety of resources including:

- **Careers in Healthcare from the Center for Rural Health, University of North Dakota School of Medicine and Health Sciences Careers in Healthcare** (und.edu)
- **Center for Health Workforce Studies – Health Careers** (<https://www.chwsny.org/health-careers/> & www.Healthcareerinfo.net)
- **New York State Department of Labor – Career Zone** (www.careerzone.ny.gov)
- **Explore Health Careers** (www.explorehealthcareers.org)



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