

Nurse Practitioners

Snapshot

Career Cluster(s): Health science

Earnings (Median Pay 2018): \$113,930 yearly; \$54.78 hourly

Employment & Outlook: Much faster than average

Employment Change, 2016-26: \$64,200

OVERVIEW

Sphere of Work

Nurse anesthetists, nurse midwives, and nurse practitioners, also referred to as *advanced practice registered nurses (APRNs)*, coordinate patient care and may provide primary and specialty healthcare. The scope of practice varies from state to state.

APRNs work independently or in collaboration with physicians. In most states, they can prescribe medications, order medical tests, and diagnose health problems. APRNs may provide primary and preventive care and may specialize in care for certain groups of



people, such as children, pregnant women, or patients with mental health disorders.

Some APRN duties are the same as those for registered nurses, including gathering information about a patient's condition and taking action to treat or manage the patient's health. However, APRNs are trained to perform many additional functions, including ordering and evaluating test results, referring patients to specialists, and diagnosing and treating ailments. APRNs focus on patient-centered care, which means understanding a patient's concerns and lifestyle before choosing a course of action.

APRNs also may conduct research or teach staff about new policies or procedures. Others may provide consultation services based on a specific field of knowledge, such as oncology, which is the study of cancer.

Duties and Responsibilities

Advanced practice registered nurses typically do the following:

- **Take and record patients' medical histories and symptoms**
- **Perform physical exams and observe patients**
- **Create patient care plans or contribute to existing plans**
- **Perform and order diagnostic tests**
- **Operate and monitor medical equipment**
- **Diagnose various health problems**
- **Analyze test results or changes in a patient's condition, and alter treatment plans, as needed**
- **Give patients medicines and treatments**
- **Evaluate a patient's response to medicines and treatments**
- **Consult with doctors and other healthcare professionals, as needed**
- **Counsel and teach patients and their families how to stay healthy or manage their illnesses or injuries**
- **Conduct research**

OCCUPATION SPECIALTIES

The following are types of APRNs:

Nurse Anesthetists

Nurse Anesthetists (CRNAs) provide anesthesia and related care before, during, and after surgical, therapeutic, diagnostic, and obstetrical procedures. They also provide pain management and some emergency services. Before a procedure begins, nurse anesthetists discuss with a patient any medications the patient is taking as well as any allergies or illnesses the patient may have, so that anesthesia can be safely administered. Nurse anesthetists then give a patient general anesthesia to put the patient to sleep so they feel no pain during surgery or administer a regional or local anesthesia to numb an area of the body. They remain with the patient throughout a procedure to monitor vital signs and adjust the anesthesia as necessary.

Nurse Midwives

Nurse Midwives (CNMs) provide care to women, including gynecological exams, family planning services, and prenatal care. They deliver babies; manage emergency situations during labor, such as hemorrhaging; repair lacerations; and may provide surgical assistance to physicians during cesarean births. Nurse midwives may act as primary care providers for women and newborns. They also provide wellness care, educating their patients on how to lead healthy lives by discussing topics such as nutrition and disease prevention. Nurse midwives also provide care to their patients' partners for sexual or reproductive health issues.

Nurse Practitioners

Nurse Practitioners (NPs) serve as primary and specialty care providers, delivering advanced nursing services to patients and their families. They assess patients, determine the best way to improve or manage a patient's health, and discuss ways to integrate health promotion strategies into a patient's life. Nurse practitioners typically care for a certain population of people. For instance, NPs may work in

adult and geriatric health, pediatric health, or psychiatric and mental health.

Although the scope of their duties varies some by state, many nurse practitioners work independently, prescribe medications, and order laboratory tests. All nurse practitioners consult with physicians and other health professionals when needed.

WORK ENVIRONMENT

Nurse anesthetists, nurse midwives, and nurse practitioners held about 203,800 jobs in 2016. Employment in the detailed occupations that make up nurse anesthetists, nurse midwives, and nurse practitioners was distributed as follows:

Nurse practitioners	155,500
Nurse anesthetists	41,800
Nurse midwives	6,500

Some advanced practice registered nurses (APRNs) may treat patients in their patients' homes. Some nurse midwives work in birthing centers, which are a type of outpatient care center.

APRNs may travel long distances to help care for patients in places where there are not enough healthcare workers.

APRN work can be both physically and emotionally demanding. Some APRNs spend much of their day on their feet. They are vulnerable to back injuries because they must lift and move patients. APRN work can also be stressful because they make critical decisions that affect a patient's health.

Because of the environments in which they work, APRNs may come in close contact with infectious diseases. Therefore, they must follow

strict, standardized guidelines to guard against diseases and other dangers, such as accidental needle sticks or patient outbursts.

Most APRNs work full time. APRNs working in physicians' offices typically work during normal business hours. Those working in hospitals and various other healthcare facilities may work in shifts to provide round-the-clock patient care. They may work nights, weekends, and holidays. Some APRNs, especially those who work in critical care or those who deliver babies, also may be required to be on call.

Nurse anesthetists, nurse midwives, and nurse practitioners, also referred to as *advanced practice registered nurses (APRNs)*, must earn at least a master's degree in one of the specialty roles. APRNs must also be licensed registered nurses in their state and pass a national certification exam.

EDUCATION, TRAINING, AND ADVANCEMENT

Nurse anesthetists, nurse midwives, and nurse practitioners must earn a master's degree from an accredited program. These programs include both classroom education and clinical experience. Courses in anatomy, physiology, and pharmacology are common as well as coursework specific to the chosen APRN role.

Important Qualities

- **Communication skills.** Advanced practice registered nurses must be able to communicate with patients and other healthcare professionals to ensure that the appropriate course of action is understood.
- **Critical-thinking skills.** APRNs must be able to assess changes in a patient's health, quickly determine the most appropriate course of action, and decide if a consultation with another healthcare professional is needed.
- **Compassion.** APRNs should be caring and sympathetic when treating patients who are in pain or who are experiencing emotional distress.
- **Detail oriented.** APRNs must be responsible and detail oriented because they provide various treatments and medications that affect the health of their patients. During an evaluation, they must pick up on even the smallest changes in a patient's condition.
- **Interpersonal skills.** APRNs must work with patients and families as well as with other healthcare providers and staff within the organizations where they provide care. They should work as part of a team to determine and execute the best possible healthcare options for the patients they treat.
- **Leadership skills.** APRNs often work in positions of seniority. They must effectively lead and sometimes manage other nurses on staff when providing patient care.
- **Resourcefulness.** APRNs must know where to find the answers that they need in a timely fashion.

An APRN must have a registered nursing (RN) license before pursuing education in one of the advanced practice roles, and a strong background in science is helpful.

Most APRN programs prefer candidates who have a bachelor's degree in nursing. However, some schools offer bridge programs for registered nurses with an associate's degree or diploma in nursing. Graduate-level programs are also available for individuals who did not obtain a bachelor's degree in nursing but in a related health science field.

These programs prepare the student for the RN licensure exam in addition to the APRN curriculum.

Although a master's degree is the most common form of entry-level education, APRNs may choose to earn a Doctor of Nursing Practice (DNP) or a Ph.D. The specific educational requirements and qualifications for each of the roles are available on professional organizations' websites.

Prospective nurse anesthetists must have 1 year of clinical experience as a prerequisite for admission to an accredited nurse anesthetist program. Candidates typically have experience working as a registered nurse in an acute care or critical care setting.

Licenses, Certifications, and Registrations

Most states recognize all of the APRN roles. In states that recognize some or all of the roles, APRNs must have a registered nursing license, complete an accredited graduate-level program, and pass a national certification exam. Each state's board of nursing can provide details.

The *Consensus Model for APRN Regulation*, a document developed by a wide variety of professional nursing organizations, including the National Council of State Boards of Nursing, aims to standardize APRN requirements. The model recommends all APRNs to complete a graduate degree from an accredited program, be a licensed registered nurse, pass a national certification exam, and earn a second license specific to one of the APRN roles and to a certain group of patients.

Certification is required in the vast majority of states to use an APRN title. Certification is used to show proficiency in an APRN role and is often a requirement for state licensure.

The National Board of Certification and Recertification for Nurse Anesthetists (NBCRNA) offers the National Certification Examination (NCE). Certified registered nurse anesthetists (CRNAs) must recertify via the Continued Professional Certification (CPC) Program every 4 years.

The American Midwifery Certification Board offers the Certified Nurse-Midwife (CNM). Individuals with this designation must recertify via the Certificate Maintenance Program every 5 years.

There are a number of certification exams for nurse practitioners because of the large number of populations NPs may work with and the number of specialty areas in which they may practice. Certifications are available from a number of professional organizations, including the American Nurses Credentialing Center and the Pediatric Nursing Certification Board.

In addition, APRN positions may require certification in cardiopulmonary resuscitation (CPR), basic life support (BLS) certification, and/or advanced cardiac life support (ACLS).

Some APRNs may take on managerial or administrative roles, while others go into academia. APRNs who earn a doctoral degree may conduct independent research or work in an interprofessional research team.

The median annual wage for nurse anesthetists, nurse midwives, and nurse practitioners was \$110,930 in May 2017. The lowest 10 percent earned less than \$76,830, and the highest 10 percent earned more than \$180,460.

Famous First

The nation's first nursing school based on Florence Nightingale's principles, the Training School for Nurses, opened at Bellevue in 1873. Sister Helen Bowdin of the All Saints Sisterhood in London was the first Superintendent. Sister Bowdin remained a faithful All Saints sister, later nursing for the community in South Africa.

Source: <http://allsaintssisters.org/Who/OurHistory.aspx>



EARNINGS AND ADVANCEMENT

Median annual wages for nurse anesthetists, nurse midwives, and nurse practitioners in May 2018 were as follows:

Median annual wages May 2018

Nurse anesthetists, nurse midwives, and nurse practitioners: \$113,930

Health diagnosing and treating practitioners: \$80,990

Total, all occupations: \$38,640

Note: All Occupations includes all occupations in the U.S. Economy.

Source: U.S. Bureau of Labor Statistics, Employment Projections program

Nurse anesthetists	\$165,120
Nurse practitioners	\$103,880
Nurse midwives	\$100,590

Most advanced practice registered nurses (APRNs) work full time. APRNs working in physicians' offices typically work during normal business hours. Those working in hospitals and various other healthcare facilities may work in shifts to provide round-the-clock patient care. They may work nights, weekends, and holidays. Some APRNs, especially those who work in critical care or those who deliver babies, also may be required to be on call.

Nurse anesthetists, nurse midwives, and nurse practitioners held about 240,700 jobs in 2018. Employment in the detailed occupations

EMPLOYMENT AND OUTLOOK

that make up nurse anesthetists, nurse midwives, and nurse practitioners was distributed as follows:

Nurse practition-ers	189,100
Nurse anesthetists	45,000
Nurse midwives	6,500

The largest employers of nurse anesthetists, nurse midwives, and nurse practitioners were as follows:

Offices of physicians	47%
Hospitals; state, local, and private	27%
Outpatient care centers	9%
Educational services; state, local, and pri-vate	4%
Offices of other health practitioners	3%

Some advanced practice registered nurses (APRNs) provide care in patients' homes. Some nurse midwives work in birthing centers, which are a type of outpatient care center.

APRNs may travel long distances to help care for patients in places where there are not enough healthcare workers.

Overall employment of nurse anesthetists, nurse midwives, and nurse practitioners is projected to grow 26 percent from 2018 to 2028, much faster than the average for all occupations. Employment growth will vary by occupation. Because nurse midwives is a small occupation, however, the fast growth will result in only about 1,000 new jobs in this occupation over the 10-year period.

Growth will occur because of an increase in the demand for healthcare services. Several factors will contribute to this demand, including an

Percent change in employment, Projected 2018–28

Nurse anesthetists, nurse midwives, and nurse practitioners: 26%

Health diagnosing and treating practitioners: 13%

Total, all occupations: 5%

Note: All Occupations includes all occupations in the U.S. Economy.

Source: U.S. Bureau of Labor Statistics, Employment Projections program

increased emphasis on preventive care and demand for healthcare services from the aging population.

Advanced practice registered nurses (APRNs) perform many of the same services as physicians. APRNs will be increasingly used in team-based models of care, particularly in hospitals, offices of physicians, clinics, and other ambulatory care settings, where they will be needed to provide preventive and primary care.

APRNs will also be needed to care for the large baby-boom population. As baby boomers age, they will experience ailments and complex conditions that require medical care. APRNs will be needed to keep these patients healthy and to treat the growing number of patients with chronic and acute conditions.

As states change their laws governing APRN practice authority, APRNs are being allowed to perform more services. APRNs also are being recognized more widely by the public as a source for primary healthcare.

About 16,900 openings for nurse practitioners, 3,200 openings for nurse anesthetists, and 500 openings for nurse midwives are projected each year, on average, over the decade.

Many of those openings are expected to result from the need to replace workers who exit the labor force, such as to retire, and from the need to replace workers who transfer to different occupations.

Overall, job opportunities for advanced practice registered nurses are likely to be excellent. APRNs will be in high demand, particularly in medically underserved areas such as inner cities and rural areas.

This list shows occupations with job duties that are similar to those of nurse anesthetists, nurse midwives, and nurse practitioners.

SIMILAR OCCUPATIONS

Audiologists

Audiologists diagnose, manage, and treat a patient's hearing, balance, or ear problems.

Occupational Therapists

Occupational therapists treat injured, ill, or disabled patients through the therapeutic use of everyday activities. They help these patients develop, recover, improve, as well as maintain the skills needed for daily living and working.

Physical Therapists

Physical therapists, sometimes called PTs, help injured or ill people improve their movement and manage their pain. These therapists are often an important part of the rehabilitation, treatment, and prevention of patients with chronic conditions, illnesses, or injuries.

Physician Assistants

Physician assistants, also known as PAs, practice medicine on teams with physicians, surgeons, and other healthcare workers. They examine, diagnose, and treat patients.

Physicians and Surgeons

Physicians and surgeons diagnose and treat injuries or illnesses. Physicians examine patients; take medical histories; prescribe medications; and order, perform, and interpret diagnostic tests. They counsel patients on diet, hygiene, and preventive healthcare. Surgeons operate on patients to treat injuries, such as broken bones; diseases, such as cancerous tumors; and deformities, such as cleft palates.

Registered Nurses

Registered nurses (RNs) provide and coordinate patient care, educate patients and the public about various health conditions, and provide advice and emotional support to patients and their family members.

Speech-Language Pathologists

Speech-language pathologists (sometimes called speech therapists) assess, diagnose, treat, and help to prevent communication and swallowing disorders in children and adults. Speech, language, and swallowing disorders result from a variety of causes, such as a stroke, brain injury, hearing loss, developmental delay, Parkinson's disease, a cleft palate, or autism.

Fast Fact

Lina Rogers Struthers became known as the first school nurse in the United States, in New York City, 1902.

Conversation With . . . **JENNA HERMAN**

Family Nurse Practitioner Program Coordinator for the
University of Mary
Bismarck, North Dakota
Nurse Practitioner, 7 years

1. What was your individual career path in terms of education/training, entry-level job, or other significant opportunity?

When I was ten years old, I was in a serious bike accident, and spent the first week in intensive care and the second week at a rehabilitation center. Many wonderful health care professionals were part of my recovery, and by observing the compassion and fortitude of the nurses who took care of me day after day, I knew nursing was the career for me.

After graduating with my bachelor's degree from Augustana University in Sioux Falls, South Dakota, my first job as a registered nurse was at a large medical center in Minneapolis, Minnesota. I enjoyed taking care of cancer patients and seeing them fight a critical disease. I saw a lot of patients pass away, and I wanted to try to help people before they got to a disease state, to try to make more of a difference and maybe prevent some of these diseases.

While volunteering as a nurse at a free clinic that provided services to uninsured individuals, I met a family nurse practitioner (FNP). She examined patients, diagnosed illness, and provided treatment, often prescribing medication that made a difference in patients' lives. She also helped them to make healthier choices and have a better quality of life. I wanted to do the same, so I went back to graduate school to become an FNP. I earned my master's degree in nursing (MSN) at the College of St. Scholastica in Duluth, Minnesota, while continuing to work as a nurse.

Currently, I teach FNP students at the University of Mary in courses ranging from physical assessment to acute and emergent care. In addition, I continue to practice part-time at several nurse practitioner-run urgent care clinics. In addition, I am fortunate to be part of medical mission and service learning trips to Ayaviri, Peru, through the university, which established a partnership with the local medical community. We take week-long service learning trips to provide care and model continuity of care so people will keep coming back.

2. What are the most important skills and/or qualities for someone in your profession?

Nursing has been the number one trusted profession for many years, according to Gallup polls. Trust is established because nurses, including FNPs, display skills and qualities including empathy, commitment, and determination. Obtaining nursing experience before becoming an FNP is highly recommended because it provides a foundation of knowledge, cultivates patient interaction skills, and develops critical thinking. FNPs are often at the center of a patient's care and require collaboration skills. It is essential to be an advocate to ensure that patients receive the best care possible.

3. What do you wish you had known going into this profession?

Being an FNP is a great career, but you will face many demands. The hours can be long, and a patient's care and treatment have become more complex because we're living longer than previous generations and are therefore faced with increasing disease. FNPs are often expected to be ready to go on their first day. I recall many days struggling to complete all of my required tasks: seeing patients, charting, answering questions, making referrals, and contacting patients with results. It was challenging to find time to eat or even take a bathroom break. To overcome these difficulties, identify a mentor of whom you can ask questions, and get help identifying priorities for each day and improving time management. You will often be challenged to do more with less with increased pressure to see more patients as health care costs continue to rise.

4. Are there many job opportunities in your profession? In what specific areas?

The job market is bright for FNPs in general as the population continues to age and the shortage of primary care professionals increases. There are nearly 250,000 NPs in the United States, almost double the number practicing in 2008. In particular, jobs are more plentiful in rural areas compared to urban because people tend to want to live in larger cities. As a consequence, some larger cities are starting to become saturated, so FNPs — particularly new graduates — are having a harder time finding a job in these areas.

5. How do you see your profession changing in the next five years, how will technology impact that change, and what skills will be required?

NPs, including FNPs, are fighting to practice at the full scope of their education and training. When I first met the FNP at the free clinic, I was in awe of her confidence and abilities, but later learned she needed a physician to sign off on her charts and treatment plans.

NPs have reduced or restricted practice in more than half of the states in the United States. I respect and value physicians as important members of the health care team, but with the provider shortage, NPs need to practice at the highest levels of their education and training to help combat this issue. I do hope these barriers will continue to fall over the next five years.

I see patients, especially younger ones, who have grown up with the Internet and cell phones, want quick and easy access to care through technology. Many FNPs are part of practices that incorporate technology such as patients being able to report symptoms, chat with an FNP, and receive a prescription if needed without having to leave home. I believe this is the future of health care, and FNPs need to continue to adapt to these changes.

6. What do you enjoy most about your job? What do you enjoy least about your job?

I greatly enjoy the difference I make in my students' and patients' lives. Seeing patients get better from an acute illness or make better choices to become healthier is very rewarding. The best part of teaching is when students become colleagues.

A well-known adage in health care is, "If it wasn't documented it wasn't done." Therefore, I dislike all of the required documentation, as it takes away time from interacting with patients.

7. Can you suggest a valuable "try this" for students considering a career in your profession?

Shadow or interview an FNP to get an idea of what the day-to-day job may involve. Also, training to become a nursing assistant, paramedic, or EMT will give you firsthand experience and skills that are valuable if you choose to pursue more education. Be realistic regarding your reactions and tolerance toward handling things like bodily fluids or blood, because that is an integral part of an FNP's job.

MORE INFORMATION

For more information about nurse anesthetists, including a list of accredited programs, visit

American Association of Nurse Anesthetists

<https://www.aana.com/>

For more information about nurse midwives, including a list of accredited programs, visit

American College of Nurse-Midwives

<http://www.midwife.org/>

For more information about nurse practitioners, including a list of accredited programs, visit

American Association of Nurse Practitioners

<https://www.aanp.org/>

For more information about registered nurses, including credentialing, visit

American Nurses Association

<https://www.nursingworld.org/>

For more information about nurse anesthetists, including a list of accredited programs, visit

National League for Nursing

<http://www.nln.org/>

For more information about undergraduate and graduate nursing education, nursing career options, and financial aid, visit

American Association of Colleges of Nursing

<https://www.aacnnursing.org/>

For more information about the Consensus Model and for a list of the states' Boards of Nursing, visit

National Council of State Boards of Nursing

<https://www.ncsbn.org/>

For more information about certification, visit

National Board of Certification and Recertification for Nurse Anesthetists

<https://www.nbcna.com/>

American Midwifery Certification Board

<https://www.amcbmidwife.org/>

American Nurses Credentialing Center

<https://www.nursingworld.org/ancc/>

Pediatric Nursing Certification Board

<https://www.pncb.org/>