Advanced Practice Registered Nurses: Nurse Anesthetists, Nurse Midwives, Nurse Practitioners & Clinical Nurse Specialists

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

DUTIES

Advanced practice registered nurses typically do the following:

- Take and record patients’ medical histories and symptoms and set up plans for patients’ care or contribute to existing plans
- Perform physical exams
- Observe patients and diagnose various health problems
- Perform and order diagnostic tests and analyze results
- Give patients medicines and treatments
- Consult with doctors and other healthcare professionals as needed
- Operate and monitor medical equipment
- Provide counseling and teach patients and their families how to stay healthy or manage their illnesses or injuries

APRNs work independently or in collaboration with physicians. In most states, they can prescribe medications, order medical tests, and diagnose health problems. They may provide primary and preventative care and may specialize in care for certain groups of people, such as children, pregnant women, or patients with mental health disorders.

APRNs who work with patients typically perform many of the same duties as registered nurses, gathering information about a patient’s condition and taking action to treat or manage the patient’s health. However, APRNs are also 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 may also 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.

The following are examples of types of APRNs:

- **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 or 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** provide care to women, including gynecological exams, family planning services, prenatal care, and attendance in labor and delivery. They may act as primary care providers for women and newborns. Many nurse midwives 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 (NPs)** serve as primary and specialty care providers, providing advanced nursing services to patients and their families. NPs 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. They 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.

• **Clinical nurse specialists (CNSs)** provide direct patient care to a certain population of people, such as pediatric patients, within one of many nursing specialties, such as orthopedic nursing or oncology nursing. CNSs also provide indirect care by working with other nurses, healthcare teams, and various other staff to improve the quality of care that patients receive. They also work at the system or organizational level to improve the quality of nursing care throughout a facility related to their specialty. Those with a research doctorate may conduct research.

### IMPORTANT QUALITIES

- **Communication skills.** Advanced practice registered nurses must be able to communicate with patients and other health care professionals to ensure that the appropriate course of action is understood.
- **Critical-thinking skills.** ARPNs must be able to assess changes in a patient’s health, quickly determining the most appropriate course of action and if a consultation with another health care professional is needed.
- **Compassion.** Nurses 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.** Advanced practice registered nurses must work with patients and families as well as with other health care 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.** Advanced practice registered nurses 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.

### EDUCATION

Nurse anesthetists, nurse midwives, nurse practitioners, and clinical nurse specialists 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.

An APRN must become a licensed registered nurse (RN) before pursuing education in one of the advanced practice roles. Many programs also require some period of clinical experience, 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, many APRNs 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.
Accredited Schools in Virginia – Nurse Anesthetist

- Old Dominion University
- Virginia Commonwealth University

Accredited Schools in Virginia – Nurse Midwife

- James Madison University
- Old Dominion University
- Radford University
- Shenandoah University

Accredited Schools in Virginia – Nurse Practitioner

- George Mason University
- Hampton University
- James Madison University
- Marymount University
- Old Dominion University
- Radford University
- Shenandoah University
- University of Virginia
- Virginia Commonwealth University

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 approved 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 every 2 years, which includes 40 hours of continuing education.

The American Midwifery Certification Board offers the Certified Nurse-Midwife and Certified Midwife designations. Individuals with these designations must recertify 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.

**WORK ENVIRONMENT**

Nurse Anesthetists, nurse midwives, nurse practitioners, and clinical nurse specialists, also referred to as advanced practice registered nurses (APRNs), held about 151,400 jobs in 2012. The industries that employed the most APRNs in 2012 were as follows:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices of physicians</td>
<td>47%</td>
</tr>
<tr>
<td>Hospitals; state, local, &amp; private</td>
<td>28%</td>
</tr>
<tr>
<td>Outpatient care centers</td>
<td>6%</td>
</tr>
<tr>
<td>Colleges, universities, and professional schools; state, local, &amp; private</td>
<td>4%</td>
</tr>
<tr>
<td>Offices of other health practitioners</td>
<td>3%</td>
</tr>
</tbody>
</table>

APRNs work in a variety of settings including physicians’ offices, hospitals, nursing care facilities, schools, and clinics. Nurse midwives also work in birthing centers. Some APRNs may treat patients in their patients’ homes.

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

**Injuries & Illnesses**

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 as critical decisions must be made.

Because of the environments in which they work, APRNs may come in close contact with infectious diseases and potentially harmful drugs. Therefore, they must follow strict, standardized guidelines to guard against diseases and other dangers, such as accidental needle sticks or patient outbursts.

**Work Schedules**

APRNs working in physicians’ offices or schools 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, may also be on call.

**JOB OUTLOOK**

Employment of nurse anesthetists, nurse midwives, and nurse practitioners is expected to grow 31 percent from 2012 to 2022, much faster than the average for all occupations. U.S News & World Report, in their article “Best Jobs of 2015,” claims that Nurse Practitioners hold the number two spot.

Growth will occur because of an increase in the demand for healthcare services. Several factors, including healthcare legislation and the resulting newly insured, an increased emphasis on preventative care, and the large, aging baby-boom population will contribute to this demand.

The number of individuals who have access to health insurance will increase due to federal health insurance reform legislation. APRNs can perform many of the same services as physicians and may be needed to provide primary care services.

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

APRNs will also be needed to care for the aging baby-boom generation. 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.
AVERAGE SALARY

The median annual wage for nurse anesthetists, nurse midwives, clinical nurse specialists, and nurse practitioners, was $96,460 in May 2012. The median wage is the wage at which half of the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than $66,330, and the top 10 percent earned more than $161,030.

In May 2012, the median annual wages for advanced practice registered nurses in the top five industries in which APRNs worked were as follows:

<table>
<thead>
<tr>
<th>Industry</th>
<th>Median Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals; local, state, and private</td>
<td>$101,990</td>
</tr>
<tr>
<td>Offices of other health practitioners</td>
<td>$98,260</td>
</tr>
<tr>
<td>Offices of physicians</td>
<td>$97,600</td>
</tr>
<tr>
<td>Outpatient care centers</td>
<td>$92,270</td>
</tr>
<tr>
<td>Colleges, universities, &amp; professional schools</td>
<td>$88,070</td>
</tr>
</tbody>
</table>

Many employers of APRNs offer flexible work schedules, childcare, and educational benefits. APRNs working in physicians’ offices or schools 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, may also be on call.

Contacts for More Information

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

American Association of Nurse Anesthetists

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

American College of Nurse-Midwives

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

American Association of Nurse Practitioners

For more information about registered nurses, including credentialing, visit

American Nurses Association

For more information about nursing education and being a registered nurse, visit

National League for Nursing

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

American Association of Colleges of Nursing
For information about the Consensus Model and for a list of the states’ Boards of Nursing, visit

National Council of State Boards of Nursing

For information about certification, visit

National Board of Certification and Recertification for Nurse Anesthetists

American Midwifery Certification Board

American Nurses Credentialing Center

Pediatric Nursing Certification Board

O*NET

Nurse Practitioners

Nurse Midwives

Nurse Anesthetists

REFERENCE