While there are differences in academic degree and length of time spent preparing to practice, all health professionals must meet certain requirements to commence and remain in practice in the United States. The tables that follow detail the processes designed to demonstrate continuing competence among the professions.

**ELEMENTS**

**Accreditation**

Accrediting bodies assess educational programs (and, for physicians and pharmacists, residency programs) to determine whether their curricula/content can be expected to produce competent professionals. By profession, these bodies are:

- **Medicine**: The Liaison Committee on Medical Education accredits allopathic medical schools, while the American Osteopathic Association’s Commission on Osteopathic College Accreditation (AOA’s COCA) accredits osteopathic medical schools. The Accreditation Council for Graduate Medical Education (ACGME) and the AOA accredit the respective residency programs.

- **Nursing**: The National League for Nursing Accrediting Commission accredits all types of nursing education programs, including those that award advanced degrees. The Commission on Collegiate Nursing Education accredits programs that offer only baccalaureate and master’s degrees. The Council on Accreditation of Nurse Anesthesia Educational Programs accredits nurse anesthesia programs. The Accreditation Commission for Midwifery Education accredits midwifery education programs.
Physician Assistant education programs are accredited by the Accreditation Review Commission on Education for the Physician Assistant.

Pharmacy schools are accredited by the Accreditation Council for Pharmacy Education, while the American Society of Health-System Pharmacists accredits residency programs.

Licensure

State-based licensing bodies are charged with protecting the public by establishing minimum standards of competence for health professionals. This is generally a matter of setting educational requirements, providing for criminal background checks, and monitoring the results of licensure exams. The exams themselves, for all of the professions detailed in the tables, are standardized at the national level and administered to aspiring license holders across the country. States may set limits on how many attempts a candidate may pursue to achieve a passing grade. For the most part, health professionals must be separately licensed in each state where they practice, though some states mutually recognize nursing licenses (see table). States also define a profession's scope of practice. While physicians have all but unlimited scope, other professions are more strictly defined in terms of what they are able to do and under what circumstances, and when they can bill a payer directly for their services.

Licensing boards oversee periodic license renewal, including requirements for continuing education, and may institute disciplinary action against poorly performing or lawbreaking professionals. The health professions listed below require some continuing education for license renewal, though this is not required of registered nurses in all states. Specialty boards or other professional organizations typically approve providers of continuing education programs, while states generally specify the required number of hours. Historically, there has been little direct regulation of the course content itself, though the professions may set some rules, for example, that a certain percentage of hours be earned in the licensee’s specialty. Moreover, a handful of states have recently established certain mandates, for example, that physicians take courses in end-of-life care, infection control, or prescribing controlled substances. Some states require pharmacists to have subject-specific continuing education as well.
Certification ("Board Certification")

Health professional organizations (medical and nursing specialty boards, the National Commission on Certification of Physician Assistants, the Board of Pharmacy Specialties) administer certification processes designed to attest that a person has successfully demonstrated the knowledge and competency to practice at a high standard. Nurses, physician assistants, and pharmacists may seek certification in one of their profession's specialties, but this is not required.¹ Advance practice nurses² are required to be certified, according to a national-level process administered by organizations such as the American Academy of Nurse Practitioners and the American Midwifery Certification Board. Certification is voluntary for physicians, but it is estimated that 80 to 90 percent of physicians are, in fact, certified. This is in part for reasons of prestige and professional pride, but also because many hospitals make privileges and many medical groups make membership contingent on certification. At one time a once-for-always proposition based on an exam, physician certification must now be maintained according to the specifications of the relevant specialty board (and under the aegis of the American Board of Medical Specialties, the American Board of Physician Specialties, or the AOA). Maintenance involves periodic re-testing, practice performance assessment, and quality improvement activities.

Credentialing

In some health professions, such as nursing, being certified and having a specialty credential are synonymous. Credentialing for physicians refers to a laborious process whereby hospitals and health plans not only verify education and work experience, but review references, insurance claims histories, procedural logs, disciplinary records, and other primary source materials to determine that a physician is qualified to carry out a defined range of medical functions. A health plan may tie a physician's education, certification, and experience credentials to specific billing codes for which it will reimburse his services, while a hospital will use this information to define his practice privileges.
ENDNOTES

1. The certification conferred on physician assistants (PAs) upon passage of their certifying exam indicates that a PA meets entry-level standards of knowledge and practice; further certification in a specialty is a separate process.

2. Advanced practice nurses typically include certified nurse-midwives, nurse practitioners, certified registered nurse anesthetists, and clinical nurse specialists.

<table>
<thead>
<tr>
<th>Education Program</th>
<th>Post-Graduate Education</th>
<th>State Licensure Requirements</th>
<th>Certification</th>
<th>Scope of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYSICIAN ASSISTANTS</td>
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</table>
| Typically a bachelor’s degree followed by a physician assistant (PA) program. Most of these are now at the master’s degree level. | Not required | * Graduate from PA program  
* Pass Physician Assistant National Certifying Exam (PANCE)  
* Renewal generally requires continuing education credits | Conferred upon passage of PANCE, renewed at 6-year intervals. A PA may also seek a Certificate of Added Qualifications as recognition of specialty experience. These are offered in five specialties, but have not had much takeup so far. | Must work under physician supervision, but physician may delegate duties at his or her discretion. |
| PHARMACISTS | Residency optional – typically 12 months in duration. May be required by some employers. An optional specialty residency may follow a general residency. | * Graduate from accredited program  
* Pass the North American Pharmacist Licensure Exam (NAPLEX) and (in most states) the Multistate Pharmacy Jurisprudence Exam (or, in a few states, a state-based law exam)  
States may specify a number of hours working in a practice setting before license is granted. | Voluntary, to obtain a specialty credential such as in pharmaco-therapy, ambulatory care pharmacy, or geriatric pharmacy.  
Conferred by national Board of Pharmacy Specialties or the Commission for Certification in Geriatric Pharmacy.  
Pharmacists who wish to retain certification must earn continuing education credit or pass a recertification exam every 7 years (BPS) or 5 years (CCGP). | Defined by state. |

Prepared by Lisa Sprague. 
*Please direct questions to lsprague@gwu.edu.*
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<tbody>
<tr>
<td><strong>NURSES</strong></td>
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<tr>
<td>Diploma program</td>
<td>No counterpart to residency, though the National Council of State Boards of Nursing is piloting a Transition to Practice module with on-the-job training and mentoring for new nurses.</td>
<td></td>
<td>Voluntary, to obtain a specialty credential, such as Certified Critical Care Nurse.</td>
<td>Defined by states.</td>
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<tr>
<td>(e.g., through hospital) – usually 3 years</td>
<td></td>
<td></td>
<td>Written exams plus specified period of clinical practice in the role being tested.</td>
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<tr>
<td>Associate degree</td>
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<td></td>
<td>Administered by 32 certifying organizations, which also define renewal cycles.†</td>
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<tr>
<td>(community college) – 2 to 3 years</td>
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<td></td>
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<tr>
<td>Bachelor’s degree</td>
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<td></td>
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<tr>
<td>– 4 years</td>
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<tr>
<td>Some schools offer a degree program combining accelerated one-year nursing training followed by a two-year master’s program</td>
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<tr>
<td><strong>ADVANCED PRACTICE NURSES</strong></td>
<td>After completion of nursing program (as above), master’s or doctoral degree in addition to RN license.‡</td>
<td>No counterpart to residency.</td>
<td>Required; most states require national-level certification.</td>
<td>Defined by states; may require a degree of physician supervision; limit activities, prescribing authority, or ability to bill independently.</td>
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<tr>
<td></td>
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<td></td>
<td>Written exams plus specified period of clinical practice.</td>
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<td></td>
<td></td>
<td></td>
<td>Renewed as specified by certifying organization and state, also with mandatory time in practice.</td>
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* The National Council Licensure Examinations for registered nurses and practical nurses, respectively, are offered by the National Council of State Boards of Nursing.
† See the American Board of Nursing Specialties at http://nursingcertification.org/membership-directory-regular.html for a list.
‡ Some certified nurse-midwife programs will admit candidates who are not licensed as RNs.
## Physicians [allopaths (MDs) and osteopaths (DOs)]

<table>
<thead>
<tr>
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<th>Certification</th>
<th>Scope of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>College –</td>
<td>4 years</td>
<td></td>
<td></td>
<td>Full practice of medicine.</td>
</tr>
<tr>
<td>Medical School –</td>
<td>4 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some programs</td>
<td>combine college and medical school into 6 to 7 years</td>
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</table>

**Graduate Medical Education** *(GME, also known as residency)* – 3 to 5 years in a specialty-specific program sponsored by a hospital and accredited by ACGME or AOA*

**Subspecialty fellowship(s)** – Generally optional following residency, but required for some specialties – 1 to 6 years

**Initial**
- Graduate from accredited med school
- Pass three-step USMLE or COMLEX†
  - with at least state-specified minimum score; number of attempts may be limited by state
- Complete minimum of 1 year (2 in some states) of GME training

**Renewal**
- Complete state-specified minimum continuing education (CE) requirements
- Pay fee

May be done without demonstrating active practice status.

By one of 24 specialty-specific boards jointly approved by the ABMS and the AMA‡ Council on Medical Education (allopathic physicians) or the AOA’s Bureau of Osteopathic Specialists.

Voluntary, but may be required by hospital, medical group, or insurance company.

**Initial certification**
- Hold unrestricted license
- Complete accredited residency in the specialty
- Pass written, oral, and/or clinical specialty board examination

**Maintenance of certification**
- Hold unrestricted license

Generally involves:
- Written exam every 5 to 10 years
- Lifelong learning (minimum CE credits) and self-assessment
- Practice performance assessment, such as participation in outcomes database, quality improvement, benchmarking (effective January 2013 for DOs)

Required by ABMS, AOA; frequency and criteria determined by each specialty board.

DOs are also required to maintain continuous AOA membership.

A physician may seek certification in a specialty and one or more subspecialties.

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*ACGME, Accreditation Council for Graduate Medical Education; AOA, American Osteopathic Association.†The USMLE (United States Medical Licensing Examination) is jointly sponsored by the Federation of State Medical Boards and the National Board of Medical Examiners. The counterpart for graduates of osteopathic medical schools is the COMLEX (Comprehensive Osteopathic Medical Licensing Examination), administered by the National Board of Osteopathic Medical Examiners.‡ABMS, American Board of Medical Specialties; AMA, American Medical Association.*