

# The Lifecycle of Licensure, Certification, and Maintenance of Certification in Selected Health Professions

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## Introduction and Scope

This document summarizes requirements that selected health professionals must meet after they complete their formal training in order to gain entry into their respective professions and to remain in good standing with full practice privileges over time. The discussion includes regulatory requirements such as licensure, professional requirements such as certification, and the ways in which these interact. The following professions are included in the discussion:

- Physicians (allopathic and osteopathic)
- Nurse Practitioners
- Pharmacists
- PAs

The goal of the document is to assist PA policy leaders as they evaluate the current and proposed regulatory and professional requirements of the PA profession by providing a comparison with the requirements of other relevant health professions. The discussion takes a “life-cycle” approach beginning with entry, and will make the assumption that the candidate has met his/her basic training requirements and is therefore eligible for entry into the profession. Basic pre-professional training requirements are therefore outside of the scope of this discussion, as are special requirements that apply to internationally-trained candidates.

## Physicians

### A Word about Medical Licensure Boards

While the majority of US jurisdictions have a combined medical licensure board for both allopathic and osteopathic medicine, 14 states maintain separate boards of osteopathic medicine (AZ, CA, FL, ME, MI, NV, NM, OK, PA, TN, UT, VT, WA, WV). Where there are separate boards, the requirements for licensure are often identical. In the states where they differ, the prerequisites for osteopathic board make fewer requirements than the corresponding allopathic board.

One area of significant variation among medical boards is the requirement for postgraduate training. The majority (32) require one year of postgraduate training in an accredited residency program to establish eligibility for licensure. Sixteen states require 2 years of postgraduate training, and 3 states require 3 years.

## Licensure Exams

### Allopathic Medicine

Allopathic physicians are required to take and pass the United States Medical Licensing Examination (USMLE). The examination has 3 “Steps” and is sponsored by the Federation of State Medical Boards and the National Board of Medical Examiners. The test and its administration are overseen by a Composite Committee appointed by the two organizations.

USMLE consists of three stages of testing each of which is referred to as a “Step” in the test’s official nomenclature. Step 1 testing occurs during the 2<sup>nd</sup> year of medical school and Step 2 during the 4<sup>th</sup> year of medical school. A candidate must successfully pass each examination “Step” before being allowed to proceed to the next.

USMLE Step 3 is the exam that is relied upon by medical boards for making licensure decisions. Prerequisites include having passed Steps 1 and 2, and having obtained medical degree from a medical school in the US or Canada accredited by the Liaison Committee on Medical Education or the American Osteopathic Association. Many states impose limits on the number of attempts to pass that are allowed before additional training is required. The test administrators limit the number of attempts to 6. USMLE is accepted by licensure boards of all 50 states.

Graduates of osteopathic medical schools are eligible to take USMLE, but few do so.

### Osteopathic Medicine

Osteopathic physicians generally take the Comprehensive Osteopathic Licensure Examination (COMLEX-USA), which is administered by the National Board of Osteopathic Medical Examiners. It has a 3-part structure similar to USMLE and each stage of testing is referred to as a “Level.” Level 1 testing takes place during the 2<sup>nd</sup> year of medical school and Level 2 during the 4<sup>th</sup> year. Like USMLE, each Level must be successfully passed before a candidate is allowed to proceed to the next Level.

COMLEX-USA Level 3: The eligibility requirements are that the candidate has passed Levels 1 and 2 and has received a degree from an AOA-accredited medical school. Level 3 is a one-day exam that focuses on medical knowledge and the appropriate use of that knowledge in the care of patients. Beginning in 2018 Level 3 will add a 2<sup>nd</sup> day of testing. COMLEX-USA is accepted by licensure boards in all 50 states. Like USMLE, many states limit the number of attempts to pass before additional training is required.

## Physician Licensure Exam Summary

Once a physician has passed USMLE Step 3 or COMLEX-USA Level 3 and met other requirements for licensure, the physician is not required to submit to any additional testing in order to maintain that license.

## Maintenance of Licensure

To maintain a license in most states a physician must meet any CME requirements and avoid actions that might cause the medical board to proceed against his or her license. CME requirements vary widely from none at all to a high of 50 credits per year. A few states have mandatory CME topics.

The Federation of State Medical Boards has proposed a formal Maintenance of Licensure (MOL) program that is intended to impose uniform requirements for maintaining a license. The proposal includes reflective self-assessment, knowledge assessment, and practice performance assessment. The intention is to provide a standard for maintaining a license for licensed, but non board-certified, physicians that parallels the Maintenance of Certification (MOC--discussed below) which board-certified physicians must engage in to maintain their certification. Board-certified physicians participating in their Board's MOC program would be recognized as meeting the requirements for MOL. A pilot of MOL is underway among 11 out of the 64 allopathic and osteopathic medical licensing boards in the US. Implementation in most states would require new legislation that would be vigorously opposed by physician groups. It would also require significant investments in the infrastructure of medical boards to administer the program. Taken together, these factors make widespread implementation of MOL unlikely.

## Initial Certification for Physicians

Before a physician can be certified by an allopathic or osteopathic board, the candidate must have satisfactorily completed an accredited residency or fellowship. Allopathic residencies are accredited by the American Council on Graduate Medical Education and osteopathic residencies by the American Osteopathic Association. In 2014 the two organizations agreed to merge to form a single standard for postgraduate medical education and are currently in the processes of harmonizing their standards and merging their operations.

After completing residency or fellowship training, candidates for board certification have a limited period of eligibility to satisfy the requirements for board certification in a specialty. Allopathic board eligibility periods range from 5-7 years, but American Board of Medical Specialty boards have agreed on a common standard of 7 years and are currently transitioning their respective requirements. Osteopathic boards have a similar range of eligibility with 6 years being the most common. While there are multiple requirements that may vary by board, core requirements include passing the board's secure examination and holding an unrestricted license to practice medicine in a US jurisdiction, and subscribing to an ethical code. There is usually a limit of 3 attempts to pass the certification examination during the eligibility period. If a candidate fails to gain board certification during the eligibility period, additional training is usually required to reestablish eligibility.

# Maintenance of Certification

## Allopathic Physicians

The American Board of Medical Specialties (ABMS) has specified a Maintenance of Certification (MOC) framework for its 24 member boards. MOC is intended to assess the 6 Core Competencies that have been adopted by the American Council on Graduate Medical Education and ABMS. The program falls into the following parts:

- Part I: Professionalism and Professional Standing
- Part II: Lifelong Learning and Self-assessment
- Part III: Assessment of Knowledge, Judgement, and Skills
- Part IV: Improvement in Medical Practice

ABMS provides some flexibility for implementation among boards. The foundation of Part I is maintaining an unrestricted license to practice medicine, although it may include other elements. Proposals for additional elements in Part I include peer evaluations and patient surveys. Part II may include a conventional CME requirement, but usually includes structured, question-based self-assessments. The structured formats are often board-exclusive products, although some allow specifically board-approved products from 3<sup>rd</sup>-party providers. The foundation of Part III is the traditional board exam. However, the title indicates that other forms of direct assessment may be included in the future. Part IV requires involvement in structured quality improvement activities. Often these are board-approved modules. Most of the ABMS boards recognize participation in activities of the ABMS Multi-specialty Portfolio Program as meeting this requirement. Many of the surgical boards recognize submission of data to a national registry as meeting the requirement.

MOC calls for a 10-year certification cycle and requires the diplomate to engage in the process continuously throughout the 10 years.

It is important to note many osteopathic physicians are trained in allopathic residency programs and certified by allopathic boards.

## Osteopathic Physicians

The AOA's Osteopathic Continuous Certification (OCC) is similar to MOC if slightly less complex and is structured as follows:

- Component 1: Unrestricted Licensure
- Component 2: Life-long Learning/Continuing Medical Education
- Component 3: Cognitive Assessment
- Component 4: Practice Performance Assessment and Improvement
- Component 5: Continuous AOA Membership

In addition to holding an unrestricted license, Component 1 also requires the diplomate to subscribe to the AOA Code of Ethics. Component 2 requires 120 Credits over a 3-year period, 50 of which must be in the physician's specialty. Component 3 is the traditional board certification exam. Component 4 requires the diplomate to complete board-approved modules. The number and timing of these modules varies by specialty. Implementation of OCC began in 2013. The length of certification also varies by specialty and ranges from 6 to 10 years.

Failure by a physician to maintain board certification does not endanger the physician's license and therefore his/her basic ability to practice medicine. However, it may have other professional ramifications related to credentialing and privileging where board certification may be a requirement and this may limit his or her practice.

## **Nurse Practitioners**

Nurse Practitioners (NPs) are nurses with an expanded scope of practice by virtue of having completed a qualified graduate degree designed to prepare the nurse for an Advanced Practice Registered Nurse (APRN) role. The APRN category also includes Clinical Nurse Specialists, Certified Nurse Midwives, and Certified Nurse Anesthetists. The first nursing license held by a prospective NP is always that of a Registered Nurse. In order to obtain a nursing license, the nurse must pass a national licensing exam administered by the National Council of State Boards of Nursing known as NCLEX-RN. This licensing exam is required for licensure by all 50 States. NCLEX-RN is a secure exam administered in approved testing centers and assesses knowledge related to nursing science and practice. After obtaining a license the prospective nurse practitioner will continue to maintain a nursing license. After meeting the additional educational requirements to qualify as an NP, he or she may apply for an APRN license. This will be discussed further in the Certification section as the requirements are somewhat overlapping.

## **Initial Certification for Nurse Practitioners**

To qualify for certification as an NP, a nurse must have completed a graduate-level training program accredited by the US Department of Education or the Council for Higher Education that is designed to prepare the candidate for an APRN role in one or more the following population focus areas:

- Family medicine across the lifespan
- Adult/gerontology
- Neonatal
- Pediatrics
- Women's health/gender related
- Psychiatric/mental health

Candidates meeting the educational requirements may choose to certify through the American Nurses Credentialing Center (ANCC) or through the American Academy for Nurse Practitioners Certification Process (AANPCP). ANCC offers a wider range of certificates including the following:

- Acute Care NP

- Adult Nurse NP
- Adult-Gerontology Acute NP
- Adult-Gerontology Primary Care NP
- Adult Psychiatric-Mental Health NP
- Family NP
- Gerontological NP
- Pediatric Primary Care NP
- Psychiatric-Mental Health NP
- School NP
- Diabetes Management-Advanced
- Emergency NP

AANPCP offer the following 3 Certificates

- Adult Nurse Practitioner
- Family Nurse Practitioner
- Adult-Gerontology Primary Care Nurse Practitioner

After meeting training requirements and passing a recognized certification exam, the certified NP is eligible to apply for an APRN license from his/her state board of nursing. APRNs in several states (AL, FL, NC, SD) also have the option of being licensed through a medical board. All states except California and New York require national certification to obtain an APRN license as an NP. States that require national certification to obtain an APRN license also require current certification to renew a license. Licensees must also meet the state's CE requirements. They vary widely in terms of the number of credits required, special topics, or acceptable credit types. As with other professions, some states have mandatory topics.

### **Maintenance of Certification**

Regardless of whether the certificate was issued by ANCC or AANPCP, NP certificates must be renewed every 5 years. NPs have 2 options for renewal:

Option 1:

- Unexpired certificate
- Current license
- 1000 practice hours in the previous 5 years
- Continuing professional development requirement

The following option is for those NPs who are unable to meet the practice requirement.

Option 2:

- Unexpired certificate

- Current license
- Continuing professional development requirement
- Secure exam

A total of 6 professional activities are recognized in meeting the continuing professional development requirement. In addition to CE, these include precepting, speaking, research, and writing and may be used in various combinations to meet the requirement. If CE is used alone, the candidate must document at least 150 credits, 25 of which must be in pharmacotherapy.

## Pharmacists

### Initial Licensure

In order to obtain a license to practice pharmacy, a graduate of an ACPE-accredited school of pharmacy is required to pass the North American Pharmacist Licensure Examination (NAPLEX) administered by the National Association of Boards of Pharmacy. This secure exam assesses if the candidate is able to identify practice standards for safe and effective pharmacotherapy including safe preparation and dispensing of medications and provision of health information. The majority of states also require candidates to take and pass the Multiple State Pharmacy Jurisprudence Exam (MPJE). This computer adaptive test adapts scenarios to the state laws of the state where the candidate is applying for licensure. In addition to the testing requirements, most states require documentation of a minimum number of hours of supervised practice. This requirement ranges from 1,000 to 2,000 hours with 1,500 hours as the most common requirement.

### Maintenance of Licensure

To maintain a license a pharmacist must complete between 15-30 continuing education credits with 30 credits being the most common requirement. Most states specify ACPE as the provider. Some states have mandatory topics such as pharmacy law or HIV.

After passing the initial licensure and jurisprudence exams, a pharmacist does not need to submit to additional testing to maintain his/her license to practice unless the individual applies for a license in a new jurisdiction, in which case the board may require the applicant to take and pass that state's version of the MPJE.

### Residency Training and Certification for Pharmacists

Postgraduate training and certification is not necessary to practice as a licensed pharmacist in many settings, but may be necessary to gain access to specialty pharmacy practice, particularly in academic settings and elite centers. Accredited residency programs are available in 21 specialties and board certification is available in 8 of them. Because of the gap between the areas where board certification is available versus those where residency training is available, it is residency training rather than board certification that is the *de facto* requirement for entry into specialty practice, particularly in academic

and elite centers. Where residency training and board certification are both available, some centers may require both.

Residency programs are accredited by the American Society of Health-system Pharmacists (ASHP). Residency programs are either 1 or 2-years in length. The first post graduate year focuses on one of 3 core areas: community pharmacy, managed-care pharmacy, or general pharmacy. Those who continue into a 2<sup>nd</sup> postgraduate year may choose one of 21 specialty areas.

To be admitted to a residency program the candidate must be a graduate of an ACPE-accredited school of pharmacy and either hold a pharmacy license or be eligible for licensure. In 2015 there were 3075 PGY-1 and 912 PGY-2 positions available. The profession uses a formal match process similar to the one used in medicine. In 2011 62% of applicants who applied for PGY-1 matched in a residency program.

The Board of Pharmacy Specialties grants certificates in the following areas of practice:

- Ambulatory Care Pharmacy
- Critical Care Pharmacy
- Nuclear Pharmacy
- Nutrition Support Pharmacy
- Oncology Pharmacy
- Pediatric Pharmacology
- Pharmacotherapy
- Psychiatric Pharmacy

To be eligible to be certified, a pharmacist must have satisfactorily completed a ASHP-accredited residency (those completing either 1 or 2 years are considered) in the corresponding specialty or demonstrate at least a minimum number of years of relevant practice (varies by board but generally 2-4 years) and pass a secure examination.

The Board of Pharmacy Specialties reports that there are over 25,000 board-certified pharmacists practicing in the United States. Compared with the US Bureau of labor statistics estimate of 297,000 practicing pharmacists this is a small minority. It is difficult to discover how many residency-trained but non-certified pharmacists are practicing in the US.

### **Maintenance of Certification**

Certification from the Board of Pharmacy Specialties is for a term of 7 years. To renew certification diplomates have the choice of either passing a recertification exam or completing 100 credits of specifically directed and approved continuing education.

While board certification may be required by employers, it is not a requirement to gain or maintain a license to practice pharmacy in any jurisdiction.



# PAAs

## Initial Licensure and Certification

All states, the District of Columbia and all US territories, with the exception of Puerto Rico which does not yet license PAs, require that a candidate for licensure be a graduate of an ARC-PA-accredited PA program. Eight states specify at least a baccalaureate degree and an additional 3 states are requiring a Master's degree. Those states requiring a Master's degree make some accommodation for PAs who lack a Master's degree based on when the PA graduated, or documented years of continuous practice.

Passing the Physician Assistant National Certifying Examination (PANCE) is a requirement for licensure in all US jurisdictions that license PAs. PANCE both establishes eligibility for licensure and conveys a nationally-recognized certification.

Graduates of accredited PA programs are eligible to take PANCE for a period of 6 years after graduation. A total of 6 attempts to pass are permitted.

PAs obtain their license through a medical board in most states. Six states with both allopathic and osteopathic boards of medicine give PAs the option of seeking a license through either of these boards (ME, MI, NV, PA, WA, WV). Seven states have a separate PA licensing board for PAs (AZ, CA, IA, MA, RI, TX, UT). Some states license PAs through an agency that is also responsible for licensing a range of different professions.

## Maintenance of Licensure

Twenty states require current NCCPA certification to renew a license (AK, CT, HI, ID, IL, IN, KY, LA, MT, MO, NH, ND, NV, NM, OH, PA, SC, VA, WV, WY). Nevada requires current NCCPA certification for license renewal for PAs licensed by the osteopathic board only.

Minnesota requires current NCCPA certification as a condition for prescriptive authority. Oregon and the Washington osteopathic board also require current NCCPA certification as a condition for prescriptive authority for Schedule II drugs.

Twenty-six states and DC require only CME to renew a license (AL, AZ, AR, CA, DE, DC, FL, GA, IA, KS, ME, MD, MA, MN, MS, NE, NV, NJ, NC, OK, RI, SD, TN, TX, UT, VT, WA).

Five states do not require current NCCPA certification or CME to renew a license (CO, MI, NY, OR, WI).

## Maintenance of Certification

The National Commission on the Certification of Physician Assistants (NCCPA) began transitioning to a 10-year model for maintaining certification in May of 2014. Currently certified PAs are being transitioned into the new cycle on the date of their next scheduled recertification exam.

## The 6-year cycle

PAs certified prior to May 2014 continue in a 6-year cycle until the expiration of their current certificate. The requirements for maintaining certification in the 6-year cycle follow.

- CME: PAs are required to log at least 100 CME credits with NCCPA in each of three two-year reporting cycles within the period of certification. At least 50 of these credits must be in Category 1. The remaining 50 credits may be reported as Category 2 which is learner-designated and may include activities such as journal reading. Credit types acceptable within Category 1 include AAPA Category 1, AMA PRA Category 1, AAFP Prescribed, and AOA 1A.
- PANRE: The Physician Assistant National Recertification Examination (PANRE) may be taken as early as the 5<sup>th</sup> year of the certification period. A total of 2 attempts are allowed per calendar year and attempts must be spaced by at least 90 days.

PANRE is a generalist exam with 60% focusing on general medical and clinical knowledge. PAs may choose versions of the exam where the remaining 40% is drawn from Adult Medicine, Surgery, or Primary Care.

## The 10-year Cycle

Starting in May of 2014 all new graduates and those due to recertify entered into a new 10-year certification cycle. The remainder of the PA population will transition to the 10-year cycle at the time of their next scheduled recertification.

The new cycle is divided into 5 two-year logging cycles. There are changes to the CME requirements for logging cycles 1-4. The 100 credit requirement per cycle requirement is retained. However, 20 of the 50 Category 1 credits must be either AAPA Category 1 PI-CME, AAPA Category 1 Self-assessment CME or a combination of both. By the end of the 4<sup>th</sup> logging cycle the PA must have accumulated 40 credits of AAPA Category 1 PI-CME and 40 credits of AAPA Category 1 Self-assessment. During the 5<sup>th</sup> and final logging cycle PAs must log 100 credits, at least 50 of which must be Category 1. The PI-CME and Self-assessment CME formats are not required during the 5<sup>th</sup> and final logging cycle.

PAs in the 10 year cycle may choose to take PANRE as early as the 9<sup>th</sup> year of the cycle. Two attempts per calendar year are permitted which must be separated by at least 90 days.

## References

### Physicians

United States Medical Licensing Examination (USMLE): <http://www.usmle.org/>

Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA):  
<https://www.nbome.org/exams-comlex.asp>

State-specific Requirements for Initial Medical Licensure: [https://www.fsmb.org/policy/public-resources/state\\_specific](https://www.fsmb.org/policy/public-resources/state_specific)

Physician CME Requirement by State: <http://www.medscape.org/public/staterequirements>

Allopathic Board Certification and Maintenance of Certification: <http://www.abms.org/board-certification/>

Multi-specialty MOC Portfolio Approval Program: <http://mocportfolioprogram.org/>

Osteopathic Board Certification: <http://www.osteopathic.org/inside-aoa/development/aoa-board-certification/>

Osteopathic Continuous Certification: <http://www.osteopathic.org/inside-aoa/development/aoa-board-certification/Pages/osteopathic-continuous-certification.aspx>

Maintenance of Licensure: <https://www.fsmb.org/fsmb-mol>

## **Nurse Practitioners**

National Council License Examination (NCLEX-RN): <https://www.ncsbn.org/nclex.htm>

American Nurses Credentialing Council NP Certification:  
<http://www.nursecredentialing.org/certification.aspx>

American Academy of Nurse Practitioners Certification Program: <https://www.aanpcert.org/>

NP State Practice Environment (licensure requirements and practice limitations)  
<https://www.aanp.org/legislation-regulation/state-legislation/state-practice-environment>

APRN Consensus Model: <https://www.ncsbn.org/736.htm>

## **Pharmacists**

North American Pharmacist Licensure Examination (NAPLEX):  
<http://www.nabp.net/programs/examination/naplex>

Multistate Pharmacy Jurisprudence Examination (MPJE):  
<http://www.nabp.net/programs/examination/mpje>

Residency Programs in Pharmacy: <http://www.ashp.org/menu/Residency/Program-Information>

Board of Pharmacy Specialties: <http://www.bpsweb.org/>

## **PAs**

NCCPA Certification and Recertification Requirements: <http://www.nccpa.net/>

State Laws and Regulations: <https://www.aapa.org/threeColumnLanding.aspx?id=304>