



ACGME International

**Advanced Specialty Program Requirements for
Graduate Medical Education in
Neurology**

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in Neurology**

Int. Introduction

Background and Intent: Programs must achieve and maintain Foundational Accreditation according to the ACGME-I Foundational Requirements prior to receiving Advanced Specialty Accreditation. The Advanced Specialty Requirements noted below complement the ACGME-I Foundational Requirements. For each section, the Advanced Specialty Requirements should be considered together with the Foundational Requirements.

Int. I. Definition and Scope of the Specialty

Neurology includes the diagnosis and treatment of all categories of conditions and diseases involving the central and peripheral nervous system, including the autonomic nervous and somatic nervous systems, their coverings, blood vessels, and all effector tissues and muscles. The purpose of the education program is to prepare the physician for the independent practice of clinical neurology.

Int. II. Duration of Education

Int. II.A. The educational program in neurology must be 48 or 60 months in length.

I. Institution

I.A. Sponsoring Institution

I.A.1. The Sponsoring Institution and program should allocate adequate educational resources to facilitate resident involvement in scholarly activities.

I.B. Participating Sites

See International Foundational Requirements, Section I.B.

II. Program Personnel and Resources

II.A. Program Director

See International Foundational Requirements, Section II.A.

II.B. Faculty

II.B.1. The faculty must include a program director, a child neurologist, and a minimum of four full-time neurology faculty members who provide clinical service and teaching and who devote sufficient time to the program to ensure basic and clinical education for residents.

II.B.2. The faculty must include specialists with expertise in all the disciplines related to neurology, including behavioral neurology, cerebrovascular disease, child neurology, clinical neurophysiology, critical care, epilepsy, infectious disease, movement disorders, neuro-genetics, neuroimaging, neuro-immunology, neuromuscular disease, neuro-oncology, neuro-ophthalmology, neuro-otology, pain management, psychiatry, sleep disorders, and the neurology of aging .

II.B.2.a) These specialists should be available for consultation on a regular basis to neurology residents.

II.C. Other Program Personnel

See International Foundational Requirements, Section II.C.

II.D. Resources

II.D.1. The patient population available to neurology residents must reflect the full spectrum of neurological disorders across the lifespan, to include patients seen in multiple settings, including outpatient, inpatient, emergency, and intensive care.

III. Resident Appointment

See International Foundational Requirements, Section III.

IV. Specialty-Specific Educational Program

IV.A. ACGME-I Competencies

IV.A.1. The program must integrate the following ACGME-I Competencies into the curriculum.

IV.A.1.a) Professionalism

IV.A.1.a).(1) Residents must demonstrate a commitment to professionalism and an adherence to ethical principles. Residents must demonstrate:

IV.A.1.a).(1).(a) compassion, integrity, and respect for others;

IV.A.1.a).(1).(b) responsiveness to patient needs that supersedes self-interest;

IV.A.1.a).(1).(c) respect for patient privacy and autonomy;

IV.A.1.a).(1).(d) accountability to patients, society, and the profession; and,

- IV.A.1.a).(1).(e) sensitivity and responsiveness to a diverse patient population, including to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
- IV.A.1.b) Patient Care and Procedural Skills
- IV.A.1.b).(1) Residents must provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents must demonstrate competence in:
- IV.A.1.b).(1).(a) the management of outpatients and inpatients with neurological disorders across the lifespan, including those who require emergency and intensive care;
- IV.A.1.b).(1).(b) care of patients in the areas of critical care, neuromuscular, ambulatory, neurodegenerative, and pediatrics, by evaluating a minimum of five different patients as specified below during the course of the educational program:
- IV.A.1.b).(1).(b).(i) Critical care: one critically ill adult patient with neurological disease in either an intensive care unit or emergency department setting, or through an emergency consultation from another inpatient service;
- IV.A.1.b).(1).(b).(ii) Neuromuscular: one adult patient with a neuromuscular disease who may be in either an inpatient or outpatient setting;
- IV.A.1.b).(1).(b).(iii) Ambulatory: one adult patient with an episodic disorder, such as seizures or migraine;
- IV.A.1.b).(1).(b).(iv) Neurodegenerative: one adult patient with a neurodegenerative disorder, such as dementia, a movement disorder, or multiple sclerosis; and,
- IV.A.1.b).(1).(b).(v) Pediatrics: one child patient with a neurological disorder.
- IV.A.1.c) Medical Knowledge

- IV.A.1.c).(1) Residents must demonstrate knowledge of established and evolving biomedical clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents must demonstrate knowledge of:
- IV.A.1.c).(1).(a) major developments in the clinical sciences relating to neurology; and,
- IV.A.1.c).(1).(b) the basic sciences through application of this knowledge in the care of their patients and by passing clinical skills examinations.
- IV.A.1.d) Practice-based Learning and Improvement
- IV.A.1.d).(1) Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents are expected to develop skills and habits to be able to meet the following goals:
- IV.A.1.d).(1).(a) identify strengths, deficiencies, and limits in one's knowledge and expertise;
- IV.A.1.d).(1).(b) identify and perform appropriate learning activities;
- IV.A.1.d).(1).(c) incorporate formative evaluation feedback into daily practice;
- IV.A.1.d).(1).(d) locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;
- IV.A.1.d).(1).(e) participate in the education of patients, patients' families, students, other residents, and other health professionals;
- IV.A.1.d).(1).(f) set learning and improvement goals;
- IV.A.1.d).(1).(g) supervise other residents, medical students, nurses, and other health care personnel.
- IV.A.1.d).(1).(h) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement; and,
- IV.A.1.d).(1).(i) use information technology to optimize learning;
- IV.A.1.e) Interpersonal and Communication Skills

- IV.A.1.e).(1) Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Residents must:
- IV.A.1.e).(1).(a) communicate effectively with patients, patients' families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;
- IV.A.1.e).(1).(b) communicate effectively with physicians, other health professionals, and health-related agencies;
- IV.A.1.e).(1).(c) work effectively as a member or leader of a health care team or other professional group;
- IV.A.1.e).(1).(d) act in a consultative role to other physicians and health professionals; and,
- IV.A.1.e).(1).(e) maintain comprehensive, timely, and legible medical records, if applicable.

IV.A.1.f) Systems-based Practice

- IV.A.1.f).(1) Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Residents must:
- IV.A.1.f).(1).(a) work effectively in various health care delivery settings and systems relevant to their clinical specialty;
- IV.A.1.f).(1).(b) coordinate patient care within the health care system relevant to their clinical specialty;
- IV.A.1.f).(1).(c) incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;
- IV.A.1.f).(1).(d) advocate for quality patient care and optimal patient care systems;
- IV.A.1.f).(1).(e) work in interprofessional teams to enhance patient safety and improve patient care quality; and,
- IV.A.1.f).(1).(f) participate in identifying system errors and implementing potential systems solutions.

IV.B. Regularly Scheduled Educational Activities

- IV.B.1. The curriculum must have organized instruction in the basic neurosciences.
- IV.B.2. Additional topics that must be covered during seminars and conferences include:
- IV.B.2.a) bioethics;
 - IV.B.2.b) cost-effective care; and,
 - IV.B.2.c) palliative care, including adequate pain relief, as well as psychosocial support and counseling for patients and their families.
- IV.B.3. The basic science curriculum must include the scientific foundations on which clinical neurology is based.
- IV.B.4. Residents must receive instruction in:
- IV.B.4.a) the principles of psychopathology, psychiatric diagnosis, and therapy and indications for and complications of drugs used in psychiatry; and,
 - IV.B.4.b) appropriate and compassionate methods of end-of-life palliative care, including adequate pain relief and psychosocial support and counseling for patients and their families about these issues.
- IV.B.5. Residents should attend one national professional conference during the educational program.

IV.C. Clinical Experiences

- IV.C.1. The program must include:
- IV.C.1.a) one year of broad clinical experience in general internal medicine;
 - IV.C.1.a).(1) Experience in general internal medicine must occur during the first year of the program.
 - IV.C.1.a).(2) Experience in general internal medicine must include at least:
 - IV.C.1.a).(2).(a) eight months in internal medicine with primary responsibility in patient care; or,

- IV.C.1.a).(2).(b) six months in internal medicine with primary responsibility in patient care, and at least two months comprising one or more months of pediatrics, emergency medicine, internal medicine, or family medicine.
- IV.C.1.b) at least 18 months (full-time equivalent) of clinical adult neurology that includes:
- IV.C.1.b).(1) at least six months of inpatient experience in adult neurology; and,
- IV.C.1.b).(2) at least six months (full-time equivalent) of outpatient experience in clinical adult neurology.
- IV.C.1.b).(2).(a) The outpatient experience must include a resident longitudinal/continuity clinic with attendance by each resident for one half day weekly throughout the program.
- IV.C.1.c) at least three months of elective time;
- IV.C.1.d) at least three months (full-time equivalent) in clinical child neurology with management responsibility under the supervision of a child neurologist with appropriate certification or suitable equivalent qualifications;
- IV.C.1.e) at least one-month full-time equivalent experience in clinical psychiatry, including cognition and behavior, under the supervision of a certified psychiatrist or another individual who possesses qualifications acceptable to the Review Committee;
- IV.C.1.f) clinical teaching rounds, supervised by faculty members, occurring at least five days per week;
- IV.C.1.g) exposure to and understanding of evaluation and management of patients with neurological disorders in various settings, including an intensive care unit and an emergency department, and of patients requiring acute neurosurgical management; and,
- IV.C.1.h) experience in neuroimaging, including magnetic resonance imaging, computerized tomography, and neurosonology.

IV.D. Scholarly Activity

IV.D.1. Resident Scholarly Activity

- IV.D.1.a) The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.

IV.D.1.b) Residents should participate in scholarly activity.

IV.D.2. Faculty Scholarly Activity

See International Foundational Requirements, Section IV.D.2.

V. Evaluation

See International Foundational Requirements, Section V.

VI. The Learning and Working Environment

See International Foundational Requirements, Section VI.