ACGME International Specialty Program Requirements for Graduate Medical Education in Emergency Medicine

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

Residencies in emergency medicine teach the fundamental skills, knowledge, and humanistic qualities that constitute the foundations of emergency medicine practice. Residents develop a level of clinical maturity, judgment, and technical skill required to practice emergency medicine, and the ability to incorporate new skills and knowledge during their careers and to monitor their own physical and mental well-being.

Int. II. Duration of Education

Int. II.A. The educational program in emergency medicine must be 36 or 48 months in length.

I. Institution

I.A. Sponsoring Institution

See International Foundational Requirements, Section I.A.

I.B. Participating Sites

I.B.1. The program must be based at the primary clinical site.

I.B.2. Programs using multiple participating sites must ensure the provision of a unified educational experience for the residents.

I.B.2.a) Each participating site must offer significant educational opportunities to the overall program.

I.B.3. Required rotations to participating sites that are geographically distant from the Sponsoring Institution must offer educational opportunities unavailable locally that significantly augment residents’ overall educational experience.

II. Program Personnel and Resources

Emergency Medicine 1
II.A. Program Director

II.A.1. Qualifications of the program director must include current clinical activity in emergency medicine.

II.B. Faculty

II.B.1. A faculty staffing ratio of 4.0 patients per faculty hour or less must be maintained in order to ensure adequate clinical instruction and supervision, as well as efficient, high-quality clinical operations.

II.C. Other Program Personnel

See International Foundational Requirements, Section II.C.

II.D. Resources

II.D.1. Clinical support services must be provided on a 24-hour basis.

II.D.1.a) These services must meet reasonable and expected demands, including nursing, clerical, intravenous, electrocardiogram (EKG), respiratory therapy, messenger/transporter, and phlebotomy.

II.D.2. The hospital must ensure that all clinical specialty and subspecialty services are available in a timely manner for emergency department consultation and hospital admission.

II.D.2.a) If any clinical services are not available for consultation or admission, the hospital must have a written protocol for provision of these services elsewhere, which may include written agreements for the transfer of patients to a designated hospital that provides the needed clinical service(s).

II.D.2.b) Clinical services should include internal medicine and its subspecialties, obstetrics and gynecology, orthopaedics, pediatrics and its subspecialties, and surgery and its subspecialties.

II.D.3. At every site in which the emergency department provides resident education, the following must be provided:

II.D.3.a) adequate space for patient care;

II.D.3.b) space for clinical support services;

II.D.3.c) completed diagnostic imaging with results available on a timely basis, especially those required on a STAT basis; and,

II.D.3.d) completed laboratory studies with results available on a timely basis, especially those required on a STAT basis.
II.D.4. Each clinical site must ensure timely consultation decisions by a provider from admitting and consulting services with decision making authority.

II.D.5. The primary clinical site and other emergency departments to which residents rotate for four months or longer should have a minimum of 30,000 emergency department visits each year.

II.D.6. The primary clinical site should have a significant number of critically ill or critically injured patients, constituting at least three percent or 1,200 (whichever is greater) of emergency department patients per year.

III. Resident Appointment

III.A. Eligibility Criteria

See International Foundational Requirements, Section III.A.

III.B. Number of Residents

III.B.1. There should be a minimum of four residents in each year of the educational program.

III.C. Resident Transfers

See International Foundational Requirements, Section III.C.

III.D. Appointment of Fellows and Other Learners

See International Foundational Requirements, Section III.D.

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) ability to discuss difficult patient outcomes and death honestly, sensitively, patiently, and compassionately;

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

IV.A.1.a).(1).(c) compassion, integrity, and respect for others;
IV.A.1.a).(1).(d) openness and responsiveness to the comments of other team members, patients, families, and peers;

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

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

IV.A.1.a).(1).(g) 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) gathering accurate, essential information in a timely manner;

IV.A.1.b).(1).(b) treating medical conditions commonly managed by emergency medicine physicians;

IV.A.1.b).(1).(c) generating an appropriate differential diagnosis;

IV.A.1.b).(1).(d) applying the results of diagnostic testing based on the probability of disease and the likelihood of test results altering management;

IV.A.1.b).(1).(e) narrowing and prioritizing the list of weighted differential diagnoses to determine appropriate management based on all available data;

IV.A.1.b).(1).(f) implementing an effective patient management plan;

IV.A.1.b).(1).(g) selecting and prescribing appropriate pharmaceutical agents based on relevant considerations, including:

IV.A.1.b).(1).(g).(i) allergies;

IV.A.1.b).(1).(g).(ii) clinical guidelines;
IV.A.1.b).(1).(g).(iii) intended effect;
IV.A.1.b).(1).(g).(iv) financial considerations;
IV.A.1.b).(1).(g).(v) institutional policies;
IV.A.1.b).(1).(g).(vi) mechanism of action;
IV.A.1.b).(1).(g).(vii) patient preferences;
IV.A.1.b).(1).(g).(viii) possible adverse effects, and potential drug-food and drug-drug interactions; and,
IV.A.1.b).(1).(g).(ix) effectively combining agents and monitoring and intervening in the event of adverse effects in the emergency department.

IV.A.1.b).(1).(h) managing multiple patients and resources within the emergency department;
IV.A.1.b).(1).(h).(i) This should be demonstrated progressively with increasing responsibility over time.

IV.A.1.b).(1).(i) providing health care services aimed at preventing health problems or maintaining health;
IV.A.1.b).(1).(j) working with other health care professionals to provide patient-focused care;
IV.A.1.b).(1).(k) identifying life-threatening conditions and the most likely diagnosis, synthesizing acquired patient data, and identifying how and when to access current medical information;
IV.A.1.b).(1).(l) establishing and implementing a comprehensive disposition plan that uses appropriate consultation resources, patient education regarding diagnosis, treatment plan, medications, and time- and location-specific disposition instructions; and,
IV.A.1.b).(1).(m) reevaluating patients undergoing emergency department observation (and monitoring) and using appropriate data and resources, and determining the differential diagnosis, treatment plan, and disposition.

IV.A.1.b).(2) Residents must demonstrate competence in performing all medical, diagnostic, and surgical procedures considered essential for the area of practice, including:
IV.A.1.b).(2).(a) performing diagnostic and therapeutic procedures and emergency stabilization;

IV.A.1.b).(2).(b) managing critically ill and injured patients who present to the emergency department, including prioritizing critical initial stabilization action, mobilizing hospital support services in the resuscitation of critically ill or injured patients, and reassessing after a stabilizing intervention;

IV.A.1.b).(2).(c) properly sequencing critical actions for patient care and generating a differential diagnosis for an undifferentiated patient;

IV.A.1.b).(2).(d) mobilizing and managing necessary personnel and other hospital resources to meet critical needs of multiple patients; and,

IV.A.1.b).(2).(e) performing invasive procedures, monitoring unstable patients, and directing major resuscitations of all types on all age groups.

IV.A.1.b).(3) Residents must demonstrate competence in performing the following key index procedures:

IV.A.1.b).(3).(a) adult medical resuscitation;

IV.A.1.b).(3).(b) adult trauma resuscitation; and,

IV.A.1.b).(3).(c) anesthesia and pain management.

IV.A.1.b).(4) Residents must demonstrate competence in providing safe acute pain management, anesthesia, and procedural sedation to patients of all ages, regardless of the clinical situation, including:

IV.A.1.b).(4).(a) cardiac pacing;

IV.A.1.b).(4).(b) chest tubes;

IV.A.1.b).(4).(c) cricothyrotomy;

IV.A.1.b).(4).(d) dislocation reduction; and,

IV.A.1.b).(4).(e) emergency department bedside ultrasound.
IV.A.1.b).(5) Residents must demonstrate competence in using ultrasound for the bedside diagnostic evaluation of emergency medical conditions and diagnoses, resuscitation of the acutely ill or injured patient, and procedural guidance, including:

IV.A.1.b).(5).(a) intubations;
IV.A.1.b).(5).(b) lumbar puncture;
IV.A.1.b).(5).(c) pediatric medical resuscitation;
IV.A.1.b).(5).(d) pediatric trauma resuscitation;
IV.A.1.b).(5).(e) pericardiocentesis;
IV.A.1.b).(5).(f) procedural sedation;
IV.A.1.b).(5).(g) vaginal delivery; and,
IV.A.1.b).(5).(h) successfully obtaining vascular access in patients of all ages, regardless of the clinical situation.

IV.A.1.b).(6) Residents must demonstrate competence in wound management.

IV.A.1.b).(6).(a) Residents must assess and appropriately manage wounds in patients of all ages, regardless of the clinical situation.

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) evaluating patients with an undiagnosed and undifferentiated presentation;
IV.A.1.c).(1).(b) interpreting basic clinical tests and images;
IV.A.1.c).(1).(c) recognizing and managing emergency medical problems;
IV.A.1.c).(1).(d) using common pharmacotherapy; and,
IV.A.1.c).(1).(e) using and performing diagnostic and therapeutic procedures appropriately.
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) apply knowledge of study design and statistical methods to critically appraise the medical literature;

IV.A.1.d).(1).(b) identify strengths, deficiencies, and limits in one’s knowledge and expertise;

IV.A.1.d).(1).(c) identify and perform appropriate learning activities;

IV.A.1.d).(1).(d) incorporate formative evaluation feedback into daily practice;

IV.A.1.d).(1).(e) locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems;

IV.A.1.d).(1).(f) participate in the education of patients, patients’ families, students, other residents, and other health professionals;

IV.A.1.d).(1).(g) set learning and improvement goals;

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 and improve patient care.

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;

IV.A.1.e).(1).(e) maintain comprehensive, timely, and legible medical records, if applicable;

IV.A.1.e).(1).(f) develop effective written communication skills;

IV.A.1.e).(1).(g) demonstrate the ability to handle situations unique to the practice of emergency medicine; and,

IV.A.1.e).(1).(h) effectively communicate with out-of-hospital personnel, as well as with non-medical personnel.

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) advocate for quality patient care and optimal patient care systems;

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) participate in identifying system errors and implementing potential systems solutions;

IV.A.1.f).(1).(e) participate in performance improvement to optimize self-learning, emergency department function, and patient safety;

IV.A.1.f).(1).(f) understand different medical practice models and delivery systems and how to best utilize them to care for the individual patient;

IV.A.1.f).(1).(g) use technology to accomplish and document safe health care delivery;
work effectively in various health care delivery settings and systems relevant to their clinical specialty; and,

work in interprofessional teams to enhance patient safety and improve patient care quality.

**IV.B. Regularly Scheduled Educational Activities**

**IV.B.1.** The core curriculum must include a didactic program based on the core knowledge content of emergency medicine.

**IV.B.2.** All residents must have an average of at least five hours per week of planned educational experiences developed by the program.

**IV.B.2.a) The program must ensure that residents are relieved of clinical duties to attend these planned educational experiences.**

**IV.B.2.a).(1) Although release from some off-service rotations may not be possible, the program should require that residents participate, on average, in at least 70 percent of the planned emergency medicine educational experiences offered (excluding vacations).**

**IV.B.2.b) Residents’ attendance should be monitored and documented.**

**IV.B.3.** The majority of the didactic experiences must occur at the primary clinical site.

**IV.B.4.** At least 50 percent of resident conferences should be presented by emergency medicine faculty members or by other faculty members with emergency medicine expertise.

**IV.C. Clinical Experiences**

**IV.C.1.** The curriculum must include at least 21 months in the emergency department under the supervision of emergency medicine faculty members.

**IV.C.1.a) This must include experiences dedicated to the care of pediatric patients younger than 18 years of age.**

**IV.C.1.b) This must include a minimum of three months per year of emergency medicine experience.**

**IV.C.1.c) This experience may include emergency medical services, toxicology, pediatric emergency medicine, sports medicine, emergency medicine administration, or research in emergency medicine.**
IV.C.2. The curriculum must include at least four months of dedicated critical care experiences, including critical care of infants and children.

IV.C.2.a) At least two months of these experiences must be at the PGY-2 level or above.

IV.C.3. The curriculum must include at least five full-time equivalent (FTE) months, or 20 percent of all emergency department encounters, dedicated to the care of pediatric patients younger than 18 years of age in the pediatric emergency department or other pediatric settings.

IV.C.3.a) At least 50 percent of the five months should be in an emergency setting.

IV.C.3.b) This experience should include the critical care of infants and children.

IV.C.4. The curriculum must include at least 0.5 months in obstetrics or 10 low-risk normal spontaneous vaginal deliveries.

IV.C.5. The curriculum must include out-of-hospital experience in emergency preparedness and disaster management.

IV.C.5.a) This should include participation in multi-casualty incident drills.

IV.C.6. If provided in the country or jurisdiction, residents should have a structured experience in emergency medical services (EMS).

IV.C.6.a) This should include teaching out-of-hospital emergency personnel.

IV.C.7. Residents must have sufficient opportunities to perform invasive procedures, monitor unstable patients, and direct major resuscitations of all types on all age groups.

IV.C.7.a) Residents must make admission recommendations and direct resuscitations.

IV.C.8. Residents must meet the minimum guidelines for procedures and resuscitations, including both patient care and laboratory simulations.

IV.C.8.a) Only one resident must be credited with the direction of each resuscitation and the performance of each procedure.

IV.C.9. Residents must perform airway management, including for patients who are uncooperative, at the extremes of age, hemodynamically unstable, and who have multiple co-morbidities, poorly defined anatomy, are at high risk for pain or procedural complications, or who require sedation.
IV.C.9.a) Residents must take steps to avoid potential complications and recognize the outcome and/or complications resulting from procedures.

IV.C.10. Residents must assess and appropriately manage wounds in patients of all ages regardless of the clinical situation.

IV.C.11. Each resident must maintain, in an accurate and timely manner, a record of all major resuscitations and procedures performed throughout the entire educational program.

IV.C.11.a) The record must document each procedure type, adult or pediatric patient, and circumstances of each procedure (live or simulation).

IV.C.11.b) The record must document the resident’s role (participant or director) and the age of patient.

IV.D. Scholarly Activity

See International Foundational Requirements, Section IV.D.

V. Evaluation

See International Foundational Requirements, Section V.

VI. The Learning and Working Environment

VI.A. Principles

See International Foundational Requirements, Section VI.A.

VI.B. Patient Safety

See International Foundational Requirements, Section VI.B.

VI.C. Quality Improvement

See International Foundational Requirements, Section VI.C.

VI.D. Supervision and Accountability

See International Foundational Requirements, Section VI.D.

VI.E. Professionalism

See International Foundational Requirements, Section VI.E.

VI.F. Well-Being

See International Foundational Requirements, Section VI.F.
VI.G. **Fatigue**

See International Foundational Requirements, Section VI.G.

VI.H. **Transitions of Care**

See International Foundational Requirements, Section VI.H.

VI.I. **Clinical Experience and Education**

VI.I.1. While on duty in the emergency department, residents must not work longer than 12 continuous scheduled hours.

VI.I.2. There must be at least an equivalent period of time off between scheduled work periods.

VI.I.3. A resident should not work more than 60 scheduled hours per week seeing patients in the emergency department, and no more than 72 duty hours per week.

VI.J. **On-Call Activities**

See International Foundational Requirements, Section VI.J.