



ACGME International

**Advanced Specialty Program Requirements for
Graduate Medical Education in
Pediatric Emergency Medicine
(Emergency Medicine or Pediatrics)**

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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

Specialists in pediatric emergency medicine provide medical care to acutely ill or injured child in an emergency care setting.

Int. II. Duration of Education

Int. II.A. The educational program in pediatric emergency medicine must be planned for graduates of an emergency medicine residency and a pediatrics residency.

Int II.A.1. For graduates of an emergency medicine residency, the program must be 24 or 36 months in length.

Int II.A.2. For graduates of a pediatric residency, the program must be 36 or 48 months in length.

I. Institution

I.A. Sponsoring Institution

I.A.1. A fellowship in pediatric emergency medicine must function as an integral part of ACGME-I-accredited residency in emergency medicine or pediatrics.

I.A.1.a) The pediatric emergency medicine fellowship and the ACGME-I-accredited residency in either emergency medicine or pediatrics must be sponsored by the same ACGME-I-accredited Sponsoring Institution.

I.A.2. The fellowship must be affiliated with ACGME-I-accredited residencies in both emergency medicine and pediatrics.

I.B. Participating Sites

I.B.1. A participating site that provides more than four months of required educational experience must be pre-approved by the Review Committee-International.

II. Program Personnel and Resources

II.A. Program Director

- II.A.1. At a minimum, the program director must be provided with the salary support required to devote 20 percent full-time equivalent (FTE), or one day per week, of non-clinical time to the administration of the program.
- II.A.2. Qualifications of the program director must include:
 - II.A.2.a) at least three years' experience as a clinician, teacher, and administrator in pediatric emergency medicine; and,
 - II.A.2.b) a record of ongoing involvement in scholarly activities.

II.B. Faculty

- II.B.1. Teaching and consultant faculty members in the full range of pediatric and emergency medicine subspecialties and in other related disciplines must be available, including:
 - II.B.1.a) pediatric surgeons;
 - II.B.1.b) radiologists; and,
 - II.B.1.c) surgical subspecialists as appropriate to pediatric emergency medicine.
- II.B.2. There must be at least three core faculty members, including the program director, who are certified in or who have extensive experience in pediatric emergency medicine.
- II.B.3. Faculty members must be actively engaged in all curricular elements, including didactics and clinical experience in the management of acutely ill and injured pediatric patients.
- II.B.4. Faculty members must mentor fellows in the application of scientific principles, epidemiology, biostatistics, and evidence-based medicine to the clinical care of patients.

II.C. Other Program Personnel

- II.C.1. To enhance fellows' understanding of the multidisciplinary nature of pediatric emergency medicine, the following personnel with pediatric focus and experience should be available:
 - II.C.1.a) child life therapist(s);
 - II.C.1.b) dietitian(s);

- II.C.1.c) mental health professional(s);
- II.C.1.d) nurse(s);
- II.C.1.e) pharmacist(s);
- II.C.1.f) respiratory therapist(s); and,
- II.C.1.g) social worker(s).

II.D. Resources

- II.D.1. There must be an acute care facility that receives patients via ambulance from the pre-hospital setting and is equipped to handle trauma of any severity.
 - II.D.1.a) This facility should be accredited by the Joint Commission International or by another entity with reasonably equivalent standards as determined by the Review Committee-International.
 - II.D.1.b) This facility must be approved as an ambulance-receiving facility or its equivalent and be part of an emergency medical services system, if provided in the country or jurisdiction.
- II.D.2. There must be comprehensive radiologic and laboratory support systems, readily available operative suites, and intensive care unit beds.
- II.D.3. Support services, either at the primary clinical site or through a formal referral system to an appropriate facility, must include:
 - II.D.3.a) clinical laboratories;
 - II.D.3.b) imaging;
 - II.D.3.c) intensive care;
 - II.D.3.d) mental health services;
 - II.D.3.e) nutrition services;
 - II.D.3.f) occupational therapy;
 - II.D.3.g) pathology;
 - II.D.3.h) pharmacology;
 - II.D.3.i) physical therapy;
 - II.D.3.j) respiratory therapy; and,
 - II.D.3.k) social services.

II.D.4. An adequate number and variety of patients, ranging in age from newborn to young adulthood, must be available to provide a broad experience for the fellows.

II.D.4.a) There must be a minimum of 20,000 pediatric patient visits per year in the program's primary emergency department.

II.D.4.b) There must be a sufficient number of acutely ill patients with major and minor trauma, airway obstruction or management, ingestions, obstetric and gynecologic disorders, psychosocial disturbances, and emergent problems representing all pediatric medical and surgical subspecialties.

III. Fellow Appointment

III.A. Eligibility Criteria

III.A.1. Prior to appointment in the program, fellows should have completed an ACGME-I-accredited residency program in emergency medicine or pediatrics, or an emergency medicine or pediatrics residency program acceptable to the Sponsoring Institution's Graduate Medical Education Committee.

III.B. Number of Fellows

See International Foundational Requirements, Section III.B.

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) Fellows must demonstrate a commitment to professionalism and an adherence to ethical principles.

IV.A.1.b) Patient Care and Procedural Skills

IV.A.1.b).(1) Fellows must provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows must demonstrate competence in:

IV.A.1.b).(1).(a) providing consultation, performing a history and physical examination, making informed diagnostic and therapeutic decisions that result in optimal clinical judgement, and developing and carrying out management plans;

- IV.A.1.b).(1).(b) providing transfer of care that ensures seamless transitions;
- IV.A.1.b).(1).(c) counselling patients and patients' families;
- IV.A.1.b).(1).(d) using information technology to optimize patient care;
- IV.A.1.b).(1).(e) providing appropriate role modeling and supervision; and,
- IV.A.1.b).(1).(f) promoting emotional resilience in children, adolescents, and their families, including:
 - IV.A.1.b).(1).(f).(i) providing care that is sensitive to the developmental stage of the patient with common behavioral and mental health issues, and the cultural context of the patient and patient's family; and,
 - IV.A.1.b).(1).(f).(ii) referring and/or co-managing patients with common behavioral and mental health issues with appropriate specialists when indicated.
- IV.A.1.b).(2) Fellows must demonstrate leadership skills to enhance team function, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients.
- IV.A.1.b).(3) Fellows must demonstrate competence in:
 - IV.A.1.b).(3).(a) providing initial evaluation and treatment to all patients presenting to the emergency department;
 - IV.A.1.b).(3).(b) providing care for acutely ill and/or injured pediatric patients;
 - IV.A.1.b).(3).(c) differentiating between high- and low-acuity patients;
 - IV.A.1.b).(3).(d) performing an age- and developmentally appropriate, precise history and physical exam;
 - IV.A.1.b).(3).(e) developing a complaint-based and age-appropriate differential diagnosis using evidence-guided reasoning and pattern recognition;

- IV.A.1.b).(3).(f) developing and initiating a prioritized diagnostic evaluation and therapeutic management plan that is complaint- and disease-specific, evidence-guided, culturally competent, and cost effective;
- IV.A.1.b).(3).(g) accurately documenting patient encounters;
- IV.A.1.b).(3).(h) demonstrating family-centered care with informed and/or shared decision-making with patients/patients' families that is developmentally appropriate and within state statutes;
- IV.A.1.b).(3).(i) developing appropriate patient dispositions;
- IV.A.1.b).(3).(j) performing rapid and concise evaluations on patients with undifferentiated chief complaints and diagnoses, with simultaneous stabilization of any life-threatening conditions, and ensuring appropriate life-saving interventions before arriving at a definitive diagnosis;
- IV.A.1.b).(3).(k) providing care for medically- and technologically-complex pediatric patients in the emergency department;
- IV.A.1.b).(3).(l) developing a diagnostic and management plan that takes into consideration the interaction between the acute problem and the underlying chronic illness with its associated co-morbidities;
- IV.A.1.b).(3).(m) demonstrating compassion for the stress associated with sudden illness, injury, and death in responding to the emotional needs of patients, their families, and emergency department staff members;
- IV.A.1.b).(3).(n) demonstrating the skills necessary to prioritize and simultaneously manage the emergency care of multiple patients; and,
- IV.A.1.b).(3).(o) assuming leadership responsibility for the pediatric emergency department.
- IV.A.1.b).(4) Fellows must demonstrate competence in performing and interpreting the results of imaging and diagnostic procedures and the resulting laboratory tests for use in patient care.

IV.A.1.b).(5)	Fellows must acquire the necessary procedural and resuscitation skills, and develop an understanding of their indications, risks, and limitations for pediatric patients of all ages, including:
IV.A.1.b).(5).(a)	abscess incision and drainage;
IV.A.1.b).(5).(b)	airway and assisted ventilation, including bag-valve-mask ventilation, rapid sequence intubation, and supraglottic device insertion;
IV.A.1.b).(5).(c)	cardioversion/defibrillation;
IV.A.1.b).(5).(d)	central venous catheterization;
IV.A.1.b).(5).(e)	closed reduction/splinting of fractures and dislocations;
IV.A.1.b).(5).(f)	conversion of supraventricular tachycardia;
IV.A.1.b).(5).(g)	cricothyrotomy–translaryngeal ventilation;
IV.A.1.b).(5).(h)	epistaxis management, to include nasal packing;
IV.A.1.b).(5).(i)	external cardiac pacing;
IV.A.1.b).(5).(j)	foreign body removal;
IV.A.1.b).(5).(k)	gastrostomy tube placement;
IV.A.1.b).(5).(l)	initial management of burn injuries;
IV.A.1.b).(5).(m)	intraosseous access;
IV.A.1.b).(5).(n)	laceration repair;
IV.A.1.b).(5).(o)	lumbar puncture;
IV.A.1.b).(5).(p)	mechanical ventilation;
IV.A.1.b).(5).(q)	medical and trauma resuscitation in pediatric patients ranging in age from newborn to young adulthood;
IV.A.1.b).(5).(r)	non-invasive ventilation;
IV.A.1.b).(5).(s)	pericardiocentesis;
IV.A.1.b).(5).(t)	procedural sedation;
IV.A.1.b).(5).(u)	point of care ultrasound;

- IV.A.1.b).(5).(v) regional anesthesia;
- IV.A.1.b).(5).(w) slit lamp examination;
- IV.A.1.b).(5).(x) tube replacement in a mature tracheostomy site;
- IV.A.1.b).(5).(y) tube thoracostomy and needle decompression of pneumothorax;
- IV.A.1.b).(5).(z) umbilical vessel catheterization; and,
- IV.A.1.b).(5).(aa) vaginal delivery.

IV.A.1.c) Medical Knowledge

IV.A.1.c).(1) Fellows 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. Fellows must demonstrate knowledge of:

- IV.A.1.c).(1).(a) biostatistics;
- IV.A.1.c).(1).(b) clinical and laboratory research methodology;
- IV.A.1.c).(1).(c) critical literature review;
- IV.A.1.c).(1).(d) ethical principles involving clinical research;
- IV.A.1.c).(1).(e) preparation of applications for funding and/or approval of clinical research protocols;
- IV.A.1.c).(1).(f) principles of evidence-based medicine;
- IV.A.1.c).(1).(g) study design; and,
- IV.A.1.c).(1).(h) teaching methods.

IV.A.1.d) Practice-based Learning and Improvement

IV.A.1.d).(1) Fellows 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.

IV.A.1.e) Interpersonal and Communication Skills

- IV.A.1.e).(1) Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.
- IV.A.1.f) Systems-based Practice
- IV.A.1.f).(1) Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinates of health, as well as the ability to call effectively on other resources in the system to produce optimal care.

IV.B. Regularly Scheduled Educational Activities

- IV.B.1. Fellows must have a formally structured educational program in the clinical and basic sciences related to pediatric emergency medicine.
- IV.B.1.a) Clinical and basic science instruction should be evidence-based on review and analysis of relevant literature.
- IV.B.2. Fellows must participate in multi-disciplinary conferences that include lectures, morbidity and mortality conferences, case conferences, general reviews, and research seminars.
- IV.B.3. Pediatric emergency medicine conferences must be regularly scheduled, and fellows must actively participate in their planning and implementation.
- IV.B.3.a) Faculty members' and fellows' attendance must be documented.
- IV.B.3.b) Both faculty members and fellows should participate meaningfully in the didactic activities.
- IV.B.4. Fellow education should include instruction in:
- IV.B.4.a) basic and fundamental disciplines, as appropriate to pediatric emergency medicine, such as anatomy, biochemistry, embryology, genetics, immunology, microbiology, nutrition/metabolism, pathology, pharmacology, and physiology;
- IV.B.4.b) pathophysiology of disease, reviews of recent advances in clinical medicine, and biomedical research;
- IV.B.4.c) the economics of health care and current health care management issues, such as cost-effective patient care, practice management, preventive care, population health, quality improvement, resource allocation, and clinical outcomes;

- IV.B.4.d) curriculum design, information delivery in clinical and other settings, provision of feedback to learners, assessment of educational outcomes, and the development of teaching materials;
 - IV.B.4.e) diversity and cultural competence;
 - IV.B.4.f) family presence during resuscitations;
 - IV.B.4.g) professionalism;
 - IV.B.4.h) communication skills and self-directed assessment and learning; and,
 - IV.B.4.i) complications and death and the scientific, ethical, and legal implications of confidentiality and informed consent.
- IV.B.5. Fellows should have formal sessions on organizing teaching programs, medical writing, and oral presentations.
- IV.B.6. Fellows should receive instruction and experience in administrative and management skills, including quality improvement principles, necessary to oversee a division or department.

IV.C. Clinical Experiences

- IV.C.1. Programs must specify a curriculum for graduates of both an emergency medicine residency and a pediatric residency.
- IV.C.2. The curriculum for fellows who have completed a residency in emergency medicine must include the following experiences that are part of the affiliated ACGME-I-accredited pediatric residency:
- IV.C.2.a) at least three months in general pediatrics;
 - IV.C.2.b) two months in outpatient pediatric clinics, including exposure to pediatric subspecialties; and,
 - IV.C.2.c) at least three months in the management of critically-ill neonates and children in intensive care units.
- IV.C.3. The curriculum for fellows who have completed a residency in pediatrics must include the following experiences that are part of the affiliated ACGME-I-accredited emergency medicine residency:
- IV.C.3.a) at least four months caring for adults in emergency medicine; and,
 - IV.C.3.a).(1) No more than one month of this experience should be on the adult trauma surgery service.
 - IV.C.3.b) a structured educational experience in emergency medical services and toxicology that includes the care of adults.

- IV.C.3.b).(1) Fellow experience should include both didactic and experiential components that may be longitudinally integrated into other parts of the curriculum or designed as block rotations.
- IV.C.3.b).(2) Fellow experience should include acute toxicology consultations, and, if provided in the country or jurisdiction, ride-alongs with emergency medicine services in the field.
- IV.C.4. Fellows must participate in the care of pediatric patients of all ages, from infancy through young adulthood, and with a broad spectrum of illnesses and injuries of all severities.
- IV.C.5. At least 12 months of the clinical experience must be spent seeing children in an emergency department where pediatric patients are treated for the full spectrum of illnesses and injuries.
- IV.C.6. Fellow experience must include experience with blunt and penetrating trauma and psychiatric emergencies.
- IV.C.7. The core content of the program must include education in emergency medical services for children (EMSC), administration, legal issues, procedures, patient safety, medical errors, ethics, and professionalism.
- IV.C.8. Fellows must interact with the residents and faculty members in the affiliated core residencies.

IV.D. Scholarly Activity

- IV.D.1. Fellows' Scholarly Activity
- IV.D.1.a) Scholarly activities must be in basic science, clinical care, health services, health policy, quality improvement, or education, as it relates to pediatric emergency medicine.
- IV.D.1.b) Each fellow must design and conduct a scholarly project under the guidance of the program director and a designated mentor.
- IV.D.1.c) The program must provide a Scholarship Oversight Committee for each fellow to supervise and evaluate the fellow's progress as related to scholarly activity.
- IV.D.1.d) The scholarly experience must begin in the first year and continue for the entire length of the educational program.
- IV.D.1.d).(1) There must be adequate time for each fellow's development of requisite skills, project completion, and presentation of results to the Scholarship Oversight Committee.

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. When pediatric emergency medicine fellows are on emergency medicine rotations, there must be at least one equivalent period of continuous time off between scheduled work periods.

VI.I.2. When on emergency medicine rotations, fellows must have a minimum of one day (24-hour period) free per each seven-day period.

VI.I.2.a) This must not be averaged over a four-week period.

VI.I.3. While on duty in the emergency department, fellows must not work longer than 12 continuous scheduled hours.

VI.J. On-Call Activities

See International Foundational Requirements, Section VI.J.