ACGME Program Requirements for Graduate Medical Education in Pediatrics

Common Program Requirements are in BOLD

Effective: July 1, 2007

Introduction

Int.A. Residency is an essential dimension of the transformation of the medical student to the independent practitioner along the continuum of medical education. It is physically, emotionally, and intellectually demanding, and requires longitudinally-concentrated effort on the part of the resident.

The specialty education of physicians to practice independently is experiential, and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires the resident physician to assume personal responsibility for the care of individual patients. For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept—graded and progressive responsibility—is one of the core tenets of American graduate medical education.

Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring each resident’s development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishing a foundation for continued professional growth.

Int.B. Residency programs in pediatrics must provide three years of consecutive training that involve progressive responsibility.

Int.C. Duration and Scope of Training

Int.C.1. Programs must provide residents with a broad exposure to the health care of children and substantial experience in the management of diverse pathologic conditions. This must include experience in child health maintenance and those conditions commonly encountered in primary care practice. It must also include experience with a wide range of acute and chronic medical conditions of pediatrics in both the inpatient and ambulatory settings.

Int.C.2. Each program must describe a core curriculum that complies with the Review Committee’s requirements and in which all residents participate. All residents in the program must have a minimum of 18 months of training in common. In addition, programs that utilize multiple hospitals or that offer more than one track must provide evidence of a unified educational experience for each resident.
Int.C.3. The first year should include an introduction to the basic experiences on which the rest of the training will be based. During the last 24 months of training, the program must require residents to supervise the activities of more junior residents within the approved inpatient and outpatient educational settings.

Int.C.4. Throughout the three years of training, the goal should be the achievement of competency in patient care, medical knowledge, professionalism, communication, practice-based learning and improvement, and systems-based practice.

Int.D. Goal of the Residency

Int.D.1. The goal of residency training in pediatrics is to provide educational experiences that prepare residents to be competent general pediatricians able to provide comprehensive and coordinated care to a broad range of pediatric patients. The residents' educational experiences must emphasize the competencies and skills needed to practice general pediatrics of high quality in the community. In addition, residents must become sufficiently familiar with the fields of subspecialty pediatrics to enable them to participate as team members in the care of patients with chronic and complex disorders.

Int.D.2. Residents must be given the opportunity to function with other members of the health care team in both inpatient and ambulatory settings to become competent as leaders in the organization and management of patient care.

I. Institutions

I.A. Sponsoring Institution

One sponsoring institution must assume ultimate responsibility for the program, as described in the Institutional Requirements, and this responsibility extends to resident assignments at all participating sites.

The sponsoring institution and the program must ensure that the program director has sufficient protected time and financial support for his or her educational and administrative responsibilities to the program.

I.B. Participating Sites

I.B.1. There must be a program letter of agreement (PLA) between the program and each participating site providing a required assignment. The PLA must be renewed at least every five years.

The PLA should:

I.B.1.a) identify the faculty who will assume both educational and supervisory responsibilities for residents;
I.B.1.b) specify their responsibilities for teaching, supervision, and formal evaluation of residents, as specified later in this document;

I.B.1.c) specify the duration and content of the educational experience; and,

I.B.1.d) state the policies and procedures that will govern resident education during the assignment.

I.B.2. The program director must submit any additions or deletions of participating sites routinely providing an educational experience, required for all residents, of one month full time equivalent (FTE) or more through the Accreditation Council for Graduate Medical Education (ACGME) Accreditation Data System (ADS).

I.B.3. An accredited program may be independent or may occur in two or more sites that develop formal agreements and conjoint responsibilities to provide complementary facilities, teaching staff, and teaching sessions. When participating sites are utilized and a single program director assumes responsibility for the entire residency, including the appointment of all residents, the determination of all rotations, and the assignment of both residents and members of the teaching staff, the participating site may be proposed as integrated. Ordinarily, a hospital may not be an integrated part of more than one pediatric residency, and a program may not propose the primary teaching site of another accredited program as an integrated participant. The Review Committee must approve the designation of a participating hospital as integrated. In making its determination, the Review Committee will consider the proximity of the hospital to the primary teaching site and the duration of rotations planned. Normally, at least three months of required experience should occur at a hospital that is designated as integrated. A significant increase in the time spent at an integrated hospital should receive prior approval from the Review Committee. Within a single program some participating hospitals may qualify as integrated, while others are merely affiliated with the program.

I.B.4. Although no limit is placed on the duration of rotations to sites that are integrated with the primary hospital’s pediatric program (although the duration must have Review Committee approval), rotations to participating sites that are not integrated with the primary hospital may not exceed a total of nine months during the three years of training. No more than three months of these outside rotations may be in sites that do not have their own pediatric residency.

I.B.5. Rotations to other programs should enrich but not replace core experiences. When residents rotate to a site that has its own accredited pediatric residency, the rotating residents must be fully absorbed into the prevailing pattern of instruction and patient care at the same level as the pediatric residents of that host program.
I.B.6. Residency programs that offer training to residents from other pediatric residencies must provide instruction and experience equivalent to that given to their own residents. They should enter into agreements with other programs only if they are prepared to absorb those residents into the prevailing pattern of education and patient care.

II. Program Personnel and Resources

II.A. Program Director

II.A.1. There must be a single program director with authority and accountability for the operation of the program. The sponsoring institution’s GMEC must approve a change in program director. After approval, the program director must submit this change to the ACGME via the ADS.

II.A.1.a) Given the differences in training programs, there may be flexibility in defining program leadership, with a suggested minimum of 0.75 full time equivalent (FTE) dedicated to this aspect of the residency program. In order to provide this level of leadership, the program director should devote at least 0.5 FTE of his/her professional effort to this activity. In a residency program of fewer than 31 residents (each resident in a combined program considered as 1.0 FTE), there should be a total of 0.75 physician faculty FTEs dedicated to the operation of the program. In a program of 31-60 residents, this should be 1.0 faculty FTEs. For programs with 61-90 residents, support should be 1.25 faculty FTEs, and for those with over 90 residents, 1.5 FTEs. If the program director is unable to fulfill commitments beyond 0.5 FTE, additional time should be provided by key faculty members designated as associate program directors. Associate program director time should be provided in increments of no less than 0.25 FTE. This level of program leadership should be supported financially by the sponsoring and/or participating sites.

II.A.2. The program director should continue in his or her position for a length of time adequate to maintain continuity of leadership and program stability.

II.A.3. Qualifications of the program director must include:

II.A.3.a) requisite specialty expertise and documented educational and administrative experience acceptable to the Review Committee;

II.A.3.b) current certification in the specialty by the American Board of Pediatrics, or specialty qualifications that are acceptable to the Review Committee; and,

II.A.3.b).(1) If Board certification is lacking, the Review Committee will
review active participation in national societies, evidence of ongoing scholarship through contributions to the peer-review literature, and presentations at national meetings.

II.A.3.c) current medical licensure and appropriate medical staff appointment.

II.A.4. The program director must administer and maintain an educational environment conducive to educating the residents in each of the ACGME competency areas. The program director must:

II.A.4.a) oversee and ensure the quality of didactic and clinical education in all sites that participate in the program;

II.A.4.b) approve a local director at each participating site who is accountable for resident education;

II.A.4.c) approve the selection of program faculty as appropriate;

II.A.4.d) evaluate program faculty and approve the continued participation of program faculty based on evaluation;

II.A.4.e) monitor resident supervision at all participating sites;

II.A.4.f) prepare and submit all information required and requested by the ACGME, including but not limited to the program information forms and annual program resident updates to the ADS, and ensure that the information submitted is accurate and complete;

II.A.4.g) provide each resident with documented semiannual evaluation of performance with feedback;

II.A.4.h) ensure compliance with grievance and due process procedures as set forth in the Institutional Requirements and implemented by the sponsoring institution;

II.A.4.i) provide verification of residency education for all residents, including those who leave the program prior to completion;

II.A.4.j) implement policies and procedures consistent with the institutional and program requirements for resident duty hours and the working environment, including moonlighting, and, to that end, must:

II.A.4.j).(1) distribute these policies and procedures to the residents and faculty;

II.A.4.j).(2) monitor resident duty hours, according to sponsoring institutional policies, with a frequency sufficient to ensure compliance with ACGME requirements;
II.A.4.j).(3) adjust schedules as necessary to mitigate excessive service demands and/or fatigue; and,

II.A.4.j).(4) if applicable, monitor the demands of at-home call and adjust schedules as necessary to mitigate excessive service demands and/or fatigue.

II.A.4.k) monitor the need for and ensure the provision of back up support systems when patient care responsibilities are unusually difficult or prolonged;

II.A.4.l) comply with the sponsoring institution’s written policies and procedures, including those specified in the Institutional Requirements, for selection, evaluation and promotion of residents, disciplinary action, and supervision of residents;

II.A.4.m) be familiar with and comply with ACGME and Review Committee policies and procedures as outlined in the ACGME Manual of Policies and Procedures;

II.A.4.n) obtain review and approval of the sponsoring institution’s GMEC/DIO before submitting to the ACGME information or requests for the following:

II.A.4.n).(1) all applications for ACGME accreditation of new programs;

II.A.4.n).(2) changes in resident complement;

II.A.4.n).(2).(a) A modest change in the resident complement may be made without prior Review Committee approval if the program has the necessary resources to train the additional resident(s) without diluting the experience of those already in the program, and if the change has the approval of the designated institutional official of the sponsoring institution. A program that plans to implement such an increase should review the most recent letter of notification from the Review Committee for any citations pertaining to resources. Any such citation should be addressed prior to implementing an increase in complement. Proposed increases must be reported electronically through ADS.

II.A.4.n).(3) major changes in program structure or length of training;

II.A.4.n).(4) progress reports requested by the Review Committee;

II.A.4.n).(5) responses to all proposed adverse actions;
II.A.4.n).(6) requests for increases or any change to resident duty hours;

II.A.4.n).(7) voluntary withdrawals of ACGME-accredited programs;

II.A.4.n).(8) requests for appeal of an adverse action;

II.A.4.n).(9) appeal presentations to a Board of Appeal or the ACGME; and,

II.A.4.n).(10) proposals to ACGME for approval of innovative educational approaches.

II.A.4.o) obtain DIO review and co-signature on all program information forms, as well as any correspondence or document submitted to the ACGME that addresses:

II.A.4.o).(1) program citations, and/or

II.A.4.o).(2) request for changes in the program that would have significant impact, including financial, on the program or institution.

II.B. Faculty

II.B.1. At each participating site, there must be a sufficient number of faculty with documented qualifications to instruct and supervise all residents at that location.

The faculty must:

II.B.1.a) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; and to demonstrate a strong interest in the education of residents, and

II.B.1.a).(1) In addition to the key faculty, all programs should have a minimum of one person (e.g., a senior resident, chief resident, or junior faculty) who functions as a liaison between the residents and faculty. Support, based on program size, should be as follows: fewer than 31 residents, one FTE; 31–90 residents, two FTEs and for greater than 90 residents, three full-time equivalents. These numbers reflect minimum support.

II.B.1.a).(2) A measure of the commitment of the teaching staff to the pediatrics program is the degree to which patients under their care are available for resident education.
II.B.1.b) administer and maintain an educational environment conducive to educating residents in each of the ACGME competency areas.

II.B.2. The physician faculty must have current certification in the specialty by the American Board of Pediatrics, or possess qualifications acceptable to the Review Committee.

II.B.2.a) Each time the program is evaluated by the Review Committee, it is the responsibility of the program director to provide evidence of appropriate qualifications for the teaching staff who lack Board certification (e.g. participation in national societies, evidence of ongoing scholarship through contributions to the peer-review literature, and presentations at national meetings).

II.B.3. The physician faculty must possess current medical licensure and appropriate medical staff appointment.

II.B.4. The nonphysician faculty must have appropriate qualifications in their field and hold appropriate institutional appointments.

II.B.5. The faculty must establish and maintain an environment of inquiry and scholarship with an active research component.

II.B.5.a) The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.

II.B.5.b) Some members of the faculty should also demonstrate scholarship by one or more of the following:

II.B.5.b).(1) peer-reviewed funding;

II.B.5.b).(2) publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;

II.B.5.b).(3) publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings; or,

II.B.5.b).(4) participation in national committees or educational organizations.

II.B.5.c) Faculty should encourage and support residents in scholarly activities.

II.B.6. General Pediatricians

Within the primary hospital and/or integrated participating hospitals, there must be teaching staff with expertise in the area of general pediatrics who will serve as teachers, researchers, and role models for general pediatrics. To maintain their clinical skills, these physicians should have a
continuing time commitment to direct patient care. Hospital-based as well as community-based general pediatricians should participate actively in the program as leaders of formal teaching sessions, as outpatient preceptors, and as attending physicians on the general inpatient services. The number of general pediatricians actively involved in the teaching program must be sufficient to enable each resident to establish close working relationships that foster role-modeling. Where teaching staff participate on a part-time basis, there must be evidence of sufficient involvement and continuity in teaching.

II.B.7. Subspecialty Faculty

Similarly, within the primary hospital and/or integrated participating hospitals, there must be qualified teaching staff with subspecialty expertise who will serve as teachers, researchers, and role models for the residents. Specifically, there must be teaching staff with training and/or experience in behavioral and developmental pediatrics and in adolescent medicine. Within the primary hospital and/or integrated participating hospitals, there must also be teaching staff in at least five of the listed pediatric subspecialties (see Section IV.A.5.b)(1)(f)(ix)) from which the four required one-month rotations must be chosen. These pediatric subspecialists must function on an ongoing basis as integral parts of the clinical and didactic components of the program in both outpatient and inpatient settings.

II.B.8. Other Faculty

A surgeon having significant experience with pediatric patients must play a major role in the residents’ education with respect to surgical diagnoses and preoperative and postoperative care. A pathologist and a radiologist who have significant experience with pediatric problems and who interact regularly with the pediatric residents are also essential.

II.B.9. Faculty Development

Since the faculty is expected to be role models for residents, they should demonstrate the knowledge, skills, and attitudes needed to provide an environment in which the competencies become habits of practice. To accomplish this there must be a structured program for faculty development that addresses clinical, teaching, research, and leadership skills. Teaching and evaluation of competencies must be included as part of this program.

II.C. Other Program Personnel

The institution and the program must jointly ensure the availability of all necessary professional, technical, and clerical personnel for the effective administration of the program.

II.C.1. Teaching by other health professionals such as nurses, pharmacists, social workers, child-life specialists, physical and occupational therapists,
speech and hearing pathologists, respiratory therapists, psychologists, and nutritionists is highly desirable.

II.C.2. Each residency should have a minimum of one FTE designated for administrative support. For programs of 31-60 residents, this support should be 1.5 FTE; for programs of 61-90 residents, two FTEs; and for programs of more than 90 residents, three FTEs. These positions should be financially supported by the sponsoring and/or participating sites.

II.D. Resources

The institution and the program must jointly ensure the availability of adequate resources for resident education, as defined in the specialty program requirements.

II.D.1. Inpatient and Outpatient Facilities

II.D.1.a) The inpatient and outpatient facilities must be adequate in size and variety, and must have the appropriate equipment necessary for a broad educational experience in pediatrics.

II.D.1.b) There must be an emergency facility that is appropriately equipped and staffed for the care of pediatric patients. The program must also have an intensive care facility that is appropriately equipped and staffed for the care of a sufficient number of seriously-ill pediatric patients to provide adequate experience for the number of residents in the program.

II.D.2. Patient Population

The pediatric patients that must be available for resident education range in age from infancy through young adulthood. Programs must provide residents with patient care experience in both inpatient and outpatient settings. Insufficient patient experience does not meet educational needs; an excessive patient load suggests an inappropriate reliance on residents for service obligations, which might also jeopardize the educational experience.

II.E. Medical Information Access

Residents must have ready access to specialty-specific and other appropriate reference material in print or electronic format. Electronic medical literature databases with search capabilities should be available.

III. Resident Appointments

III.A. Eligibility Criteria

The program director must comply with the criteria for resident eligibility as specified in the Institutional Requirements.
III.B. Number of Residents

The program director may not appoint more residents than approved by the Review Committee, unless otherwise stated in the specialty-specific requirements. The program's educational resources must be adequate to support the number of residents appointed to the program.

III.B.1. The Review Committee for Pediatrics does not approve a specific number of resident positions. At the time of program review, the Committee will judge the adequacy of the program's resources to support the number of resident positions proposed.

III.B.2. Because peer interchange is a very important component of the learning process, each program is expected to recruit and retain a sufficient number of qualified residents to fulfill the need for peer interaction among those training in pediatrics.

III.B.3. Residents at more than one level of training must interact in the care of inpatients, allowing for frequent and meaningful discussion during all phases of the training program (e.g., neonatal, outpatient, inpatient, and emergency services). To achieve this, a program should offer a minimum total of 12 resident positions (i.e., four at each level, exclusive of subspecialty residents). Except for periods of transition, the same number of positions should be offered in each of the three years of training. An inability to recruit the required minimum number of residents and/or a high rate of resident attrition from a program over a period of years will be a cause of concern to the Review Committee. The Review Committee will consider the presence of residents from combined pediatrics programs (e.g., medicine-pediatrics or pediatrics-emergency medicine), when it evaluates the adequacy of the resident complement and of peer interaction. The total number of residents from combined programs should not be so large as to have a negative effect on the education of categorical residents.

III.C. Resident Transfers

III.C.1. Before accepting a resident who is transferring from another program, the program director must obtain written or electronic verification of previous educational experiences and a summative competency-based performance evaluation of the transferring resident.

III.C.2. A program director must provide timely verification of residency education and summative performance evaluations for residents who leave the program prior to completion.

III.D. Appointment of Fellows and Other Learners

The presence of other learners (including, but not limited to, residents from other specialties, subspecialty fellows, PhD students, and nurse practitioners) in the program must not interfere with the appointed
residents’ education. The program director must report the presence of other learners to the DIO and GMEC in accordance with sponsoring institution guidelines.

IV. Educational Program

IV.A. The curriculum must contain the following educational components:

IV.A.1. Overall educational goals for the program, which the program must distribute to residents and faculty annually;

IV.A.2. Competency-based goals and objectives for each assignment at each educational level, which the program must distribute to residents and faculty annually, in either written or electronic form. These should be reviewed by the resident at the start of each rotation;

IV.A.3. Regularly scheduled didactic sessions;

IV.A.3.a) Departmental conferences, including regular morbidity and mortality conferences, seminars, teaching rounds, and other structured educational experiences must be conducted on a regular basis and with sufficient frequency to fulfill educational goals.

IV.A.3.b) Reasonable requirements for resident attendance should be established for the various conferences; their attendance should be documented, and there must be appropriate faculty participation.

IV.A.4. Delineation of resident responsibilities for patient care, progressive responsibility for patient management, and supervision of residents over the continuum of the program; and,

IV.A.5. ACGME Competencies

The program must integrate the following ACGME competencies into the curriculum:

IV.A.5.a) Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents:

IV.A.5.a).(1) must be able to provide family-centered patient care that is culturally effective and developmentally and age appropriate;

IV.A.5.a).(2) must be exposed to sufficient numbers of patients ranging in age from infancy through young adulthood, and
representing a diverse population of varying complexity in various clinical settings. The resident must have breadth and depth of inpatient experience in the format determined by the Review Committee. A minimum of 40% of clinical training should be devoted to ambulatory experiences. These experiences include all assignments in the continuity practice, emergency and acute care, and community-based practices, as well as the ambulatory portion of normal/term newborn, developmental/behavioral, adolescent medicine, and other subspecialty experiences;

IV.A.5.a).(3) must be given progressive responsibility under close faculty supervision within a team that fosters peer and supervisory interchange. The availability of consultative resources appropriate to the patient base must be ensured, while allowing residents to participate in the full spectrum of patient care from admission through discharge in the inpatient setting, and from intake through follow-up in the outpatient setting;

IV.A.5.a).(4) must have a satisfactory patient care experience that includes: sufficient numbers of patients, diversity of diagnoses, and acuity/complexity of the patients. Faculty must document the fact that residents possess the necessary knowledge, skills, and attitudes to provide longitudinal primary care to patients;

IV.A.5.a).(5) should demonstrate competence in the following elements of patient care:

IV.A.5.a).(5).(a) gathering essential and accurate information about the patient;

IV.A.5.a).(5).(b) interviewing patients/families about the particulars of the medical condition for which they seek care, with specific attention to behavioral, psychosocial, environmental, and family unit correlates of disease;

IV.A.5.a).(5).(c) performing complete and accurate physical examinations. Residents must be evaluated performing histories and physical examinations. This must be accomplished through direct observation using a structured approach with different evaluators in different settings.

IV.A.5.a).(5).(d) making informed diagnostic and therapeutic decisions;

IV.A.5.a).(5).(e) developing and carrying out management plans;
IV.A.5.a).(5).(e).(i) Residents must have the opportunity for independent evaluation, management, and coordination of care under the guidance of faculty. Residents must demonstrate progressive autonomy over the course of training that affords them the ability to act in a supervisory role under faculty guidance. A minimum of five supervisory months is required during the last 24 months of training.

IV.A.5.a).(5).(e).(ii) Supervising residents/faculty must document the residents' ability to make diagnostic and therapeutic decisions based on best evidence and to develop and carry out management plans. This may be accomplished through direct observation in the clinical setting supplemented by one of the following: chart reviews or chart stimulated recall; faculty review of completed case-based modules; an observed structured clinical encounter; or some combination of these or other methods.

IV.A.5.a).(5).(e).(iii) Residents should participate in the following:

IV.A.5.a).(5).(e).(iii).(a) independent evaluation and development of a differential diagnosis, diagnostic work-up, therapeutic management, coordination of care, and discharge planning under faculty guidance;

IV.A.5.a).(5).(e).(iii).(b) diagnosis and management of acute episodic medical illness, such as meningitis, sepsis, dehydration, pneumonia, diarrhea, renal failure, seizures, coma, hypotension, hypertension, and respiratory illnesses;

IV.A.5.a).(5).(e).(iii).(c) diagnosis and management of acute problems associated with chronic diseases, such as diabetic ketoacidosis, status asthmaticus, status epilepticus, oncologic therapy and complications, congenital heart disease, cystic fibrosis, chronic renal disease, gastrointestinal disorders,
hepatic failure, metabolic disorders, neurologic disorders, and rheumatologic disorders;

IV.A.5.a).(5).(e).(iii).(d) pediatric aspects of the management of surgical patients, both preoperatively and postoperatively, including interaction with the surgical team.

IV.A.5.a).(5).(e).(iv) In addition to the above, each resident should demonstrate the following:

IV.A.5.a).(5).(e).(iv).(a) the ability to determine which patients require in-hospital care and why, including medical, psychosocial, and environmental considerations;

IV.A.5.a).(5).(e).(iv).(b) the skills in deciding which patients may be managed on a general inpatient service and which require higher levels of care and expertise in a critical care unit;

IV.A.5.a).(5).(e).(iv).(c) the ability to select and interpret appropriate studies in the evaluation of patients;

IV.A.5.a).(5).(e).(iv).(d) the ability to utilize best evidence to determine therapeutic management; and,

IV.A.5.a).(5).(e).(iv).(e) the appropriate use of consultants.

IV.A.5.a).(5).(f) prescribing and performing all medical procedures;

IV.A.5.a).(5).(f).(i) These educational experiences should be graduated so that residents build and maintain skills throughout the training program. Residents should be supervised until they can demonstrate the necessary skill for independent practice.

IV.A.5.a).(5).(f).(ii) The program must document instruction in the performance of procedures including indications, contraindications, and complications. As part of procedural competence, residents must be able to obtain informed consent and address the pain that is associated with procedures.
Residents must use the on-line log provided by the ACGME to record their procedures. The program director must have documentation showing the competence of each resident for each procedure. The program must also document that residents have completed training in both Pediatric Advanced Life Support and the Neonatal Resuscitation Program.

IV.A.5.a).(5).(f).(iii) Residents must have sufficient training in the following skills:

- basic and advanced life support;
- endotracheal intubation;
- placement of intraosseous lines (demonstration in a skills lab or PALS course is sufficient);
- placement of intravenous lines;
- arterial puncture;
- venipuncture;
- umbilical artery and vein catheterization;
- lumbar puncture;
- bladder catheterization;
- gynecologic evaluation of prepubertal and postpubertal females;
- wound care and suturing of lacerations;
- subcutaneous, intradermal, and intramuscular injections;
- developmental screening test;
- procedural sedation;
- pain management; and,
IV.A.5.a).(5).(f).(iii).(p) reduction and splinting of simple dislocations/fractures.

IV.A.5.a).(5).(f).(iv) In addition, residents should have exposure to the following procedures or skills:

IV.A.5.a).(5).(f).(iv).(a) circumcision;

IV.A.5.a).(5).(f).(iv).(b) tympanometry and audiometry interpretation;

IV.A.5.a).(5).(f).(iv).(c) vision screening;

IV.A.5.a).(5).(f).(iv).(d) hearing screening;

IV.A.5.a).(5).(f).(iv).(e) simple removal of foreign bodies (e.g., from ears or nose);

IV.A.5.a).(5).(f).(iv).(f) inhalation medications;

IV.A.5.a).(5).(f).(iv).(g) incision and drainage of superficial abscesses;

IV.A.5.a).(5).(f).(iv).(h) chest tube placement; and,

IV.A.5.a).(5).(f).(iv).(i) thoracentesis.

IV.A.5.a).(5).(g) counseling patients and families; faculty must document effective counseling of patients and families by residents, as well as their ability to deliver bad news, based on direct observation and comment from patients and families;

IV.A.5.a).(5).(h) providing effective health maintenance and anticipatory guidance;

IV.A.5.a).(5).(h).(i) A continuity clinic where the resident assumes responsibility for the comprehensive care of a group of patients is an essential component of training.

IV.A.5.a).(5).(h).(ii) Residents must be able to:

IV.A.5.a).(5).(h).(ii).(a) develop therapeutic relationships with patients and families;

IV.A.5.a).(5).(h).(ii).(b) coordinate the care of children with complex and multiple problems;

IV.A.5.a).(5).(h).(ii).(c) provide child health supervision with an emphasis on age and
provide anticipatory guidance regarding developmental issues and preventive health care;

implement age-appropriate screening, including oral health;

manage patients with chronic disease by coordinating the care rendered by other health care providers.

using information technology to optimize patient care.

**IV.A.5.b) Medical Knowledge**

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 sufficient knowledge of the basic and clinically supportive sciences appropriate to pediatrics.

**Inpatient**

Resident experience on the inpatient service must be for a minimum of five months. A variety of patient experiences will meet this requirement, including general pediatric patients, mixed non-intensive care subspecialty patients, or a single group of non-intensive care subspecialty patients. No more than one of the five required months may be devoted to the care of patients in a single subspecialty. The patient population available for resident education on the inpatient service must be of sufficient number, age distribution, and variety of complex and diverse pathology.

Residents at more than one level of training must interact in the care of inpatients. A first-year resident should have direct responsibility for an average daily minimum of five inpatients. If the minimum number of patients is not met, resident inpatient logs
will be required to attest to the adequacy of the experience.

IV.A.5.b).(1).(a).(iii) Residents on the inpatient service must be supervised by pediatric faculty who have extensive experience in and knowledge of the care of pediatric patients with illnesses of sufficient severity to warrant hospitalization. The utilization of general pediatricians in this role is encouraged, provided that consultative services from pediatric subspecialists and other specialists appropriate to the patient population are readily available.

IV.A.5.b).(1).(a).(iv) Regularly-scheduled teaching rounds must be conducted by qualified generalists and subspecialists who are directly involved in patient care. These rounds must be held at least three times per week, and may not be replaced by rounds that are primarily work oriented. Rounds should be targeted to the knowledge and skills required of a general pediatrician, and should emphasize the appropriate utilization of subspecialist colleagues. The correlation of the pathophysiologic basis of the disease process should be stressed. During ward rotations, there must be teaching rounds that are patient based, and that address such areas as interpretation of clinical data, pathophysiology, differential diagnosis, cost-effective management of the patient, and the appropriate use of technology and disease prevention.

IV.A.5.b).(1).(a).(v) *In-house call or night call* is defined as those duty hours beyond the normal workday when residents are required to be available on site in the assigned hospital. In addition to providing patient care, the purposes of night call include the following: 1) learning the evolution of disease though continuity of patient care over an extended period of time; 2) cumulative acquisition and maintenance of skills; and 3) fostering progressive independent decision-making. A night-float system may be used. *Night-float* is defined as those duty hours restricted to evening and overnight hours in a block format when residents are required.
to be present in the assigned institution. During a night-float rotation, residents do not typically have daytime responsibilities. Structured night-float rotations for which there are formal goals, objectives, and a specific evaluation component, and which provide an educational experience (i.e., both rounds and conferences with faculty), may count for 1 of the 5 required months of non-intensive care inpatient experience.

IV.A.5.b).(1).(b) Emergency and Acute Illness Experience

Residents must have a minimum of four months experience in emergency and acute illness. Two of these months should be in emergency medicine, of which the equivalent of one month may be completed longitudinally. At least one of these months must be a block rotation in an emergency department that serves as the receiving point for EMS transport and ambulance traffic and which is the access point for seriously-injured and acutely-ill pediatric patients. This may be either a pediatric emergency department or a combined pediatric/adult emergency department. Assignment to an acute care center or walk-in clinic to which patients are triaged from the emergency department will not fulfill this requirement.

The remaining two months of required experience may be in the emergency department or, if patients are available in sufficient numbers, in another setting where acutely-ill pediatric patients are seen. Optional sites may include walk-in clinics or acute care centers. Preferably, this experience should be a block rotation, but integration into other longitudinal experiences is acceptable if the required duration and the educational goals and objectives can be both met and documented, with appropriate supervision ensured.

The experience must be designed to develop resident competence in managing unselected and unscheduled patients with acute illness and injury of varying degrees.
of severity, from very minor to life-threatening.

IV.A.5.b).(1).(b).(iv) Specific objectives of this experience must include, but not be limited to, the development of skills in the following: resuscitation, stabilization, and triage of patients after initial evaluation; interaction with other professionals involved in emergency care in the emergency department, including the trauma team and emergency physicians; specialists in surgery, anesthesia, radiology, relevant pediatric and surgical subspecialties; dentists and others as appropriate. There must also be interaction with emergency medical personnel in the provision of pre-hospital care for acutely-ill or -injured patients, which includes either preparation of patients for transport or receipt of patients who have been transported via the EMS system.

IV.A.5.b).(1).(b).(v) Residents must have first-contact evaluation of pediatric patients and continuous on-site supervision. It is not an adequate educational experience if the pediatric resident functions only on a consultative basis or deals only with a pre-selected patient population. Residents in these settings must have on-site supervision by board-certified emergency medicine specialists with expertise in the care of pediatric patients, or by members of the pediatric teaching staff who have documented experience in the care of acute pediatric illnesses and injuries.

IV.A.5.b).(1).(b).(vi) Residents should have the opportunity to work on a multidisciplinary clinical team to learn the role of the general pediatrician in such a setting. A system for patient outcome feedback to the resident should be established. A resident's performance must be evaluated on a regular basis by staff directly involved in the acute and emergency care experience, and appropriate feedback must be provided to the resident and to the program director.
The residents' major responsibility must be for an appropriate range of pediatric patients, although they may be called on to care for some adult patients to ensure adequate volume and diversity. Programs that share the emergency and acutely-ill patient base with other training programs, such as emergency medicine, pediatric emergency medicine, and family medicine, must document that a sufficient and appropriately-diverse pediatric patient population is available to the pediatric residency program.

The comprehensive experience for all residents should include, but not be limited to, the following disorders, and should emphasize the pathophysiologic correlates of the clinical situations:

**IV.A.5.b).(1).(b).(vii)***

- acute major and minor medical problems, including but not limited to respiratory infection, respiratory failure, cardiopulmonary arrest, dehydration, coma, seizures, diabetic ketoacidosis, asthma, skin disorders, pyelonephritis, sepsis, shock, fever, and childhood exanthems;
- acute manifestations or exacerbations of chronic diseases;
- acute major and minor surgical problems, including but not limited to appendicitis, bowel obstruction, burns, foreign body inhalation and ingestion, abscess drainage, and head trauma;
- poisonings and ingestion;
- **physical and sexual abuse;**
- minor trauma (including splinting, casting, and suturing);
- major trauma (including active participation with the trauma team);
IV.A.5.b).(1).(b).(viii).(h) participation in pre-hospital management and transport;

IV.A.5.b).(1).(b).(viii).(i) acute psychiatric, behavioral, and psychosocial problems; and,

IV.A.5.b).(1).(b).(viii).(j) admission or discharge planning, including communication with the personal physician.

IV.A.5.b).(1).(c) Continuity Experience

IV.A.5.b).(1).(c).(i) A program must document one half-day session per week for a minimum of 36 clinic weeks per year throughout the three years of training for each resident. The program must provide adequate continuity experience for all residents to allow them the opportunity to develop an understanding of and appreciation for the longitudinal nature of general pediatric care including: aspects of physical and emotional growth and development; health promotion and disease prevention; management of acute, chronic, and end-of-life medical conditions; family and environmental impacts; coordination of patient-centered care both within the practice and with multidisciplinary providers; and practice management. The scope of each resident’s continuity clinic patient population must be documented with a log that includes age, diagnoses, and encounter dates.

IV.A.5.b).(1).(c).(ii) Residents must be exposed to a continuity-patient population sufficient in number and of adequate variety to meet the educational objectives. It must include well patients and those with complex and chronic problems. Patients initially managed in the normal newborn nursery, emergency department, inpatient service, intensive care unit (pediatric and neonatal), subspecialty clinics, and other sites may be enrolled in the residents’ panels. Inherent in the principle of continuity of care is that patients are seen on a regular and continuing basis. Isolated block experiences alone will not satisfy this requirement. Ideally, residents should participate in the care of their patients through any hospitalization, assess
them during acute illnesses, and be available to facilitate other services, such as school-related evaluations and specialty referrals.

IV.A.5.b).(1).(c).(iii) Residents must see progressive numbers of continuity patients, with a minimum of three patients per session in PGY-1, four in PGY-2, and five in PGY-3. Where residents participate in more than one half-day of continuity clinic per week (i.e., two sessions in same setting or one session in each of two settings), the total number of patients seen per week of clinic may be substituted for the number seen per session.

IV.A.5.b).(1).(c).(iv) The curriculum should emphasize the generalist approach to common office-based pediatric issues, including anticipatory guidance, developmental and behavioral issues, and immunization practices and health promotion, as well as the care of children with chronic conditions. Residents must learn to serve as the coordinator of comprehensive primary care for children with complex and multiple health-related problems, and to function as part of a health-care team. Subspecialty consultants and allied health personnel must be available to residents in the care of their continuity patients.

IV.A.5.b).(1).(c).(v) Residents must assume responsibility for the continuing care of a group of patients throughout their training, either as an individual practitioner or as a team member. In an effort to foster a continuity experience that emulates a pediatric practice setting, the concept of group or team practice will be supported. If a team practice is implemented, there must be a regular and formal mechanism for sharing information among the team members.

IV.A.5.b).(1).(c).(vi) Regardless of the setting, there should be a continuity relationship among the resident(s), preceptor(s), and a group of patients. To enhance the communication that is essential to continuity of experience, team size should not be excessive, and must include a preceptor or a small group of
preceptors to enhance the resident-preceptor relationship. Consistency of preceptors over time is desirable.

IV.A.5.b).(1).(c).(vi).(a) The preceptors’ responsibilities include, but are not limited to, mentoring the residents in communication skills, quality improvement skills, practice management system complexities, and patient advocacy (refer to competencies in Practice-Based Learning and Improvement and Systems-Based Practice).

IV.A.5.b).(1).(c).(vi).(b) The number of teaching staff in the continuity clinic must be sufficient to ensure an appropriate educational experience for all residents present. Teaching staff who serve as attendings in the continuity clinic must have expertise in the area of general pediatrics, and must be able to function as role models in general pediatrics. They must be actively involved in direct patient care to maintain their expertise and credibility.

IV.A.5.b).(1).(d) Normal/Term Newborn Experience

Residents must have the equivalent of at least one month in the care of normal/term newborns. This may not be part of a neonatal intensive care unit (NICU) rotation, but it may be combined with another experience over a longer period of time if an equivalent duration is demonstrated and if the educational goals of both experiences can be met. If competence in newborn care cannot be achieved in one month, it is desirable for a program to incorporate additional newborn experience. Faculty with expertise in general pediatrics should be involved in this training through teaching and/or supervision. The experience should also include at least the following:

IV.A.5.b).(1).(d).(i) recognition and appropriate intervention for high-risk infants;

IV.A.5.b).(1).(d).(ii) distinguishing well from ill infants;
IV.A.5.b).(1).(d).(iii) performance of a physical examination on newborn infants, which includes assessment of gestational age and the appropriateness of intrauterine growth;

IV.A.5.b).(1).(d).(iv) identification of common anomalies, birth defects, and syndromes, including counseling the parents;

IV.A.5.b).(1).(d).(v) provision of routine newborn care;

IV.A.5.b).(1).(d).(vi) recognition and treatment of common physiologic deviations in the newborn;

IV.A.5.b).(1).(d).(vii) identification and management of infants of mothers with substance abuse and/or sexually transmitted diseases (STDs) or other infections;

IV.A.5.b).(1).(d).(viii) routine newborn screening and appropriate follow-up of infants with positive test results;

IV.A.5.b).(1).(d).(ix) preventive measures, including immunization schedules and safety issues, such as counseling parents on the importance of infant safety seats and knowledge of normal infant nutrition, including breast feeding and knowledge of normal newborn growth and development; and,

IV.A.5.b).(1).(d).(x) discharge planning.

IV.A.5.b).(1).(e) Community and Child Advocacy Experiences

IV.A.5.b).(1).(e).(i) Residents must be provided structured educational experiences, with planned didactic and experiential opportunities for learning and methods of evaluation, which prepare them for the role of advocate for the health of children within the community. These experiences should include both didactic and experiential components that may be integrated into other parts of the curriculum (e.g., continuity, adolescent, behavior/development) or they may be designed as distinct longitudinal or block rotations.

IV.A.5.b).(1).(e).(ii) Residents must be supervised by pediatricians and other health professionals
experienced in the relevant content areas. The curriculum should include, but not be limited to, the following subjects:

IV.A.5.b).(1).(e).(ii).(a) community-oriented care with focus on the health needs of all children within a community, particularly underserved populations;

IV.A.5.b).(1).(e).(ii).(b) culturally-effective health care;

IV.A.5.b).(1).(e).(ii).(c) effects on child health of common environmental toxins, such as lead, and also of potential agents used in bioterrorism;

IV.A.5.b).(1).(e).(ii).(d) the role of the pediatrician as a consultant to schools, in early childhood education and in child care settings;

IV.A.5.b).(1).(e).(ii).(e) the role of the pediatrician in child advocacy, including the legislative process;

IV.A.5.b).(1).(e).(ii).(f) the role of the pediatrician in disease and injury prevention; and,

IV.A.5.b).(1).(e).(ii).(g) the role of the pediatricians in the regional emergency medical system for children, as well as their role in handling mass casualties.

IV.A.5.b).(1).(e).(ii).(g).(i) These experiences should utilize settings within the community, such as community-based primary care practice settings; community health resources and organizations, including governmental and voluntary agencies (e.g., local and state public health departments, services for children with disabilities and special health care needs, Head Start, schools, including elementary school through college, day care settings, home health services, hospice, facilities
Subspecialty Education

IV.A.5.b).(1).(f).(i) The curriculum must be designed to teach each resident the knowledge and skills appropriate for a general pediatrician, including the management of psychosocial problems that affect children with complex chronic disorders and their families. The experiences should include appropriate reading assignments, subspecialty conferences, and other activities that familiarize the residents with the techniques and skills used by the subspecialists.

IV.A.5.b).(1).(f).(ii) Although it is not possible for each resident to have a formal rotation through every subspecialty, it is required that all residents be exposed to the specialized knowledge and methods of the pediatric subspecialties through longitudinal experiences on the general inpatient and intensive care services and in outpatient settings. Residents should be taught when to seek consultation, when to refer to the subspecialist, and how to manage chronic illness as a team member with the subspecialist and other allied health professionals.

IV.A.5.b).(1).(f).(iii) All of the formal subspecialty rotations must involve an adequate number, variety, and complexity of patients to provide each resident with an appropriately broad experience in the subspecialty.

IV.A.5.b).(1).(f).(iv) During these rotations, residents must be given appropriate patient care responsibilities with an opportunity to evaluate and formulate management plans for subspecialty patients. In the outpatient subspecialty clinics and with appropriate supervision by a subspecialist, residents should function as the physician of first contact.
IV.A.5.b),(1).(f).(v) Pediatric subspecialty faculty must be directly involved in the supervision of residents, and be readily available for consultation on a continuing basis.

IV.A.5.b),(1).(f).(vi) Intensive Care Experience (NICU and PICU)

IV.A.5.b),(1).(f).(vi).(a) The intensive care experiences must provide the opportunity for residents to deal with the special needs of critically-ill patients and their families. The intensive care experience must be for a minimum of five and a maximum of six months.

IV.A.5.b),(1).(f).(vi).(b) This must include a minimum of three and a maximum of four block months of neonatal intensive care (Level II or III) and two block months of pediatric intensive care. Night and weekend responsibilities when the residents are predominantly responsible for the NICU are included in the allowable maximum intensive care experience, with 200 hours being considered the equivalent of one month. However, when a resident is covering the entire inpatient service, including neonatal intensive care or the delivery room, these hours need not be included in the calculation of time in intensive care. Hours covering the PICU are not included in calculation of time in intensive care.

IV.A.5.b),(1).(f).(vi).(c) To provide additional experience for those who may need it for future practice, one additional elective block month in critical care may be allowed. As is the case with any block month, it may include call. For a program that trains pediatricians to practice in non-urban areas that require the primary care pediatrician to resuscitate critically-ill infants and children, the program may petition the Review Committee for approval to offer additional critical care
experience, providing appropriate justification.

**IV.A.5.b).(1).(f).(vi).(d)**

The curricula in neonatal and pediatric intensive care must be structured to familiarize residents with the special multidisciplinary and multiorgan implications of fluid, electrolyte, and metabolic disorders; trauma, nutrition, and cardiorespiratory management; infection control; and recognition and management of congenital anomalies in pediatric patients. It also must be designed to teach the following:

**IV.A.5.b).(1).(f).(vi).(d).(i)**

recognition and management of isolated and multi-organ system failure and assessment of its reversibility;

**IV.A.5.b).(1).(f).(vi).(d).(ii)**

understanding of the variations in organ system dysfunction by age of patient;

**IV.A.5.b).(1).(f).(vi).(d).(iii)**

integration of clinical assessment and laboratory data to formulate management and therapeutic plans for critically ill patients;

**IV.A.5.b).(1).(f).(vi).(d).(iv)**

invasive and noninvasive techniques for monitoring and supporting pulmonary, cardiovascular, cerebral, and metabolic functions;

**IV.A.5.b).(1).(f).(vi).(d).(v)**

participation in decision making in the admitting, discharge, and transfer of patients in the intensive care units;

**IV.A.5.b).(1).(f).(vi).(d).(vi)**

resuscitation, stabilization, and transportation of patients to the ICUs and within the hospital;
IV.A.5.b).(1).(f).(vi).(d).(vii) understanding of the appropriate roles of the generalist pediatrician and the intensivist/ neonatologist in these settings;

IV.A.5.b).(1).(f).(vi).(d).(viii) participation in preoperative and postoperative management of surgical patients, including understanding the appropriate roles of the general pediatric practitioner and the intensivist in this setting;

IV.A.5.b).(1).(f).(vi).(d).(ix) participation, during the neonatal intensive care experience, in perinatal diagnostic and management discussions;

IV.A.5.b).(1).(f).(vi).(d).(x) resuscitation and care of newborns in the delivery room; and,

IV.A.5.b).(1).(f).(vi).(d).(xi) evaluation and management, during the pediatric intensive care experience, of patients following traumatic injury.

IV.A.5.b).(1).(f).(vii) Adolescent Medicine

Residents must receive an experience in adolescent medicine that will enable them to recognize normal and abnormal growth and development in adolescent patients. The experience must include, as a minimum, a one month block rotation to ensure a focused experience in the area of adolescent medicine. This experience must be supervised by faculty qualified to teach adolescent medicine.

Residents must receive an integrated experience in this area that incorporates adolescent issues into ambulatory and inpatient experiences throughout the three
Residents must receive instruction and experience in the following:

- **normal pubertal growth and development and the associated physiologic and anatomic changes**;
- **health promotion, disease prevention, and anticipatory guidance of adolescents**;
- **common adolescent health problems, including chronic illness, sports-related issues, motor vehicle safety, and the effects of violence in conflict resolution**;
- **interviewing the adolescent patient with attention to confidentiality, consent, and cultural background**;
- **psychosocial issues, such as peer and family relations, depression, eating disorders, substance abuse, suicide, and school performance**;
- **male and female reproductive health, including sexuality, pregnancy, contraception, and STDs**.

**Developmental/Behavioral Pediatrics**

Residents must have an adequate experience in developmental/behavioral pediatrics to ensure that the resident recognizes normal and abnormal behavior, and understands child development from infancy through young adulthood. The experience must include, as a minimum, a one-
month block rotation that is a focused experience in behavioral/developmental pediatrics. The experience must be supervised by faculty qualified to teach developmental/behavioral pediatrics.

**IV.A.5.b).(1).(f).(viii).(b)**

Residents must receive instruction in the intrinsic and extrinsic factors that influence behavior to enable them to differentiate behavior that can and should be managed by the general pediatrician from behavior that warrants referral to other specialists. Clinical and didactic components of behavioral, psychosocial, and developmental pediatrics should be integrated, when possible, into the general educational program and into each patient encounter.

**IV.A.5.b).(1).(f).(viii).(c)**

Residents must have an integrated experience that incorporates behavioral and developmental issues into ambulatory and inpatient experiences throughout the three years (e.g., inpatient unit, community setting, continuity clinic, and subspecialty rotations).

**IV.A.5.b).(1).(f).(viii).(d)**

The program must include instruction in at least the following components to enable the residents to develop appropriate skills:

**IV.A.5.b).(1).(f).(viii).(d).(i)**

Normal and abnormal child behavior and development, including cognitive, language, motor, social, and emotional components;

**IV.A.5.b).(1).(f).(viii).(d).(ii)**

Family structure, adoption, and foster care;

**IV.A.5.b).(1).(f).(viii).(d).(iii)**

Interviewing parents and children;

**IV.A.5.b).(1).(f).(viii).(d).(iv)**

Psychosocial and developmental screening techniques;
behavioral counseling and referral;
management strategies for children with developmental disabilities or special needs, within the context of the medical home;
needs of children at risk (e.g., those in poverty, from fragmented or substance abusing families, or victims of child abuse/neglect);
impact of chronic diseases, terminal conditions, and death on patients and their families; and,
recognition and coordinating care for childhood and adolescent mental health problems that require referral for diagnosis and treatment.

Additional Required Subspecialty Experience

Excluding the adolescent medicine, developmental/behavioral, and intensive care experiences (both NICU and PICU), residents must commit to at least seven months in subspecialty rotations, four of which must be taken at the primary teaching site and/or integrated hospitals.

Within these seven months, each resident must complete a minimum of four different one-month block rotations taken from the following list of pediatric subspecialties or closely allied specialties:

Allergy/Immunology
Cardiology
Endocrinology
Genetics
Gastroenterology
IV.A.5.b).(1).(f).(ix).(c) For the four required block months in different subspecialties from the above list, the inpatient/outpatient mix should reflect the standard of practice for the subspecialty.

IV.A.5.b).(1).(f).(ix).(d) The additional three months may consist of single subspecialties or combinations of specialties from either the list above or the list below. Combinations of subspecialties may be structured as block or longitudinal experiences and, where appropriate, may be combinations of inpatient and outpatient experiences or all outpatient.

Pediatric Anesthesiology
Child Psychiatry
Pediatric Dermatology
Pediatric Ophthalmology
Pediatric Orthopaedic Surgery and Sports Medicine
Pediatric Otolaryngology
Pediatric Radiology
Pediatric Surgery
Pediatric Physical Medicine and Rehabilitation

IV.A.5.b).(1).(f).(ix).(e) During the three years of training, no more than three block months, or its equivalent, may be spent by a resident in any one of these subspecialties. Subspecialty research electives that involve no clinical activities need not be counted as one of these three block months.

IV.A.5.b).(1).(f).(x) Elective Experiences

Electives should be designed to enrich the educational experience of residents in conformity with their needs, interests, and/or
future professional plans. Electives must be well-constructed, purposeful, and effective learning experiences, with written goals and objectives. The choice of electives must be made with the advice and approval of the program director and the appropriate preceptor.

IV.A.5.b).(2) must have didactic experiences to critically evaluate and apply current medical information and scientific evidence for patient care.

IV.A.5.b).(2).(a) Faculty must document a resident's ability to access, appraise, and apply knowledge from the medical literature. Faculty evaluations must address the ability of residents to apply best medical evidence to the care of patients. Evaluation must be based on direct observation and precepting in a clinical setting.

IV.A.5.b).(2).(b) In addition, the program must evaluate the competence of residents in performing an evidence-based exercise. This exercise may include, but is not limited to, a journal club presentation or other structured exercise in which best evidence is applied to a focused clinical question. The evaluation should be based on predetermined criteria.

IV.A.5.c) Practice-based Learning and Improvement

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 life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:

IV.A.5.c).(1) identify strengths, deficiencies, and limits in one’s knowledge and expertise;

IV.A.5.c).(2) set learning and improvement goals;

IV.A.5.c).(3) identify and perform appropriate learning activities;

IV.A.5.c).(4) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;

IV.A.5.c).(4).(a) Residents are expected to participate in a quality improvement project.
IV.A.5.c).(5) incorporate formative evaluation feedback into daily practice;

IV.A.5.c).(5).(a) Residents are expected to use evaluations of performance provided by peers, patients, superiors and junior colleagues to improve practice.

IV.A.5.c).(6) locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems;

IV.A.5.c).(7) use information technology to optimize learning; and,

IV.A.5.c).(8) participate in the education of patients, families, students, residents and other health professionals.

IV.A.5.c).(8).(a) This should be documented by evaluations of residents’ teaching abilities by faculty and/or learners.

IV.A.5.c).(9) take primary responsibility for lifelong learning to improve knowledge, skills, and practice performance through familiarity with general and rotation specific goals and objectives and attendance at conferences;

Documented meetings between an individual resident and mentor or advisor for purposes of feedback and guidance must occur at least twice a year. Documentation of an individual learning plan for each resident must occur annually.

IV.A.5.d) Interpersonal and Communication Skills

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 are expected to:

IV.A.5.d).(1) communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;

IV.A.5.d).(1).(a) Residents are also expected to communicate in a developmentally appropriate manner in creating and sustaining such therapeutic relationships.

IV.A.5.d).(2) communicate effectively with physicians, other health professionals, and health related agencies;

IV.A.5.d).(3) work effectively as a member or leader of a health care
team or other professional group;

IV.A.5.d).(4) act in a consultative role to other physicians and health professionals; and,

IV.A.5.d).(5) maintain comprehensive, timely, and legible medical records, if applicable.

Teaching of this competency must begin with role modeling. Role modeling should be supplemented by direct observation of resident communication skills in real or simulated situations.

Written evaluations based on direct observation must document effective communication with patients/families, supervisors, fellow residents, allied health professionals, non-medical staff, and referring physicians. These assessments must address effective communication of health care information in the resident’s role as primary caretaker, consultant, team member, and team leader as appropriate. Written evaluations of a resident’s communication skills by patients/families and members of the health care team must also be sought.

In addition, the program must evaluate each resident’s skill in written documentation and timely completion of medical records.

IV.A.5.e) Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate:

IV.A.5.e).(1) compassion, integrity, and respect for others;

IV.A.5.e).(2) responsiveness to patient needs that supersedes self-interest;

IV.A.5.e).(3) respect for patient privacy and autonomy;

IV.A.5.e).(4) accountability to patients, society and the profession; and,

IV.A.5.e).(5) sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.

IV.A.5.e).(6) high standards of ethical behavior which includes maintaining appropriate professional boundaries.
The program must document teaching of this competency. This may consist of, but is not limited to, traditional lectures, case-based teaching modules, discussion of vignettes, or role playing exercises that address aspects of ethical and professional behavior.

Written evaluations of a resident’s professional behavior by patients/families and members of the health care team based on direct observation must document elements of this competency.

Discussion of critical incidents (especially positive or negative behaviors) must be part of the ongoing mentoring of every resident.

**IV.A.5.f)** Systems-based Practice

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 are expected to:

**IV.A.5.f).(1)** work effectively in various health care delivery settings and systems relevant to their clinical specialty;

**IV.A.5.f).(1).(a)** Residents are expected to know how types of medical practice and delivery systems differ from one another, including methods of controlling healthcare cost, assuring quality, and allocating resources.

**IV.A.5.f).(2)** coordinate patient care within the health care system relevant to their clinical specialty;

**IV.A.5.f).(3)** incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;

**IV.A.5.f).(4)** advocate for quality patient care and optimal patient care systems;

**IV.A.5.f).(5)** work in interprofessional teams to enhance patient safety and improve patient care quality; and,

**IV.A.5.f).(6)** participate in identifying system errors and implementing potential systems solutions.
know how to advocate for the promotion of health and the prevention of disease and injury in populations;

The program must ensure structured educational experiences to address the following:

IV.A.5.f).(7) patient advocacy within the system (understanding the epidemiology of major health problems and health literacy awareness in the community);

IV.A.5.f).(7).(a) risk management;

IV.A.5.f).(7).(b) cost effectiveness, balancing cost and quality;

IV.A.5.f).(7).(c) health care organization, financing, and practice management, including the organization and financing of health care services for children at the local, state, and national levels and the role of the pediatrician in the legislative process;

IV.A.5.f).(7).(d) the organization and financing of clinical practice, including personnel and business management, scheduling, billing and coding procedures, telephone and telemedicine management, and maintenance of an appropriate confidential patient record system; and,

IV.A.5.f).(7).(e) systems approach to examining health care delivery practices, system errors and system solutions to error prevention.

The program must document teaching of this competency. These sessions may include, but are not limited to, traditional conferences or completion of case-based learning modules.

The program must also document experiential learning for the element that addresses the system causes of health care errors. Examples include, but are not limited to, a resident presentation at morbidity and mortality conference that focuses on potential system errors, or resident participation in an institutional process that identifies a system-based cause of an adverse patient outcome.

Faculty should assess resident progress in this domain. In addition, evaluations by other health professions must be obtained to assess residents’ ability to function as part of an interdisciplinary team.

IV.B. Residents’ Scholarly Activities
IV.B.1. 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.B.2. Residents should participate in scholarly activity.

IV.B.3. The sponsoring institution and program should allocate adequate educational resources to facilitate resident involvement in scholarly activities.

V. Evaluation

V.A. Resident Evaluation

V.A.1. Formative Evaluation

V.A.1.a) The faculty must evaluate resident performance in a timely manner during each rotation or similar educational assignment, and document this evaluation at completion of the assignment.

V.A.1.b) The program must:

V.A.1.b).(1) provide objective assessments of competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice;

V.A.1.b).(2) use multiple evaluators (e.g., faculty, peers, patients, self, and other professional staff);

V.A.1.b).(3) document progressive resident performance improvement appropriate to educational level; and,

V.A.1.b).(4) provide each resident with documented semiannual evaluation of performance with feedback.

V.A.1.c) The evaluations of resident performance must be accessible for review by the resident, in accordance with institutional policy.

V.A.2. Summative Evaluation

The program director must provide a summative evaluation for each resident upon completion of the program. This evaluation must become part of the resident’s permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy. This evaluation must:

V.A.2.a) document the resident’s performance during the final period
of education, and

V.A.2.b) verify that the resident has demonstrated sufficient competence to enter practice without direct supervision.

V.B. Faculty Evaluation

V.B.1. At least annually, the program must evaluate faculty performance as it relates to the educational program.

V.B.2. These evaluations should include a review of the faculty’s clinical teaching abilities, commitment to the educational program, clinical knowledge, professionalism, and scholarly activities.

V.B.3. This evaluation must include at least annual written confidential evaluations by the residents.

V.C. Program Evaluation and Improvement

V.C.1. The program must document formal, systematic evaluation of the curriculum at least annually. The program must monitor and track each of the following areas:

V.C.1.a) resident performance;

V.C.1.b) faculty development;

V.C.1.c) graduate performance, including performance of program graduates on the certification examination; and,

V.C.1.d) program quality. Specifically:

V.C.1.d).(1) Residents and faculty must have the opportunity to evaluate the program confidentially and in writing at least annually, and

V.C.1.d).(2) The program must use the results of residents’ assessments of the program together with other program evaluation results to improve the program.

V.C.2. If deficiencies are found, the program should prepare a written plan of action to document initiatives to improve performance in the areas listed in section V.C.1. The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes.

V.C.3. One outcome measure of the quality of a residency program is the performance of its graduates on the certifying examinations of the American Board of Pediatrics. In its evaluation of residency programs, the Review Committee will take into consideration the information provided by the American Board of Pediatrics regarding resident performance on the
certifying examinations. A program will be judged deficient if, during the most recent five years, the rate of those passing the examination on their first attempt is less than 60% and/or if less than 80% of those completing the program take the certifying examination.

VI. Resident Duty Hours in the Learning and Working Environment

VI.A. Professionalism, Personal Responsibility, and Patient Safety

VI.A.1. Programs and sponsoring institutions must educate residents and faculty members concerning the professional responsibilities of physicians to appear for duty appropriately rested and fit to provide the services required by their patients.

VI.A.2. The program must be committed to and responsible for promoting patient safety and resident well-being in a supportive educational environment.

VI.A.3. The program director must ensure that residents are integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs.

VI.A.4. The learning objectives of the program must:

VI.A.4.a) be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; and,

VI.A.4.b) not be compromised by excessive reliance on residents to fulfill non-physician service obligations.

VI.A.5. The program director and institution must ensure a culture of professionalism that supports patient safety and personal responsibility. Residents and faculty members must demonstrate an understanding and acceptance of their personal role in the following:

VI.A.5.a) assurance of the safety and welfare of patients entrusted to their care;

VI.A.5.b) provision of patient- and family-centered care;

VI.A.5.c) assurance of their fitness for duty;

VI.A.5.d) management of their time before, during, and after clinical assignments;

VI.A.5.e) recognition of impairment, including illness and fatigue, in themselves and in their peers;

VI.A.5.f) attention to lifelong learning;
VI.A.5.g) the monitoring of their patient care performance improvement indicators; and,

VI.A.5.h) honest and accurate reporting of duty hours, patient outcomes, and clinical experience data.

VI.A.6. All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. Physicians must recognize that under certain circumstances, the best interests of the patient may be served by transitioning that patient’s care to another qualified and rested provider.

VI.B. Transitions of Care

VI.B.1. Programs must design clinical assignments to minimize the number of transitions in patient care.

VI.B.2. Sponsoring institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.

VI.B.3. Programs must ensure that residents are competent in communicating with team members in the hand-over process.

VI.B.4. The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient’s care.

VI.C. Alertness Management/Fatigue Mitigation

VI.C.1. The program must:

VI.C.1.a) educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation;

VI.C.1.b) educate all faculty members and residents in alertness management and fatigue mitigation processes; and,

VI.C.1.c) adopt fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning, such as naps or back-up call schedules.

VI.C.2. Each program must have a process to ensure continuity of patient care in the event that a resident may be unable to perform his/her patient care duties.

VI.C.3. The sponsoring institution must provide adequate sleep facilities and/or safe transportation options for residents who may be too fatigued to safely return home.
VI.D. Supervision of Residents

VI.D.1. In the clinical learning environment, each patient must have an identifiable, appropriately-credentialed and privileged attending physician (or licensed independent practitioner as approved by each Review Committee) who is ultimately responsible for that patient’s care.

VI.D.1.a) This information should be available to residents, faculty members, and patients.

VI.D.1.b) Residents and faculty members should inform patients of their respective roles in each patient’s care.

VI.D.2. The program must demonstrate that the appropriate level of supervision is in place for all residents who care for patients.

Supervision may be exercised through a variety of methods. Some activities require the physical presence of the supervising faculty member. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member or resident physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback as to the appropriateness of that care.

VI.D.3. Levels of Supervision

To ensure oversight of resident supervision and graded authority and responsibility, the program must use the following classification of supervision:

VI.D.3.a) Direct Supervision – the supervising physician is physically present with the resident and patient.

VI.D.3.b) Indirect Supervision:

VI.D.3.b.(1) with direct supervision immediately available – the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision.

VI.D.3.b.(2) with direct supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision.
VI.D.3.c) Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.

VI.D.4. The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members.

VI.D.4.a) The program director must evaluate each resident’s abilities based on specific criteria. When available, evaluation should be guided by specific national standards-based criteria.

VI.D.4.b) Faculty members functioning as supervising physicians should delegate portions of care to residents, based on the needs of the patient and the skills of the residents.

VI.D.4.c) Senior residents or fellows should serve in a supervisory role of junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow.

VI.D.5. Programs must set guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions.

VI.D.5.a) Each resident must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence.

VI.D.5.a).(1) In particular, PGY-1 residents should be supervised either directly or indirectly with direct supervision immediately available.

VI.D.5.a).(2) PGY-1 residents must always be supervised either directly or indirectly with direct supervision immediately available.

VI.D.6. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility.

VI.E. Clinical Responsibilities

The clinical responsibilities for each resident must be based on PGY-level, patient safety, resident education, severity and complexity of patient illness/condition and available support services.

VI.E.1. The program director must have the authority and responsibility to set
appropriate clinical responsibilities (i.e., patient caps) for each resident based on the PGY-level, patient safety, resident education, severity and complexity of patient illness/condition, and available support services.

VI.E.2. Residents must be responsible for maintaining an appropriate patient load. Insufficient patient experiences do not meet educational needs; an excessive patient load suggests an inappropriate reliance on residents for service obligations, which may jeopardize their educational experience.

VI.F. Teamwork

Residents must care for patients in an environment that maximizes effective communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty.

VI.G. Resident Duty Hours

VI.G.1. Maximum Hours of Work per Week

Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities and all moonlighting.

VI.G.1.a) Duty Hour Exceptions

A Review Committee may grant exceptions for up to 10% or a maximum of 88 hours to individual programs based on a sound educational rationale.

The Review Committee for Pediatrics will not consider requests for exceptions to the 80-hour limit to the residents' work week.

VI.G.1.a).(1) In preparing a request for an exception the program director must follow the duty hour exception policy from the ACGME Manual on Policies and Procedures.

VI.G.1.a).(2) Prior to submitting the request to the Review Committee, the program director must obtain approval of the institution's GMEC and DIO.

VI.G.2. Moonlighting

VI.G.2.a) Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program.

VI.G.2.b) Time spent by residents in Internal and External Moonlighting (as defined in the ACGME Glossary of Terms) must be counted towards the 80-hour Maximum Weekly Hour Limit.
VI.G.2.c) PGY-1 residents are not permitted to moonlight.

VI.G.3. Mandatory Time Free of Duty

Residents must be scheduled for a minimum of one day free of duty every week (when averaged over four weeks). At-home call cannot be assigned on these free days.

VI.G.4. Maximum Duty Period Length

VI.G.4.a) Duty periods of PGY-1 residents must not exceed 16 hours in duration.

VI.G.4.b) Duty periods of PGY-2 residents and above may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage residents to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly suggested.

VI.G.4.b).(1) It is essential for patient safety and resident education that effective transitions in care occur. Residents may be allowed to remain on-site in order to accomplish these tasks; however, this period of time must be no longer than an additional four hours.

VI.G.4.b).(2) Residents must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.

VI.G.4.b).(3) In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.

VI.G.4.b).(3).(a) Under those circumstances, the resident must:

VI.G.4.b).(3).(a).(i) appropriately hand over the care of all other patients to the team responsible for their continuing care; and,

VI.G.4.b).(3).(a).(ii) document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director.
VI.G.4.b).(3).(b) The program director must review each submission of additional service, and track both individual resident and program-wide episodes of additional duty.

VI.G.5. Minimum Time Off between Scheduled Duty Periods

VI.G.5.a) PGY-1 residents should have 10 hours, and must have eight hours, free of duty between scheduled duty periods.

VI.G.5.b) Intermediate-level residents should have 10 hours free of duty, and must have eight hours between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty.

PGY-2 residents are considered to be at the intermediate level.

VI.G.5.c) Residents in the final years of education must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.

PGY-3 residents are considered to be in the final years of education.

VI.G.5.c).(1) This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in-seven standards. While it is desirable that residents in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances when these residents must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty.

VI.G.5.c).(1).(a) Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by residents in their final years of education must be monitored by the program director.

VI.G.5.c).(1).(b) There are no circumstances under which residents may stay on duty without eight hours off.

VI.G.6. Maximum Frequency of In-House Night Float

Residents must not be scheduled for more than six consecutive nights of night float.

VI.G.6.a) Residents should not have more than one consecutive week of night float and not more than four total weeks of night float per year.
VI.G.7. Maximum In-House On-Call Frequency

PGY-2 residents and above must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).

VI.G.8. At-Home Call

VI.G.8.a) Time spent in the hospital by residents on at-home call must count towards the 80-hour maximum weekly hour limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one-day-in-seven free of duty, when averaged over four weeks.

VI.G.8.a).(1) At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident.

VI.G.8.b) Residents are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new “off-duty period”.

VII. Innovative Projects

Requests for innovative projects that may deviate from the institutional, common and/or specialty specific program requirements must be approved in advance by the Review Committee. In preparing requests, the program director must follow Procedures for Approving Proposals for Innovative Projects located in the ACGME Manual on Policies and Procedures. Once a Review Committee approves a project, the sponsoring institution and program are jointly responsible for the quality of education offered to residents for the duration of such a project.

***

ACGME: February 2007 Effective: July 1, 2007
Revised Common Program Requirements Effective: July 1, 2011