

ACGME Program Requirements for Graduate Medical Education in Pediatric Transplant Hepatology

One-year Common Program Requirements are in BOLD

Effective: November 16, 2008

A subspecialty educational program in Pediatric Transplant Hepatology must function as an integral component of an accredited subspecialty fellowship in pediatric gastroenterology and be organized to provide education and experience for fellows to acquire the competencies of a pediatric transplant hepatologist.

The presence of a pediatric transplant hepatology program should not adversely affect the education of pediatric residents, the gastroenterology fellows, and other residents and fellows.

This document includes the ACGME Common Program Requirements which incorporate the competencies into fellowship education. Core and subspecialty program directors should work together to achieve this goal. Close coordination among core and subspecialty program directors will foster consistent expectations in regard to fellows' achievement of competencies, and for faculty with regard to evaluation processes.

Introduction

Int.A. Residency and fellowship programs are essential dimensions of the transformation of the medical student to the independent practitioner along the continuum of medical education. They are physically, emotionally, and intellectually demanding, and require longitudinally-concentrated effort on the part of the resident or fellow.

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 and fellow physician to assume personal responsibility for the care of individual patients. For the resident and fellow, 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 and fellows 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 and fellow'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. Duration of Educational Experience

The pediatric transplant hepatology education program must be one year in

duration.

Int.C. Scope of Educational Experience

The program must include clinical experiences and should offer protected time for research.

Int.C.1. The program must be organized and conducted in a way that ensures an appropriate environment for the well-being and care of the patients, and provides adequate education for fellows in the diagnosis and management of those subspecialty patients. This must include progressive clinical, technical, and consultative experiences that will enable the fellow to develop expertise as a consultant in the subspecialty.

Int.C.2. Fellows must develop a commitment to lifelong learning, and the program must emphasize scholarship, self-instruction, development of critical analysis of clinical problems, and the ability to make appropriate decisions.

Int.C.3. The program must provide fellows with instruction and opportunities to interact effectively with patients, patients' families, professional associates, and others in carrying out their responsibilities as physicians in the specialty. Fellows must learn to create and sustain a therapeutic relationship with patients, and how to work effectively as members or leaders of patient care teams or other groups in which they participate as a researcher, educator, health advocate, or manager.

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 fellow 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 fellows;

I.B.1.b) specify their responsibilities for teaching, supervision, and

formal evaluation of fellows, 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 fellow 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 fellows, 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 occur in one or more sites. The Review Committee must approve any site providing six months or more of the inpatient and/or outpatient education.

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.2. Qualifications of the program director must include:

II.A.2.a) requisite specialty expertise and documented educational and administrative experience acceptable to the Review Committee;

II.A.2.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.2.b).(1) Qualifications other than subspecialty certification by the American Board of Pediatrics will be considered only in exceptional circumstances. Qualifications would include subspecialty education in the subspecialty area, active participation in national societies, evidence of on-going scholarship documented by contributions to the peer-reviewed literature in the subspecialty, and presentations at national meetings in the subspecialty.

II.A.2.c) current medical licensure and appropriate medical staff appointment.

- II.A.2.d) a record of ongoing involvement in scholarly activities, including peer review publications, and mentoring (i.e., guiding fellows in the acquisition of competence in the clinical, teaching, research and advocacy skills pertinent to the discipline).
- II.A.3. The program director must administer and maintain an educational environment conducive to educating the fellows in each of the ACGME competency areas. The program director must:**
- II.A.3.a) prepare and submit all information required and requested by the ACGME;**
- II.A.3.b) be familiar with and oversee compliance with ACGME and Review Committee policies and procedures as outlined in the ACGME Manual of Policies and Procedures;**
- II.A.3.c) obtain review and approval of the sponsoring institution's GMCC/DIO before submitting to the ACGME information or requests for the following:**
- II.A.3.c).(1) all applications for ACGME accreditation of new programs;**
- II.A.3.c).(2) changes in fellow complement;**
- II.A.3.c).(3) major changes in program structure or length of training;**
- II.A.3.c).(4) progress reports requested by the Review Committee;**
- II.A.3.c).(5) responses to all proposed adverse actions;**
- II.A.3.c).(6) requests for increases or any change to fellow duty hours;**
- II.A.3.c).(7) voluntary withdrawals of ACGME-accredited programs;**
- II.A.3.c).(8) requests for appeal of an adverse action; and,**
- II.A.3.c).(9) appeal presentations to a Board of Appeal or the ACGME.**
- II.A.3.d) 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.3.d).(1) program citations, and/or**
- II.A.3.d).(2) request for changes in the program that would have significant impact, including financial, on the program**

or institution.

- II.A.3.e) ensure that the fellows are mentored in their development of clinical, educational, and administrative skills;
- II.A.3.f) ensure that explicit written guidelines identify that appropriate back-up exists. Such guidelines must be communicated to all members of the program staff. Fellows must be provided with prompt, reliable systems for communication and interaction with supervisory physicians;
- II.A.3.g) monitor and document the procedural skills of the fellows;
- II.A.3.h) have documentation of meetings that describe ongoing interaction among pediatric subspecialty and core program directors. These must take place at least semi-annually. These meetings should address a departmental approach to common educational issues and concerns (e.g., core curriculum, competencies, and evaluation).

II.B. Faculty

II.B.1. There must be a sufficient number of faculty with documented qualifications to instruct and supervise all fellows.

II.B.1.a) The program must have at least two full-time faculty members certified in Pediatric Transplant Hepatology or possess qualifications judged to be appropriate by the RRC. Each faculty member must:

II.B.1.a).(1) be a pediatric hepatologist with expertise in childhood liver diseases and pediatric liver transplantation;

II.B.1.a).(2) have ongoing direct patient care responsibilities.

II.B.2. The faculty must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities and demonstrate a strong interest in the education of fellows.

II.B.3. 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.3.a) Acceptable qualifications for the required key subspecialty faculty include:

II.B.3.a).(1) certification, if eligible, by the American Board of Pediatrics (ABP) or other appropriate board of the American Board of Medical Specialties (ABMS), or

II.B.3.a).(2) if trained elsewhere and not eligible for certification,

documented subspecialty education and peer-reviewed publications in the field with evidence of active participation in applicable local and national professional societies.

- II.B.3.b) When assessing the adequacy of the number of faculty, the total number of fellows will be considered.
- II.B.3.c) If the program is conducted at more than one institution, a member of the teaching staff of each participating site must be designated to assume responsibility for the day-to-day activities of the program at that site, with overall coordination by the program director.
- II.B.4. The physician faculty must possess current medical licensure and appropriate medical staff appointment.**
- II.B.5. The faculty must establish and maintain an environment of inquiry and scholarship with an active research component.
- II.B.5.a) Research may be in a variety of fields related to the subspecialty (e.g., basic science, clinical, health services, health policy, or educational research).
- II.B.5.a).(1) Each faculty member must have productivity in clinical or basic science research related to liver disease or transplantation.
- II.B.5.b) To provide an appropriate environment for the fellows, the fellowship faculty must have a program of ongoing scholarship characterized by peer reviewed funding and publications.
- II.B.5.c) A program must provide evidence of an ongoing commitment to, and productivity in, the scholarship of discovery in the relevant pediatric subspecialty area. Recent productivity by the program faculty will be assessed at the time of each review of the program. Activity in the following is required as evidence of the commitment to scholarship: projects with peer review for funding, and publications of original research and/or critical meta-analyses, systematic reviews of clinical practice, critical analyses of public policy, or curricular development projects in peer-reviewed journals.
- II.B.6. Other Physician and Consultative Faculty
- II.B.6.a) The following physician faculty from other disciplines must also be available: anesthesiology, pediatric surgery, child psychiatry or pediatric developmental-behavioral medicine, pediatric radiology and a pathologist with experience in interpretation of liver and transplant histology.
- II.B.6.b) The program must provide co-management responsibility with

transplant surgeons from the initial evaluation through the pre-transplant phase, surgery, recovery, and follow-up care.

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. The professional staff must include social workers, nutritionists, clinical nurse coordinators, child life therapists and a pharmacist and should include subspecialty nurses, physical and occupational therapists, and speech therapists with pediatric focus and experience.

II.D. Resources

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

- II.D.1. Liver Transplant Program

The transplant program must be present at the primary clinical site and be United Network of Organ Sharing (UNOS) approved.

- II.D.2. Patient Population

- II.D.2.a) Patients should range in age from newborn through young adulthood. Adequate numbers of pediatric subspecialty inpatients and outpatients, both new and follow up, must be available to provide a broad experience for the fellows.

- II.D.2.b) For programs with one fellow, the transplant program must perform at least 10 pediatric (patients less than 18 years old) liver transplants per year, or an average of 10 per year over the previous three year period. For programs with a complement of two or more fellows, the program must document an average of 10 transplants per year for each fellow.

- II.D.2.c) The program should also have a minimum of 20 active surviving patients in long-term follow-up (greater than one year) who are actively managed by the transplant team.

- II.D.3. The program must have interventional radiology services with staff experienced in the performance and interpretation of the invasive procedures required in liver transplant candidates and recipients.

- II.D.4. The program must utilize a multidisciplinary team to address donor and recipient selection and evaluation.

II.E. Medical Information Access

Fellows 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. Fellow Appointments

III.A. Eligibility Criteria

Each fellow must successfully complete an ACGME-accredited specialty program and/or meet other eligibility criteria as specified by the Review Committee. The program must document that each fellow has met the eligibility criteria.

- III.A.1. Fellows entering the program should have completed a 3-year ACGME-accredited program in pediatric gastroenterology. Candidates who do not meet this criterion must be advised in writing by the program director to consult the American Board of Pediatrics or other appropriate board regarding their eligibility for subspecialty certification.

III.B. Number of Fellows

The program director may not appoint more fellows 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 fellows appointed to the program.

- III.B.1. Programs planning to implement a modest increase in fellow complement between formal reviews should follow the directions provided on the Pediatrics home page of the ACGME website.

IV. Educational Program

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

- IV.A.1. **Skills and competencies the fellow will be able to demonstrate at the conclusion of the program. The program must distribute these skills and competencies to fellows and faculty annually, in either written or electronic form. These skills and competencies should be reviewed by the fellow at the start of each rotation;**

IV.A.2. ACGME Competencies

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

IV.A.2.a) Patient Care

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

- IV.A.2.a).(1) must have supervised education to acquire the necessary clinical skills used in the subspecialty. These skills should include development of expertise in the ability to perform a history and physical examination, make diagnostic and therapeutic decisions, develop and carry out management plans, counsel patients and families, and use information technology to optimize patient care;
- IV.A.2.a).(2) must be provided with a supervised experience in performing and interpreting the results of laboratory tests and diagnostic procedures for use in patient care. Instruction and experience must be sufficient for the fellow to acquire the necessary procedural skills and develop an understanding of their indications, risks, and limitations;
- IV.A.2.a).(3) must be provided with education in all the phases of transplant care including evaluation and indications, pre-transplant management, peri-operative care, immediate post-operative critical care and the specifics of short-term and long-term post-transplant medical management;
- IV.A.2.a).(4) must be involved in direct patient care, and supervise the evaluation and management of patients and in-patient consults. Specific competencies include teaching and supervising liver biopsies, diagnostic and therapeutic endoscopy and paracentesis; managing post-transplant immunosuppression; and leading daily rounds with the Liver Transplant Team;
- IV.A.2.a).(5) must have experience with and instruction on the interpretation of liver transplant biopsy specimens with an experienced liver transplant pathologist;
- IV.A.2.a).(6) must know how to care for patients that receive technical variant grafts such as living donor grafts;
- IV.A.2.a).(7) must demonstrate knowledge and clinical competence in:
- IV.A.2.a).(7).(a) management of children with chronic cholestasis, cirrhosis, and end-stage liver disease;
- IV.A.2.a).(7).(b) management of acute liver failure including critical care management;
- IV.A.2.a).(7).(c) diagnosis and management of Metabolic Liver Disease;
- IV.A.2.a).(7).(d) diagnosis and management of viral hepatitis
- IV.A.2.a).(7).(e) diagnosis and management of autoimmune

	hepatitis and Sclerosing Cholangitis
IV.A.2.a).(7).(f)	diagnosis and management of drug hepatotoxicities;
IV.A.2.a).(7).(g)	understand the impact of chronic liver disease on growth and development in children;
IV.A.2.a).(7).(h)	nutritional support of patients with chronic liver disease;
IV.A.2.a).(7).(i)	knowledge of indications and strategies for liver transplantation;
IV.A.2.a).(7).(j)	recognition of absolute and relative contraindications for liver transplantation;
IV.A.2.a).(7).(k)	psychosocial evaluation of candidates and recipients and their families;
IV.A.2.a).(7).(l)	primary evaluation, presentation and discussion of potential liver transplant candidates for consideration by a multi-disciplinary board;
IV.A.2.a).(7).(m)	ethical considerations relating to liver transplant donors, including questions related to living donors, donation after cardiac death, criteria for brain death, and appropriate recipients;
IV.A.2.a).(7).(n)	evaluation of indications for emergent re-operation or re-transplantation;
IV.A.2.a).(7).(o)	prevention and management of opportunistic infection in the transplant recipient including cytomegalovirus, adenovirus, fungal infection, and the spectrum of Epstein-Barr virus related disease including post transplant lymphoproliferative disease (PTLD);
IV.A.2.a).(7).(p)	prevention and management of recurrent viral hepatitis in the allograft;
IV.A.2.a).(7).(q)	development of a knowledge base in transplant immunology, including blood group matching, histocompatibility and tissue typing;
IV.A.2.a).(7).(r)	recognition, evaluation, diagnosis and treatment of acute and chronic allograft rejection;
IV.A.2.a).(7).(s)	recognition and intervention for complications of immunosuppressive therapy;

- IV.A.2.a).(7).(t) recognition, evaluation and management of long-term complications of liver transplantation.
- IV.A.2.a).(8) must demonstrate knowledge of the indications, contraindications, complications and interpretation of allograft biopsies and perform at least 15 percutaneous liver biopsies during education. In institutions where liver biopsies are performed only by Interventional Radiology, arrangements should be made for fellows to work with the radiologists in order to perform the required number of biopsies under the direction of the radiologist. In addition, the fellow should be familiar with the appropriate indications for ultrasound guided biopsies;
- IV.A.2.a).(9) must demonstrate an understanding of the organizational principles of a multi-disciplinary transplant program, including the training and responsibilities of nurse coordinators, procurement coordinators and other support staff;
- IV.A.2.a).(10) must demonstrate knowledge of the current UNOS organ allocation policies and the history of the evolution of the process;
- IV.A.2.a).(11) must demonstrate the ability to learn the principles of donor selection and management (e.g., hemodynamic management, indications for donor biopsy and donor factors that increase the risk of poor graft function) through observation of at least three deceased donor liver procurements. The fellow will evaluate LRD candidates and observe/participate in LRD donor/recipient procedures;
- IV.A.2.a).(12) must demonstrate knowledge of the different methods of vascular and biliary reconstruction, the outcomes of prolonged warm and cold ischemia times, as well as familiarity with the risks and associated complications of the different operative phases including the anhepatic phase and reperfusion by observing at least three liver transplant procedures.

IV.A.2.b) Medical Knowledge

Fellows must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Fellows:

- IV.A.2.b).(1) must acquire a current working knowledge of liver transplantation including the management of pediatric patients with end-stage liver disease and management of

major complications, such as nutritional complications of cholestasis and chronic liver disease, upper gastrointestinal hemorrhage, refractory ascites, hepatorenal syndrome, and hepatic encephalopathy.

IV.A.2.c) Practice-based Learning and Improvement

Fellows are expected to develop skills and habits to be able to meet the following goals:

IV.A.2.c).(1) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;

IV.A.2.c).(2) locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;

IV.A.2.c).(3) assume some departmental administrative responsibilities.

IV.A.2.d) Interpersonal and Communication Skills

Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

IV.A.2.e) Professionalism

Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

IV.A.2.e).(1) Fellows are expected to demonstrate professionalism throughout education during physician-patient, physician-family, physician-physician/allied health professional, and physician-society relationships.

IV.A.2.f) Systems-based Practice

Fellows 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.

IV.A.2.f).(1) Fellows are expected to develop knowledge in such topics as the economics of health care and current health care management issues, such as cost-effective patient care, practice management, preventive care, quality improvement, resource allocation, clinical outcomes. Programs must provide experience in the prevention of

medical errors.

- IV.A.3. Completion of a minimum of six months on the clinical inpatient liver service. The remaining months should consist of other hepatology or transplant related experience, including involvement in liver transplantation research. There must be 12 months of weekly transplant clinic to provide continuity care to patients with liver failure or post-operative transplant patients;
- IV.A.4. Formal instruction on the pathogenesis, manifestations, and complications of chronic liver disease, end-stage liver disease and hepatic transplantation, including the behavioral adjustments of patients to their problems. The impact of various modes of therapy and the appropriate use of laboratory tests and procedures should be stressed;
- IV.A.5. Formal education (lectures, conferences, seminars, and journal clubs) that includes the following:
 - IV.A.5.a) Anatomy, physiology, pharmacology, pathology, and molecular virology related to the liver and biliary tract;
 - IV.A.5.b) The natural history of chronic liver disease;
 - IV.A.5.c) Factors involved in nutrition and malnutrition and its management;
 - IV.A.5.d) Prudent cost-effective and judicious use of special instruments, tests, and therapy in the diagnosis and management of liver disorders;
 - IV.A.5.e) Clinical research issues and transplant hepatology.
- IV.A.6. Didactic and interactive conferences and seminars offered within the division and the institution in which fellows should participate, including but not limited to:
 - IV.A.6.a) Liver transplant multidisciplinary conference
 - IV.A.6.b) Pathology conference
 - IV.A.6.c) Morbidity and mortality conference
 - IV.A.6.d) Physiology/pathophysiology conference
 - IV.A.6.e) Journal club
 - IV.A.6.f) Research forum
 - IV.A.6.g) Pediatric radiology conference
- IV.A.7. Regularly-scheduled subspecialty conferences. Fellows should actively participate in the planning and implementation of these meetings.

IV.B. Fellows' Scholarly Activity

V. Evaluation

V.A. Fellow Evaluation

V.A.1. Formative Evaluation

V.A.1.a) The faculty must evaluate fellow performance in a timely manner.

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); and,

V.A.1.b).(3) provide each fellow with documented semiannual evaluation of performance with feedback.

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

V.A.2. Summative Evaluation

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

V.A.2.a) document the fellow's performance during their education, and

V.A.2.b) verify that the fellow 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. Faculty should receive formal feedback from these evaluations.

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) fellow performance;

V.C.1.b) faculty development; and,

V.C.1.c) performance of program graduates on the certification examination.

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. The same evaluation mechanisms used in the related pediatrics residency program must be adapted for and implemented in all of the pediatric subspecialty programs that function with it. In order to maintain the confidentiality of responses from fellows in small programs, evaluations of faculty may be consolidated with the core faculty evaluations.

VI. Fellow 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 fellows 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 fellow well-being in a supportive educational environment.

VI.A.3. The program director must ensure that fellows 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 fellows to fulfill non-physician service obligations.**
- VI.A.5. The program director and sponsoring institution must ensure a culture of professionalism that supports patient safety and personal responsibility. Fellows 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 fellows 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 fellows 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 fellows 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 fellows to recognize the signs of fatigue and sleep deprivation;

VI.C.1.b) educate all faculty members and fellows 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 fellow 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 fellows who may be too fatigued to safely return home.

VI.D. Supervision of Fellows

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 fellows, faculty members, and patients.

VI.D.1.b) Fellows 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 fellows 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 fellow. Other portions of care provided by the fellow can be adequately supervised by the immediate availability of the supervising faculty member or fellow physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of fellow-delivered care with feedback as to the appropriateness of that care.

VI.D.3. Levels of Supervision

To ensure oversight of fellow 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 fellow 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 fellow must be assigned by the program director and faculty members.**
 - VI.D.4.a) The program director must evaluate each fellow’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 fellows, based on the needs of the patient and the skills of the fellows.**
 - VI.D.4.c) Fellows should serve in a supervisory role of residents or junior fellows in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual fellow.**
- VI.D.5. Programs must set guidelines for circumstances and events in which fellows 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 fellow 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.6. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each fellow and delegate to him/her the appropriate level of patient care authority and responsibility.

VI.E. Clinical Responsibilities

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

VI.E.2. Fellows 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 fellows for service obligations, which may jeopardize their educational experience.

VI.F. Teamwork

Fellows 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.F.1. Interprofessional team members should participate in the education of fellows.

VI.G. Fellow 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 fellows' 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 fellow to achieve the goals and objectives of the educational program.
- VI.G.2.b)** Time spent by fellows 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.3.** **Mandatory Time Free of Duty**
- Fellows 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**
- Duty periods of fellows may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage fellows 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.a)** It is essential for patient safety and fellow education that effective transitions in care occur. Fellows 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)** Fellows must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.
- VI.G.4.c)** In unusual circumstances, fellows, 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.c).(1)** Under those circumstances, the fellow must:
- VI.G.4.c).(1).(a)** appropriately hand over the care of all other patients to the team responsible for their continuing care; and,
- VI.G.4.c).(1).(b)** 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.c).(2)** The program director must review each submission of additional service, and track both individual fellow and program-wide episodes of additional duty.
- VI.G.5.** **Minimum Time Off between Scheduled Duty Periods**
- VI.G.5.a)** **Fellows must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.**
- Pediatric subspecialty fellows in the PGY-4 level and beyond are considered to be in the final years of education.
- VI.G.5.a).(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 fellows have eight hours free of duty between scheduled duty periods, there may be circumstances these fellows 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.a).(1).(a)** **Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by fellows must be monitored by the program director.**
- VI.G.5.a).(1).(b)** The Review Committee defines such circumstances as: required continuity of care for a severely ill or unstable patient, or a complex patient with whom the resident has been involved; events of exceptional educational value; or, humanistic attention to the needs of a patient or family.
- VI.G.6.** **Maximum Frequency of In-House Night Float**
- Fellows 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

Fellows 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 fellows 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 fellow.

VI.G.8.b) Fellows 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”.

ACGME-approved: February 12, 2008 Effective: February 12, 2008
ACGME Approved Minor Revision: September 16, 2008 Effective: November 16, 2008
Revised Common Program Requirements Effective: July 1, 2011