



**Accreditation Council for
Graduate Medical Education**

**ACGME Program Requirements for
Graduate Medical Education
in Pediatric Hematology-Oncology**

Sections I-VI

Sections VII-VIII

General Pediatric Subspecialty Program Requirements

Pediatric Hematology-Oncology Program Requirements

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**Accreditation Council for
Graduate Medical Education**

**ACGME Program Requirements for
Graduate Medical Education
in the Subspecialties of Pediatrics**

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ACGME Program Requirements for Graduate Medical Education in the Subspecialties of Pediatrics

Common Program Requirements are in BOLD

Where applicable, text in italics describes the underlying philosophy of the requirements in that section. These philosophic statements are not program requirements and are therefore not citable.

In addition to complying with the requirements in this document, each program must comply with the Program Requirements for the respective subspecialty, which may exceed the minimum requirements set forth here. ^(Core)

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. Duration of Educational Experience

Unless specified otherwise in the subspecialty-specific Program Requirements, the educational program must be 36 months in length. ^(Core)

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. ^(Core)

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. ^(Core)

I.A.1. An accredited pediatric subspecialty program must exist in conjunction with and be an integral part of a core pediatric residency program, and must be sponsored by the same ACGME-accredited Sponsoring Institution. ^(Core)

I.A.1.a) The presence of a subspecialty program must not adversely affect the education of pediatric residents. ^(Core)

I.A.1.b) The subspecialty program should be geographically proximate to the core pediatric residency program. ^(Detail)

I.A.2. Program leadership, including the program director and associate program director(s), must be provided with a minimum combined total of 20-35 percent full time equivalent (FTE) protected time for the administration of the program (not including scholarly activity), depending on the size of the program, as follows: ^(Core)

Program Size	% FTE Required
0-3 fellows	20%
4-6 fellows	25%
7-9 fellows	30%
≥ 10 fellows	35%

I.A.3. The Sponsoring Institution must provide support for a program coordinator(s) and other support personnel required for operation of the program. ^(Core)

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. ^(Core)

The PLA should:

I.B.1.a) identify the faculty who will assume both educational and supervisory responsibilities for fellows; ^(Detail)

I.B.1.b) specify their responsibilities for teaching, supervision, and formal evaluation of fellows, as specified later in this document; ^(Detail)

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

I.B.1.d) state the policies and procedures that will govern fellow education during the assignment. ^(Detail)

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). ^(Core)

I.B.3. Any site providing six months or more of required rotations should be approved by the Review Committee. ^(Detail)

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. ^(Core)

II.A.1.a) The program director must submit this change to the ACGME via the ADS. ^(Core)

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. ^(Detail)

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; ^(Core)

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

II.A.3.b).(1) Qualifications other than subspecialty certification by the American Board of Pediatrics (ABP) will be considered only in exceptional circumstances. ^(Detail)

II.A.3.c) current medical licensure and appropriate medical staff appointment; and, ^(Core)

II.A.3.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). ^(Core)

II.A.4. The program director must administer and maintain an educational environment conducive to educating the fellows in each of the

ACGME competency areas. ^(Core)

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; ^(Core)
- II.A.4.b)** approve a local director at each participating site who is accountable for fellow education; ^(Core)
- II.A.4.c)** approve the selection of program faculty as appropriate; ^(Core)
- II.A.4.d)** evaluate program faculty; ^(Core)
- II.A.4.e)** approve the continued participation of program faculty based on evaluation; ^(Core)
- II.A.4.f)** monitor fellow supervision at all participating sites; ^(Core)
- II.A.4.g)** prepare and submit all information required and requested by the ACGME; ^(Core)
- II.A.4.g).(1)** This includes but is not limited to the program application forms and annual program updates to the ADS, and ensure that the information submitted is accurate and complete. ^(Core)
- 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; ^(Detail)
- II.A.4.i)** provide verification of fellowship education for all fellows, including those who leave the program prior to completion; ^(Detail)
- II.A.4.j)** implement policies and procedures consistent with the institutional and program requirements for fellow duty hours and the working environment, including moonlighting; ^(Core)

and, to that end, must:
 - II.A.4.j).(1)** distribute these policies and procedures to the fellows and faculty; ^(Detail)
 - II.A.4.j).(2)** monitor fellow duty hours, according to sponsoring institutional policies, with a frequency sufficient to ensure compliance with ACGME requirements; ^(Core)
 - II.A.4.j).(3)** adjust schedules as necessary to mitigate excessive service demands and/or fatigue; and, ^(Detail)

- 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. ^(Detail)
- 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; ^(Detail)
- 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 fellows, disciplinary action, and supervision of fellows; ^(Detail)
- 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; ^(Detail)
- II.A.4.n)** obtain review and approval of the sponsoring institution's GMEC/DIO before submitting information or requests to the ACGME, including: ^(Core)
- II.A.4.n).(1)** all applications for ACGME accreditation of new programs; ^(Detail)
- II.A.4.n).(2)** changes in fellow complement; ^(Detail)
- II.A.4.n).(3)** major changes in program structure or length of training; ^(Detail)
- II.A.4.n).(4)** progress reports requested by the Review Committee; ^(Detail)
- II.A.4.n).(5)** requests for increases or any change to fellow duty hours; ^(Detail)
- II.A.4.n).(6)** voluntary withdrawals of ACGME-accredited programs; ^(Detail)
- II.A.4.n).(7)** requests for appeal of an adverse action; and, ^(Detail)
- II.A.4.n).(8)** appeal presentations to a Board of Appeal or the ACGME. ^(Detail)
- II.A.4.o)** obtain DIO review and co-signature on all program application forms, as well as any correspondence or document submitted to the ACGME that addresses: ^(Detail)
- II.A.4.o).(1)** program citations, and/or, ^(Detail)
- II.A.4.o).(2)** request for changes in the program that would have significant impact, including financial, on the program

or institution. ^(Detail)

- II.A.4.p) ensure that the fellows are mentored in their development of clinical, educational, and administrative skills; ^(Core)
- II.A.4.q) ensure that each fellow's experience in such procedures be documented and that such documentation is available for review; ^(Core)
- II.A.4.r) coordinate, with the core and subspecialty program directors, the incorporation of the competencies into fellowship education in order to foster consistent expectations with regard to fellows' achievement of them, and for faculty members with regard to evaluation processes; and, ^(Core)
- II.A.4.s) maintain documentation of meetings that describe ongoing interaction among pediatric subspecialty and core program directors. ^(Core)
- II.A.4.s).(1) These meetings should take place at least semi-annually. ^(Detail)
- II.A.4.s).(2) These meetings should address a departmental approach to common educational issues and concerns (e.g., core curriculum, competencies, evaluation). ^(Detail)

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 fellows at that location. ^(Core)

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 fellows; and,** ^(Core)
- II.B.1.a).(1) In addition to the subspecialty program director, there must be at least one other member of the faculty who is qualified in the subspecialty. (Specific details are included in the related subspecialty-specific section of the Requirements.) ^(Core)
- II.B.1.b) administer and maintain an educational environment conducive to educating fellows in each of the ACGME competency areas.** ^(Core)
- II.B.2. The physician faculty must have current certification in the subspecialty by the American Board of Pediatrics, or possess**

qualifications judged acceptable to the Review Committee. ^(Core)

- II.B.2.a) Acceptable qualifications for the required key subspecialty faculty include: ^(Core)
- II.B.2.a).(1) certification, if eligible, by the appropriate member board of the American Board of Medical Specialties (ABMS); or, ^(Core)
- II.B.2.a).(2) if ineligible for certification, documented subspecialty training and peer-reviewed publications in the field, with evidence of active participation in applicable local and national professional societies. ^(Detail)
- II.B.2.b) Teaching and consultant faculty members in the full range of pediatric subspecialties and in other related disciplines must be available as specified in the subspecialty-specific requirements. ^(Core)
- II.B.2.b).(1) The faculty should include an anesthesiologist(s), pathologist(s), and radiologist(s) who have substantial experience with pediatric problems and who interact with the fellows, as well as a medical geneticist(s), child neurologist(s), child and adolescent psychiatrist(s), pediatric surgeon(s), and surgical subspecialists, as appropriate to the subspecialty. ^(Detail)
- II.B.3. The physician faculty must possess current medical licensure and appropriate medical staff appointment.** ^(Core)
- II.B.4. The nonphysician faculty must have appropriate qualifications in their field and hold appropriate institutional appointments.** ^(Core)
- II.B.5. The faculty must establish and maintain an environment of inquiry and scholarship with an active research component.** ^(Core)
- II.B.5.a) **The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.** ^(Detail)
- 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;** ^(Detail)
- II.B.5.b).(2) **publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;** ^(Detail)
- 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,** ^(Detail)
- II.B.5.b).(4) **participation in national committees or educational**

organizations. ^(Detail)

- II.B.5.c) Faculty should encourage and support fellows in scholarly activities.** ^(Core)
- II.B.5.d) This must include the mentoring of fellows as they apply scientific principles, epidemiology, biostatistics, and evidence-based medicine to the clinical care of patients. ^(Core)
- II.B.5.e) Scholarly activities should be in a field related to the subspecialty, such as basic science, clinical, health services, health policy, quality improvement, or education. ^(Detail)
- II.B.5.f) To provide an appropriate environment for the fellows, the fellowship faculty must have a program of ongoing scholarship. ^(Core)
- II.B.5.f).(1) This must be characterized by peer-reviewed funding and/or publications. ^(Core)
- II.B.5.f).(2) The members of the teaching faculty must play a substantial role in conceiving and writing the funding application(s), conducting the project, collecting and analyzing data, and publishing results. ^(Core)

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. ^(Core)

- II.C.1. Professional personnel should include nutritionists, social workers, respiratory therapists, pharmacists, subspecialty nurses, physical and occupational therapists, child life therapists, and speech therapists with pediatric focus and experience, as appropriate to the subspecialty. ^(Detail)

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. ^(Core)

- II.D.1. Adequate inpatient and outpatient facilities, as specified in the requirements for each subspecialty, must be available. ^(Core)
- II.D.1.a) These must be of sufficient size and be appropriately staffed and equipped to meet the educational needs of the program. ^(Core)
- II.D.2. Support services must include clinical laboratories, intensive care, nutrition, occupational and physical therapy, pathology, pharmacology, mental health, diagnostic imaging, respiratory therapy, and social

services. ^(Core)

II.D.3. Patients must range in age from newborn through young adulthood, as appropriate. ^(Core)

II.D.4. Adequate numbers of pediatric subspecialty patients must be available to provide a broad experience for the fellows. ^(Core)

II.D.4.a) The program must maintain an appropriate balance of the number and variety of patients, the number of faculty members, and the number of fellows in the program. ^(Core)

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. ^(Detail)

III. Fellow Appointments

III.A. Eligibility Criteria

The program director must comply with the criteria for resident eligibility as specified in the Institutional Requirements. ^(Core)

III.A.1. Eligibility Requirements – Residency Programs

III.A.1.a) **All prerequisite post-graduate clinical education required for initial entry or transfer into ACGME-accredited residency programs must be completed in ACGME-accredited residency programs, or in Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians of Canada (CFPC)-accredited residency programs located in Canada. Residency programs must receive verification of each applicant's level of competency in the required clinical field using ACGME or CanMEDS Milestones assessments from the prior training program.** ^(Core)

III.A.1.b) **A physician who has completed a residency program that was not accredited by ACGME, RCPSC, or CFPC may enter an ACGME-accredited residency program in the same specialty at the PGY-1 level and, at the discretion of the program director at the ACGME-accredited program may be advanced to the PGY-2 level based on ACGME Milestones assessments at the ACGME-accredited program. This provision applies only to entry into residency in those specialties for which an initial clinical year is not required for entry.** ^(Core)

III.A.1.c) **A Review Committee may grant the exception to the eligibility requirements specified in Section III.A.2.b) for residency**

programs that require completion of a prerequisite residency program prior to admission. ^(Core)

III.A.1.d) Review Committees will grant no other exceptions to these eligibility requirements for residency education. ^(Core)

III.A.2. Eligibility Requirements – Fellowship Programs

All required clinical education for entry into ACGME-accredited fellowship programs must be completed in an ACGME-accredited residency program, or in an RCPSC-accredited or CFPC-accredited residency program located in Canada. ^(Core)

With the exception of adolescent medicine and pediatric emergency medicine subspecialty programs, prerequisite training for entry into a pediatric subspecialty program must include the satisfactory completion of either an ACGME-accredited pediatrics or internal medicine-pediatrics combined residency, or an RCPSC-accredited pediatrics or internal medicine-pediatrics combined residency program located in Canada. ^(Core)

Prerequisite training for entry into an adolescent medicine subspecialty program must include the satisfactory completion of either an ACGME-accredited family medicine, internal medicine, pediatrics or combined internal medicine-pediatrics residency, a CFPC-accredited family medicine program located in Canada, or an RCPSC-accredited internal medicine or pediatrics residency program located in Canada. ^(Core)

Prerequisite training for entry into a pediatric emergency medicine subspecialty program must include the satisfactory completion of either an ACGME-accredited emergency medicine, pediatrics or combined internal medicine-pediatrics residency, or an RCPSC-accredited emergency medicine or pediatrics residency program located in Canada. ^(Core)

III.A.2.a) Fellowship programs must receive verification of each entering fellow's level of competency in the required field using ACGME or CanMEDS Milestones assessments from the core residency program. ^(Core)

III.A.2.b) Fellow Eligibility Exception

A Review Committee may grant the following exception to the fellowship eligibility requirements:

An ACGME-accredited fellowship program may accept an exceptionally qualified applicant, who does not satisfy the eligibility requirements listed in Sections III.A.2. and III.A.2.a), but who does meet all of the following additional qualifications and conditions:** ^(Core)

III.A.2.b).(1) Assessment by the program director and fellowship

selection committee of the applicant's suitability to enter the program, based on prior training and review of the summative evaluations of training in the core specialty; and ^(Core)

III.A.2.b).(2)

Review and approval of the applicant's exceptional qualifications by the GMEC or a subcommittee of the GMEC; and ^(Core)

III.A.2.b).(3)

Satisfactory completion of the United States Medical Licensing Examination (USMLE) Steps 1, 2, and, if the applicant is eligible, 3, and; ^(Core)

III.A.2.b).(4)

For an international graduate, verification of Educational Commission for Foreign Medical Graduates (ECFMG) certification; and, ^(Core)

III.A.2.b).(5)

Applicants accepted by this exception must complete fellowship Milestones evaluation (for the purposes of establishment of baseline performance by the Clinical Competency Committee), conducted by the receiving fellowship program within six weeks of matriculation. This evaluation may be waived for an applicant who has completed an ACGME International-accredited residency based on the applicant's Milestones evaluation conducted at the conclusion of the residency program. ^(Core)

III.A.2.b).(5).(a)

If the trainee does not meet the expected level of Milestones competency following entry into the fellowship program, the trainee must undergo a period of remediation, overseen by the Clinical Competency Committee and monitored by the GMEC or a subcommittee of the GMEC. This period of remediation must not count toward time in fellowship training. ^(Core)

**** An exceptionally qualified applicant has (1) completed a non-ACGME-accredited residency program in the core specialty, and (2) demonstrated clinical excellence, in comparison to peers, throughout training. Additional evidence of exceptional qualifications is required, which may include one of the following: (a) participation in additional clinical or research training in the specialty or subspecialty; (b) demonstrated scholarship in the specialty or subspecialty; (c) demonstrated leadership during or after residency training; (d) completion of an ACGME-International-accredited residency program.**

III.A.2.c)

The Review Committee for Pediatrics does allow exceptions to the Eligibility Requirements for Fellowship Programs in

Section III.A.2. (Core)

III.A.2.d) Applicants who do not meet the eligibility criteria in Program Requirement III.A.2. must be advised in writing by the program director to consult the ABP or other appropriate board regarding their eligibility for subspecialty certification. (Core)

III.B. Number of Fellows

The program's educational resources must be adequate to support the number of fellows appointed to the program. (Core)

III.B.1. **The program director may not appoint more fellows than approved by the Review Committee, unless otherwise stated in the specialty-specific requirements. (Core)**

III.C. Fellow Transfers

III.C.1. **Before accepting a fellow 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 fellow. (Detail)**

III.C.2. **A program director must provide timely verification of fellowship education and summative performance evaluations for fellows who may leave the program prior to completion. (Detail)**

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 fellows' education. (Core)

III.D.1. **The program director must report the presence of other learners to the DIO and GMEC in accordance with sponsoring institution guidelines. (Detail)**

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 make available to fellows and faculty; (Core)**

IV.A.2. **Competency-based goals and objectives for each assignment at each educational level, which the program must distribute to fellows and faculty at least annually, in either written or electronic form; (Core)**

IV.A.2.a) **Each educational unit or major professional activity must have a curriculum associated with it. (Core)**

- IV.A.2.b) The competency-based goals and objectives, educational strategies, and assessment methods must align with intended outcomes of those activities. ^(Core)
- IV.A.2.c) The curriculum should incorporate the competencies into the context of the major professional activities for which fellows should be entrusted. ^(Detail)
- IV.A.3. Regularly scheduled didactic sessions;** ^(Core)
- IV.A.4. Delineation of fellow responsibilities for patient care, progressive responsibility for patient management, and supervision of fellows over the continuum of the program; and,** ^(Core)
- IV.A.5. ACGME Competencies**
- The program must integrate the following ACGME competencies into the curriculum:** ^(Core)
- IV.A.5.a) Patient Care and Procedural Skills**
- IV.A.5.a).(1) 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:** ^(Outcome)
- IV.A.5.a).(1).(a) must develop competence in the necessary clinical skills used in the subspecialty and provide consultation, including the ability to perform a history and physical examination, make informed diagnostic and therapeutic decisions that result in optimal clinical judgement, develop and carry out management plans, counsel patients and families, and use information technology to optimize patient care; ^(Outcome)
- IV.A.5.a).(1).(b) must demonstrate the ability to provide transfer of care that ensures seamless transitions; ^(Outcome)
- IV.A.5.a).(1).(c) must demonstrate the ability to develop and carry out management plans; and, ^(Outcome)
- IV.A.5.a).(1).(d) must demonstrate the ability to provide appropriate role modeling and supervision. ^(Outcome)
- IV.A.5.a).(2) Fellows must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. Fellows:** ^(Outcome)

IV.A.5.a).(2).(a) must demonstrate competence in performing and interpreting the results of laboratory tests and diagnostic procedures for use in patient care. (Outcome)

IV.A.5.a).(2).(a).(i) Fellows must acquire the necessary procedural skills and develop an understanding of their indications, risks, and limitations. (Outcome)

IV.A.5.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: (Outcome)

IV.A.5.b).(1) must have a working understanding of biostatistics, clinical and laboratory research methodology, study design, preparation of applications for funding and/or approval of clinical research protocols, critical literature review, principles of evidence-based medicine, ethical principles involving clinical research, and the achievement of proficiency in teaching. (Outcome)

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

Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. (Outcome)

Fellows 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; (Outcome)

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

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

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

IV.A.5.c).(5) incorporate formative evaluation feedback into daily practice; (Outcome)

- IV.A.5.c).(6) **locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;** (Outcome)
- IV.A.5.c).(7) **use information technology to optimize learning;** (Outcome)
- IV.A.5.c).(8) **participate in the education of patients, families, students, fellows and other health professionals; and,** (Outcome)
- IV.A.5.c).(9) self-evaluate performance and incorporate assessments provided by faculty members, peers, and patients. (Outcome)
- IV.A.5.c).(9).(a) This should be a component of each fellow's individual learning plan. (Detail)

IV.A.5.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. (Outcome)

Fellows 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;** (Outcome)
- IV.A.5.d).(2) **communicate effectively with physicians, other health professionals, and health related agencies;** (Outcome)
- IV.A.5.d).(3) **work effectively as a member or leader of a health care team or other professional group;** (Outcome)
- IV.A.5.d).(4) **act in a consultative role to other physicians and health professionals;** (Outcome)
- IV.A.5.d).(5) **maintain comprehensive, timely, and legible medical records, if applicable; and,** (Outcome)
- IV.A.5.d).(6) teach proficiently based on knowledge of the principles of adult learning, including participating effectively in curriculum development, delivery of information, provision of feedback to learners, and assessment of educational outcomes. (Outcome)
- IV.A.5.d).(6).(a) Graduates should be effective in teaching both individuals and groups of learners in clinical settings, classrooms, lectures, and seminars, as

well as by electronic and print modalities. (Outcome)

IV.A.5.e)

Professionalism

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

Fellows are expected to demonstrate:

IV.A.5.e).(1)

compassion, integrity, and respect for others; (Outcome)

IV.A.5.e).(2)

responsiveness to patient needs that supersedes self-interest; (Outcome)

IV.A.5.e).(3)

respect for patient privacy and autonomy; (Outcome)

IV.A.5.e).(4)

accountability to patients, society and the profession; (Outcome)

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; (Outcome)

IV.A.5.e).(6)

trustworthiness that makes colleagues feel secure when the fellow is responsible for the care of patients; (Outcome)

IV.A.5.e).(7)

leadership skills that enhance team function, the learning environment, and/or the health care delivery system/environment with the ultimate intent of improving care of patients; and, (Outcome)

IV.A.5.e).(8)

the capacity to recognize that ambiguity is part of clinical medicine and to respond by utilizing appropriate resources in dealing with uncertainty. (Outcome)

IV.A.5.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. (Outcome)

Fellows are expected to:

IV.A.5.f).(1)

work effectively in various health care delivery settings and systems relevant to their clinical specialty; (Outcome)

- IV.A.5.f).(2)** **coordinate patient care within the health care system relevant to their clinical specialty;** ^(Outcome)
- IV.A.5.f).(3)** **incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;** ^(Outcome)
- IV.A.5.f).(4)** **advocate for quality patient care and optimal patient care systems;** ^(Outcome)
- IV.A.5.f).(5)** **work in interprofessional teams to enhance patient safety and improve patient care quality;** ^(Outcome)
- IV.A.5.f).(6)** **participate in identifying system errors and implementing potential systems solutions;** ^(Outcome)
- IV.A.5.f).(7) participate in the administrative aspects of the subspecialty, including: ^(Outcome)
- IV.A.5.f).(7).(a) knowledge of regional and national access to care, resources, workforce, and financing appropriate to the subspecialty through guided reading and discussion; and, ^(Outcome)
- IV.A.5.f).(7).(b) organization and management of a subspecialty service within one's own delivery system by engaging fellows as active participants in discussions (e.g., through scheduled division activities/meetings) that involve: ^(Outcome)
- IV.A.5.f).(7).(b).(i) staffing a service or unit, including managing personnel and making and adhering to a schedule; ^(Outcome)
- IV.A.5.f).(7).(b).(ii) drafting policies and procedures, leading interdisciplinary meetings and conferences, and providing in-service teaching sessions; ^(Outcome)
- IV.A.5.f).(7).(b).(iii) proposals for hospital and community resources, including clinical, laboratory, and research space, equipment, and technology necessary for the program to provide state-of-the-art care while advancing knowledge in the field; ^(Outcome)
- IV.A.5.f).(7).(b).(iv) business planning and practice management, including billing and coding, personnel management policies, and professional liability; ^(Outcome)

IV.A.5.f).(7).(b).(v) division or program development, organization, and maintenance; and, (Outcome)

IV.A.5.f).(7).(b).(vi) collaboration within (e.g., with pathology, radiology, or surgery) and beyond (e.g., participation in national specialty societies, cooperative care groups, or multi-center research) the institution as appropriate to the subspecialty. (Outcome)

IV.A.6. Curriculum Organization and Fellow Experiences

IV.A.6.a) Fellows must have a formally-structured educational program in the clinical and basic sciences related to the subspecialty. (Core)

IV.A.6.a).(1) The program must utilize didactic and practical experience. (Core)

IV.A.6.a).(2) Subspecialty conferences must occur regularly, and must involve active participation by the fellows in planning and implementation. (Core)

IV.A.6.a).(3) Fellow education must include instruction in basic and fundamental disciplines, as appropriate to the subspecialty, such as anatomy, physiology, biochemistry, embryology, pathology, microbiology, pharmacology, immunology, genetics, and nutrition/metabolism. (Core)

IV.A.6.a).(4) Fellow education must include instruction in pathophysiology of disease, reviews of recent advances in clinical medicine and biomedical research, and conferences dealing with complications and death, and the scientific, ethical, and legal implications of confidentiality and informed consent. (Core)

IV.A.6.a).(5) Bioethics must be addressed in the formal curriculum. (Core)

IV.A.6.a).(5).(a) This should include attention to physician-patient, physician-family, physician-physician/allied health professional, and physician-society relationships. (Detail)

IV.A.6.a).(6) Fellow education must include instruction in 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, and clinical outcomes. (Core)

IV.A.6.b) A structured curriculum must be provided to allow fellows to participate and be assessed in the following activities:

- IV.A.6.b).(1) provide for and obtain consultation from other health care providers caring for children; ^(Core)
- IV.A.6.b).(2) contribute to the fiscally sound and ethical management of a practice (e.g., through billing, scheduling, coding, and record-keeping practices); ^(Core)
- IV.A.6.b).(3) apply public health principles and improvement methodology to improve care for populations, communities, and systems; ^(Core)
- IV.A.6.b).(4) lead an interprofessional health care team; ^(Core)
- IV.A.6.b).(5) facilitate hand-overs to another health care provider; and, ^(Core)
- IV.A.6.b).(6) lead within the subspecialty profession. ^(Core)
- IV.A.6.c) 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 subspecialty. ^(Core)
- IV.A.6.c).(1) Fellows must learn to create and sustain a therapeutic relationship with patients, and 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. ^(Core)
- IV.A.6.d) The fellowship program and residency program must complement and enhance one another. ^(Core)

IV.B. Fellows' Scholarly Activities

- IV.B.1. The curriculum must advance fellows' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care.** ^(Core)
- IV.B.1.a) Where appropriate, the core curriculum in scholarly activity should be a collaborative effort involving all of the pediatric subspecialty programs in the institution. ^(Detail)
- IV.B.2. Fellows should participate in scholarly activity.** ^(Core)
- IV.B.2.a) Each fellow must design and conduct a scholarly project in his or her subspecialty area with the guidance of the fellowship director and a designated mentor. ^(Core)
- IV.B.2.b) The program must provide a scholarship oversight committee for each fellow to oversee and evaluate his or her progress as related to scholarly activity. ^(Core)

IV.B.2.b).(1) Where applicable, the process of establishing fellow scholarship oversight committees should be a collaborative effort involving other pediatric subspecialty programs at the institution. ^(Detail)

IV.B.2.c) The scholarly experience must begin in the first year and continue for the entire period of training. ^(Core)

IV.B.2.c).(1) There must be adequate time for each fellow to allow for the development of requisite skills, project completion, and presentation of results to the scholarship oversight committee. ^(Core)

IV.B.3. The sponsoring institution and program should allocate adequate educational resources to facilitate fellow involvement in scholarly activities. ^(Detail)

V. Evaluation

V.A. Fellow Evaluation

V.A.1. The program director must appoint the Clinical Competency Committee. ^(Core)

V.A.1.a) At a minimum the Clinical Competency Committee must be composed of three members of the program faculty. ^(Core)

V.A.1.a).(1) The program director may appoint additional members of the Clinical Competency Committee.

V.A.1.a).(1).(a) These additional members must be physician faculty members from the same program or other programs, or other health professionals who have extensive contact and experience with the program's fellows in patient care and other health care settings. ^(Core)

V.A.1.a).(1).(b) Chief residents who have completed core residency programs in their specialty and are eligible for specialty board certification may be members of the Clinical Competency Committee. ^(Core)

V.A.1.b) There must be a written description of the responsibilities of the Clinical Competency Committee. ^(Core)

V.A.1.b).(1) The Clinical Competency Committee should:

V.A.1.b).(1).(a) review all fellow evaluations semi-annually; ^(Core)

V.A.1.b).(1).(b) prepare and ensure the reporting of Milestones evaluations of each fellow semi-annually to ACGME; and, ^(Core)

V.A.1.b).(1).(c) advise the program director regarding fellow progress, including promotion, remediation, and dismissal. ^(Detail)

V.A.2. Formative Evaluation

V.A.2.a) The faculty must evaluate fellow performance in a timely manner during each rotation or similar educational assignment, and document this evaluation at completion of the assignment. ^(Core)

V.A.2.b) The program must:

V.A.2.b).(1) provide objective assessments of competence in patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice based on the specialty-specific Milestones; ^(Core)

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

V.A.2.b).(3) document progressive fellow performance improvement appropriate to educational level; and, ^(Core)

V.A.2.b).(4) provide each fellow with documented semiannual evaluation of performance with feedback. ^(Core)

V.A.2.c) The evaluations of fellow performance must be accessible for review by the fellow, in accordance with institutional policy. ^(Detail)

V.A.3. Summative Evaluation

V.A.3.a) The specialty-specific Milestones must be used as one of the tools to ensure fellows are able to practice core professional activities without supervision upon completion of the program. ^(Core)

V.A.3.b) The program director must provide a summative evaluation for each fellow upon completion of the program. ^(Core)

This evaluation must:

V.A.3.b).(1) 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; ^(Detail)

V.A.3.b).(2) document the fellow's performance during the final period of education; and, ^(Detail)

V.A.3.b).(3) verify that the fellow has demonstrated sufficient competence to enter practice without direct supervision. ^(Detail)

V.B. Faculty Evaluation

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

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. ^(Detail)

V.B.3. This evaluation must include at least annual written confidential evaluations by the fellows. ^(Detail)

V.B.4. Faculty members must receive feedback from these evaluations. ^(Core)

V.C. Program Evaluation and Improvement

V.C.1. The program director must appoint the Program Evaluation Committee (PEC). ^(Core)

V.C.1.a) The Program Evaluation Committee:

V.C.1.a).(1) must be composed of at least two program faculty members and should include at least one fellow; ^(Core)

V.C.1.a).(2) must have a written description of its responsibilities; and, ^(Core)

V.C.1.a).(3) should participate actively in:

V.C.1.a).(3).(a) planning, developing, implementing, and evaluating educational activities of the program; ^(Detail)

V.C.1.a).(3).(b) reviewing and making recommendations for revision of competency-based curriculum goals and objectives; ^(Detail)

V.C.1.a).(3).(c) addressing areas of non-compliance with ACGME standards; and, ^(Detail)

- V.C.1.a).(3).(d)** reviewing the program annually using evaluations of faculty, fellows, and others, as specified below. ^(Detail)
- V.C.2.** The program, through the PEC, must document formal, systematic evaluation of the curriculum at least annually, and is responsible for rendering a written, annual program evaluation. ^(Core)
- The program must monitor and track each of the following areas:
- V.C.2.a)** fellow performance; ^(Core)
- V.C.2.b)** faculty development; ^(Core)
- V.C.2.c)** graduate performance, including performance of program graduates on the certification examination; ^(Core)
- V.C.2.d)** program quality; and, ^(Core)
- V.C.2.d).(1)** Fellows and faculty must have the opportunity to evaluate the program confidentially and in writing at least annually, and ^(Detail)
- V.C.2.d).(2)** The program must use the results of fellows' and faculty members' assessments of the program together with other program evaluation results to improve the program. ^(Detail)
- V.C.2.e)** progress on the previous year's action plan(s). ^(Core)
- V.C.3.** The PEC must prepare a written plan of action to document initiatives to improve performance in one or more of the areas listed in section V.C.2., as well as delineate how they will be measured and monitored. ^(Core)
- V.C.3.a)** The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes. ^(Detail)
- V.C.4.** At least 75 percent of the program's graduates from the preceding six years who take the certifying examination for the first time must pass. ^(Outcome)
- V.C.5.** The same evaluation mechanisms used in the related core pediatrics residency program should be adapted for and implemented in all of the pediatric subspecialty programs that function with it. ^(Detail)

VI. The Learning and Working Environment

Fellowship education must occur in the context of a learning and working environment that emphasizes the following principles:

- ***Excellence in the safety and quality of care rendered to patients by fellows today***
- ***Excellence in the safety and quality of care rendered to patients by today's fellows in their future practice***
- ***Excellence in professionalism through faculty modeling of:***
 - ***the effacement of self-interest in a humanistic environment that supports the professional development of physicians***
 - ***the joy of curiosity, problem-solving, intellectual rigor, and discovery***
- ***Commitment to the well-being of the students, residents/fellows, faculty members, and all members of the health care team***

VI.A. Patient Safety, Quality Improvement, Supervision, and Accountability

VI.A.1. Patient Safety and Quality Improvement

All physicians share responsibility for promoting patient safety and enhancing quality of patient care. Graduate medical education must prepare fellows to provide the highest level of clinical care with continuous focus on the safety, individual needs, and humanity of their patients. It is the right of each patient to be cared for by fellows who are appropriately supervised; possess the requisite knowledge, skills, and abilities; understand the limits of their knowledge and experience; and seek assistance as required to provide optimal patient care.

Fellows must demonstrate the ability to analyze the care they provide, understand their roles within health care teams, and play an active role in system improvement processes. Graduating fellows will apply these skills to critique their future unsupervised practice and effect quality improvement measures.

It is necessary for fellows and faculty members to consistently work in a well-coordinated manner with other health care professionals to achieve organizational patient safety goals.

VI.A.1.a) Patient Safety

VI.A.1.a).(1) Culture of Safety

A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement.

VI.A.1.a).(4) **Fellow Education and Experience in Disclosure of Adverse Events**

Patient-centered care requires patients, and when appropriate families, to be apprised of clinical situations that affect them, including adverse events. This is an important skill for faculty physicians to model, and for fellows to develop and apply.

VI.A.1.a).(4).(a) **All fellows must receive training in how to disclose adverse events to patients and families.** ^(Core)

VI.A.1.a).(4).(b) **Fellows should have the opportunity to participate in the disclosure of patient safety events, real or simulated.** ^(Detail)

VI.A.1.b) **Quality Improvement**

VI.A.1.b).(1) **Education in Quality Improvement**

A cohesive model of health care includes quality-related goals, tools, and techniques that are necessary in order for health care professionals to achieve quality improvement goals.

VI.A.1.b).(1).(a) **Fellows must receive training and experience in quality improvement processes, including an understanding of health care disparities.** ^(Core)

VI.A.1.b).(2) **Quality Metrics**

Access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts.

VI.A.1.b).(2).(a) **Fellows and faculty members must receive data on quality metrics and benchmarks related to their patient populations.** ^(Core)

VI.A.1.b).(3) **Engagement in Quality Improvement Activities**

Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to improve patient care.

VI.A.1.b).(3).(a) **Fellows must have the opportunity to participate in interprofessional quality improvement activities.** ^(Core)

VI.A.1.b).(3).(a).(i) This should include activities aimed at reducing health care disparities. ^(Detail)

VI.A.2. Supervision and Accountability

VI.A.2.a) *Although the attending physician is ultimately responsible for the care of the patient, every physician shares in the responsibility and accountability for their efforts in the provision of care. Effective programs, in partnership with their Sponsoring Institutions, define, widely communicate, and monitor a structured chain of responsibility and accountability as it relates to the supervision of all patient care.*

Supervision in the setting of graduate medical education provides safe and effective care to patients; ensures each fellow's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishes a foundation for continued professional growth.

VI.A.2.a).(1) Each patient must have an identifiable and appropriately-credentialed and privileged attending physician (or licensed independent practitioner as specified by the applicable Review Committee) who is responsible and accountable for the patient's care. ^(Core)

VI.A.2.a).(1).(a) This information must be available to fellows, faculty members, other members of the health care team, and patients. ^(Core)

VI.A.2.a).(1).(b) Fellows and faculty members must inform each patient of their respective roles in that patient's care when providing direct patient care. ^(Core)

VI.A.2.b) *Supervision may be exercised through a variety of methods. 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 on site or by means of telephonic and/or electronic modalities. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of fellow-delivered care with feedback.*

VI.A.2.b).(1) The program must demonstrate that the appropriate level of supervision in place for all fellows is based on each fellow's level of training and ability, as well as patient complexity and acuity. Supervision may be

exercised through a variety of methods, as appropriate to the situation. ^(Core)

VI.A.2.c) Levels of Supervision

To promote oversight of fellow supervision while providing for graded authority and responsibility, the program must use the following classification of supervision: ^(Core)

VI.A.2.c).(1) Direct Supervision – the supervising physician is physically present with the fellow and patient. ^(Core)

VI.A.2.c).(2) Indirect Supervision:

VI.A.2.c).(2).(a) 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. ^(Core)

VI.A.2.c).(2).(b) 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. ^(Core)

VI.A.2.c).(3) Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered. ^(Core)

VI.A.2.d) 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. ^(Core)

VI.A.2.d).(1) The program director must evaluate each fellow’s abilities based on specific criteria, guided by the Milestones. ^(Core)

VI.A.2.d).(2) Faculty members functioning as supervising physicians must delegate portions of care to fellows based on the needs of the patient and the skills of each fellow. ^(Core)

VI.A.2.d).(3) Fellows should serve in a supervisory role to residents or junior fellows in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow. ^(Detail)

VI.A.2.e) Programs must set guidelines for circumstances and events in which fellows must communicate with the supervising faculty member(s). (Core)

VI.A.2.e).(1) Each fellow must know the limits of their scope of authority, and the circumstances under which the fellow is permitted to act with conditional independence. (Outcome)

VI.A.2.f) Faculty supervision assignments must be of sufficient duration to assess the knowledge and skills of each fellow and to delegate to the fellow the appropriate level of patient care authority and responsibility. (Core)

VI.B. Professionalism

VI.B.1. Programs, in partnership with their Sponsoring Institutions, must educate fellows and faculty members concerning the professional responsibilities of physicians, including their obligation to be appropriately rested and fit to provide the care required by their patients. (Core)

VI.B.2. The learning objectives of the program must:

VI.B.2.a) be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; (Core)

VI.B.2.b) be accomplished without excessive reliance on fellows to fulfill non-physician obligations; and, (Core)

VI.B.2.c) ensure manageable patient care responsibilities. (Core)

VI.B.3. The program director, in partnership with the Sponsoring Institution, must provide a culture of professionalism that supports patient safety and personal responsibility. (Core)

VI.B.4. Fellows and faculty members must demonstrate an understanding of their personal role in the:

VI.B.4.a) provision of patient- and family-centered care; (Outcome)

VI.B.4.b) safety and welfare of patients entrusted to their care, including the ability to report unsafe conditions and adverse events; (Outcome)

VI.B.4.c) assurance of their fitness for work, including; (Outcome)

VI.B.4.c).(1) management of their time before, during, and after clinical assignments; and, (Outcome)

- VI.B.4.c).(2) recognition of impairment, including from illness, fatigue, and substance use, in themselves, their peers, and other members of the health care team. (Outcome)
- VI.B.4.d) commitment to lifelong learning; (Outcome)
- VI.B.4.e) monitoring of their patient care performance improvement indicators; and, (Outcome)
- VI.B.4.f) accurate reporting of clinical and educational work hours, patient outcomes, and clinical experience data. (Outcome)
- VI.B.5. All fellows and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. This includes the recognition 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. (Outcome)
- VI.B.6. Programs must provide a professional, respectful, and civil environment that is free from mistreatment, abuse, or coercion of students, residents/fellows, faculty, and staff. Programs, in partnership with their Sponsoring Institutions, should have a process for education of fellows and faculty regarding unprofessional behavior and a confidential process for reporting, investigating, and addressing such concerns. (Core)
- VI.C. Well-Being
- In the current health care environment, fellows and faculty members are at increased risk for burnout and depression. Psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician. Self-care is an important component of professionalism; it is also a skill that must be learned and nurtured in the context of other aspects of fellowship training. Programs, in partnership with their Sponsoring Institutions, have the same responsibility to address well-being as they do to evaluate other aspects of fellow competence.*
- VI.C.1. This responsibility must include:
- VI.C.1.a) efforts to enhance the meaning that each fellow finds in the experience of being a physician, including protecting time with patients, minimizing non-physician obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships; (Core)
- VI.C.1.b) attention to scheduling, work intensity, and work compression that impacts fellow well-being; (Core)
- VI.C.1.c) evaluating workplace safety data and addressing the safety of fellows and faculty members; (Core)

- VI.C.1.d) policies and programs that encourage optimal fellow and faculty member well-being; and, (Core)**
- VI.C.1.d).(1) Fellows must be given the opportunity to attend medical, mental health, and dental care appointments, including those scheduled during their working hours. (Core)**
- VI.C.1.e) attention to fellow and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and fellows in identification of the symptoms of burnout, depression, and substance abuse, including means to assist those who experience these conditions. Fellows and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must: (Core)**
- VI.C.1.e).(1) encourage fellows and faculty members to alert the program director or other designated personnel or programs when they are concerned that another resident, fellow, or faculty member may be displaying signs of burnout, depression, substance abuse, suicidal ideation, or potential for violence; (Core)**
- VI.C.1.e).(2) provide access to appropriate tools for self-screening; and, (Core)**
- VI.C.1.e).(3) provide access to confidential, affordable mental health assessment, counseling, and treatment, including access to urgent and emergent care 24 hours a day, seven days a week. (Core)**
- VI.C.2. There are circumstances in which fellows may be unable to attend work, including but not limited to fatigue, illness, and family emergencies. Each program must have policies and procedures in place that ensure coverage of patient care in the event that a fellow may be unable to perform their patient care responsibilities. These policies must be implemented without fear of negative consequences for the fellow who is unable to provide the clinical work. (Core)**
- VI.D. Fatigue Mitigation**
- VI.D.1. Programs must:**
- VI.D.1.a) educate all faculty members and fellows to recognize the signs of fatigue and sleep deprivation; (Core)**

- VI.D.1.b) educate all faculty members and fellows in alertness management and fatigue mitigation processes; and, (Core)**
- VI.D.1.c) encourage fellows to use fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning. (Detail)**
- VI.D.2. Each program must ensure continuity of patient care, consistent with the program’s policies and procedures referenced in VI.C.2, in the event that a fellow may be unable to perform their patient care responsibilities due to excessive fatigue. (Core)**
- VI.D.3. The program, in partnership with its Sponsoring Institution, must ensure adequate sleep facilities and safe transportation options for fellows who may be too fatigued to safely return home. (Core)**
- VI.E. Clinical Responsibilities, Teamwork, and Transitions of Care**
- VI.E.1. Clinical Responsibilities**
- The clinical responsibilities for each fellow must be based on PGY level, patient safety, fellow ability, severity and complexity of patient illness/condition, and available support services. (Core)**
- VI.E.1.a) 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, fellow education, severity and complexity of patient illness/condition, and available support services. (Core)**
- VI.E.1.a).(1) This must include progressive clinical, technical, and consultative experiences that will enable the fellows to develop expertise as a consultant in the subspecialty. (Core)**
- VI.E.1.a).(2) Lines of responsibility for the pediatric residents and the fellows must be clearly defined. (Core)**
- VI.E.1.b) The program director must ensure that fellows maintain 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 the educational experience. (Core)**
- VI.E.2. Teamwork**
- Fellows must care for patients in an environment that maximizes 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 and larger health system. (Core)**
- VI.E.2.a) Interprofessional team members should participate in the**

education of fellows. ^(Detail)

VI.E.3. Transitions of Care

- VI.E.3.a) Programs must design clinical assignments to optimize transitions in patient care, including their safety, frequency, and structure. ^(Core)**
- VI.E.3.b) Programs, in partnership with their Sponsoring Institutions, must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety. ^(Core)**
- VI.E.3.c) Programs must ensure that fellows are competent in communicating with team members in the hand-over process. ^(Outcome)**
- VI.E.3.d) Programs and clinical sites must maintain and communicate schedules of attending physicians and fellows currently responsible for care. ^(Core)**
- VI.E.3.e) Each program must ensure continuity of patient care, consistent with the program's policies and procedures referenced in VI.C.2, in the event that a fellow may be unable to perform their patient care responsibilities due to excessive fatigue or illness, or family emergency. ^(Core)**

VI.F. Clinical Experience and Education

Programs, in partnership with their Sponsoring Institutions, must design an effective program structure that is configured to provide fellows with educational and clinical experience opportunities, as well as reasonable opportunities for rest and personal activities.

VI.F.1. Maximum Hours of Clinical and Educational Work per Week

Clinical and educational work hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of all in-house clinical and educational activities, clinical work done from home, and all moonlighting. ^(Core)

VI.F.2. Mandatory Time Free of Clinical Work and Education

- VI.F.2.a) The program must design an effective program structure that is configured to provide fellows with educational opportunities, as well as reasonable opportunities for rest and personal well-being. ^(Core)**
- VI.F.2.b) Fellows should have eight hours off between scheduled clinical work and education periods. ^(Detail)**

- VI.F.2.b).(1)** There may be circumstances when fellows choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements. ^(Detail)
- VI.F.2.c)** Fellows must have at least 14 hours free of clinical work and education after 24 hours of in-house call. ^(Core)
- VI.F.2.d)** Fellows must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days. ^(Core)
- VI.F.3.** **Maximum Clinical Work and Education Period Length**
- VI.F.3.a)** Clinical and educational work periods for fellows must not exceed 24 hours of continuous scheduled clinical assignments. ^(Core)
- VI.F.3.a).(1)** Up to four hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or fellow education. ^(Core)
- VI.F.3.a).(1).(a)** Additional patient care responsibilities must not be assigned to a fellow during this time. ^(Core)
- VI.F.4.** **Clinical and Educational Work Hour Exceptions**
- VI.F.4.a)** In rare circumstances, after handing off all other responsibilities, a fellow, on their own initiative, may elect to remain or return to the clinical site in the following circumstances:
- VI.F.4.a).(1)** to continue to provide care to a single severely ill or unstable patient; ^(Detail)
- VI.F.4.a).(2)** humanistic attention to the needs of a patient or family; or, ^(Detail)
- VI.F.4.a).(3)** to attend unique educational events. ^(Detail)
- VI.F.4.b)** These additional hours of care or education will be counted toward the 80-hour weekly limit. ^(Detail)
- VI.F.4.c)** A Review Committee may grant rotation-specific exceptions for up to 10 percent or a maximum of 88 clinical and educational work hours to individual programs based on a sound educational rationale.

VI.F.8.b)

Fellows are permitted to return to the hospital while on at-home call to provide direct care for new or established patients. These hours of inpatient patient care must be included in the 80-hour maximum weekly limit. ^(Detail)



**Accreditation Council for
Graduate Medical Education**

**ACGME Program Requirements for
Graduate Medical Education
in Pediatric Hematology-Oncology**

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ACGME Program Requirements for Graduate Medical Education in Pediatric Hematology-Oncology

Introduction

Int.A. Scope of Educational Experience

- Int.A.1. Subspecialty programs in pediatric hematology-oncology must provide an educational environment for fellows to develop an understanding of the pathophysiology of pediatric hematologic and oncologic disorders, as well as competence in the clinical diagnosis and management of these disorders. ^{(Core)*}
- Int.A.2. The program must provide a continuity of care experience that will allow fellows to understand the psychosocial aspects and natural history of these disorders. ^(Core)
- Int.A.3. There must be training in the selection, performance, and evaluation of procedures necessary for appropriate assessment of these disorders. ^(Core)
- Int.A.4. The program must emphasize the fundamentals of clinical diagnosis, with special emphasis on history-taking, physical examination and interpersonal communication skills. ^(Core)
- Int.A.5. There must be sufficient clinical experience with both inpatients and outpatients who have hematologic and oncologic disorders to allow fellows to develop skill in diagnosing and managing both common and unusual problems. ^(Core)
- Int.A.6. The scope of clinical experience must lead to an understanding of and exposure to clinical research, enrollment on treatment protocols, and ethical issues in managing patients on institutional and multi-institutional protocols. ^(Core)

VII. Program Personnel and Resources

VII.A. Faculty

VII.A.1. Pediatric Hematology-Oncology Specialists

At least four pediatric hematologists/oncologists must be based at the primary teaching site, and must devote sufficient time to the program both to ensure adequate teaching and to provide critical evaluation of the progress and competence of the fellows. ^(Core)

VII.A.2. Other Physician Teaching and Consultant Faculty

In addition to the full range of pediatric subspecialists, appropriate consultants must be available in related disciplines, including radiation oncology, gynecology, neuro-oncology, pediatric pathology, hematopathology, neuropathology, immunopathology, pediatric radiology,

nuclear medicine, pediatric general surgery, neurological surgery, ophthalmology, otolaryngology, orthopaedic surgery, urology, and transfusion medicine. ^(Detail)

VII.B. Other Program Personnel

Consultation should be available from pediatric psychiatry, pediatric psychology, physical medicine and rehabilitation, pain medicine, and palliative care. ^(Detail)

VII.B.1. A pediatric oncology pharmacist or PharmD on the hematology-oncology team is suggested. ^(Detail)

VII.C. Resources

VII.C.1. The program must provide space in an ambulatory setting equipped for optimal evaluation and care of patients, including facilities for outpatient chemotherapy and transfusions. ^(Core)

VII.C.2. An inpatient area with a full array of pediatric and related services staffed by pediatric fellows and faculty must also be present. ^(Core)

VII.C.3. The program must have access to specialized laboratories. ^(Core)

VII.C.3.a) These should be capable of assaying red blood cell enzymes, identifying unusual hemoglobins, preparing and interpreting bone marrow aspirates and biopsies, performing human lymphocyte antigen typing, immunophenotyping of leukemic blast cells, performing flow cytometry, performing cytogenetic analyses, and identifying complex congenital and/or acquired abnormalities of hemostasis and thrombosis. ^(Detail)

VII.C.4. The principal training site should have available the diagnostic services of radiology. ^(Core)

VII.C.4.a) This should include full-body magnetic resonance imaging, nuclear medicine, computerized tomography, sonography, and angiography. ^(Detail)

VII.C.4.b) Timely access to diagnostic service in clinical chemistry, microbiology, virology, immunology and cytogenetics must be available. ^(Detail)

VII.C.5. Patient Population

VII.C.5.a) Adequate numbers of patients with hematologic and oncologic disorders, ranging in age from newborn through young adult, must be available to the training program. ^(Core)

VII.C.5.a).(1) Each fellow must have continuing responsibility for the care of patients with malignant disease and with chronic hematologic problems over the duration of their training.

(Core)

- VII.C.5.b) A program should have at least 60 patients with newly-diagnosed oncologic disease and at least 60 patients with newly-diagnosed hematologic disease each year. ^(Detail)
- VII.C.5.b).(1) A program having fewer such patients must specifically demonstrate that it is able to provide the breadth of experience required for the number of fellows in the program. ^(Detail)
- VII.C.5.c) To become familiar with the hematologic manifestations of a broad spectrum of pediatric illnesses, each fellow must provide consultation for a sufficient variety of patients. ^(Core)
- VII.C.5.c).(1) A program without a sizable population of patients with non-oncologic, hematologic disorders, such as one based in a cancer center, must demonstrate how fellows will learn how to diagnose and manage sickle cell disease, hemophilia, and other acute and chronic hematologic problems (see IX.A.2.a. below). ^(Detail)
- VII.C.5.c).(1).(a) A program having fewer such patients must specifically demonstrate that it is able to provide the breadth of experience required for the number of fellows in the program. ^(Detail)

VIII. Educational Program

VIII.A. Patient Care

- VIII.A.1. Fellows must develop competence in the management of children with hematologic and oncologic diseases. ^(Outcome)
- VIII.A.1.a) Fellows must demonstrate competence in the diagnosis and treatment of children with disorders of red blood cells, white blood cells, platelets, hemostasis and thrombosis, and bone marrow failure. ^(Outcome)
- VIII.A.1.a).(1) Fellows must demonstrate competence in the care of patients with acute and chronic complications of blood disorders, including but not limited to sickle cell anemia, hemophilia, and aplastic anemia. ^(Outcome)
- VIII.A.1.a).(2) Fellows must be able to apply new diagnostic techniques to patient care, and the roles of genetic testing and counseling. ^(Outcome)
- VIII.A.1.b) The pediatric oncology component of the program must include education in the staging and classification of tumors, the application of multimodal therapy, the epidemiology and etiology

of childhood cancer, making appropriate observations, and keeping accurate patient data. ^(Detail)

- VIII.A.1.b).(1) The experience should include learning to function as a member of a multidisciplinary team serving patients with cancer and chronic hematologic disorders, and should ensure that fellows demonstrate competence in the uses and management of chemotherapy, as well as the pertinent aspects of surgical therapy and radiotherapy in managing patients with malignant diseases. ^(Detail)
- VIII.A.1.b).(2) The program must include formal education in the elements of long-term, follow-up care, including monitoring for late effects of treatment or disease. ^(Detail)
- VIII.A.2. Fellows must demonstrate competence in the care of both inpatients and outpatients with a broad variety of hematologic and oncologic problems. ^(Outcome)
- VIII.A.2.a) This should include but not be limited to the following categories: ^(Outcome)
- VIII.A.2.a).(1) hematologic disorders of the newborn; ^(Outcome)
- VIII.A.2.a).(2) hemoglobinopathies, including the thalassemia syndromes; ^(Outcome)
- VIII.A.2.a).(3) inherited and acquired disorders of the red-blood-cell membrane and of red-blood cell metabolism; ^(Outcome)
- VIII.A.2.a).(4) autoimmune disorders, including hemolytic anemia; ^(Outcome)
- VIII.A.2.a).(5) nutritional anemia; ^(Outcome)
- VIII.A.2.a).(6) inherited and acquired disorders of white blood cells; ^(Outcome)
- VIII.A.2.a).(7) hemophilia, von Willebrand's disease, and other inherited and acquired coagulopathies; ^(Outcome)
- VIII.A.2.a).(8) platelet disorders, including idiopathic thrombocytopenic purpura (ITP), and acquired and inherited platelet function defects; ^(Outcome)
- VIII.A.2.a).(9) congenital and acquired thrombotic disorders; ^(Outcome)
- VIII.A.2.a).(10) leukemias, including acute lymphoblastic leukemia, acute and chronic myeloid leukemias, and myelodysplastic syndromes; ^(Outcome)
- VIII.A.2.a).(11) Hodgkin's disease and non-Hodgkin's lymphomas; ^(Outcome)

- VIII.A.2.a).(12) solid tumors of organs, soft tissue, bone, and central nervous system; ^(Outcome)
- VIII.A.2.a).(13) bone marrow failure; ^(Outcome)
- VIII.A.2.a).(14) transfusion medicine and use of blood products; ^(Outcome)
- VIII.A.2.a).(15) management of the patient undergoing long-term transfusion therapy; ^(Outcome)
- VIII.A.2.a).(16) bone marrow reconstitution, including use of allogeneic peripheral blood stem cells and umbilical cord blood; and, ^(Outcome)
- VIII.A.2.a).(17) graft versus host disease. ^(Outcome)
- VIII.A.3. Fellows must demonstrate competence in the diagnosis and management of complications of disease and therapy, including treatment of infections in the compromised host. ^(Outcome)
- VIII.A.3.a) Fellows must demonstrate their understanding of the indications and procedures for transfusion therapy, including proper use of blood components, coagulation factors, apheresis, and platelet pheresis. ^(Outcome)
- VIII.A.4. Fellows must demonstrate competence in stem cell transplantation. ^(Outcome)
- VIII.A.4.a) This should include the indications for transplantation, processes for donor identification, methods of stem cell harvest and infusion, preparative regimens before transplant, and management of transplant-related complications. ^(Outcome)
- VIII.A.5. Fellows must demonstrate competence in the methods of physiologic support of the patient, including provision of nutrition (both enteral and parenteral), control of nausea and vomiting, and management of pain. ^(Outcome)
- VIII.A.6. The fellow must have structured educational experiences in psychological and social support of patients, families, and staff ^(Core)
- VIII.A.6.a) Fellows must be able to recognize and manage psychosocial stresses and problems, serve as a member of a multidisciplinary team, demonstrate skill in communication and counseling, and the provision of comprehensive care. ^(Outcome)
- VIII.A.7. Throughout the three years of training, the fellow must attend a regularly-scheduled outpatient clinic that provides experience in continuity and follow-up care of patients under their care. ^(Core)

- VIII.A.7.a) The clinic must be supervised by one or more members of the pediatric hematology/oncology faculty. ^(Detail)
- VIII.A.8. The program must document that the fellow participates in the activities of the tumor board. ^(Detail)
- VIII.A.9. Fellows must demonstrate competence in collecting and analyzing accurate patient data to improve patient care, and know how data recording and analysis is conducted as part of collaborative or cooperative group clinical trials. ^(Outcome)
- VIII.A.10. Fellows must have appropriate structured educational experiences in the laboratories, including blood bank and tissue pathology. ^(Core)
- VIII.A.10.a) Fellows must be competent in the proper use of laboratory techniques for diagnosis, with recognition of the limitations of the various methods and the pitfalls in interpretation of laboratory results. ^(Outcome)
- VIII.A.10.a).(1) This should include the normal variations in laboratory data that occur at different ages, as well as the influence of medications, toxins, and systemic disease on hematologic values test results. ^(Outcome)
- VIII.A.11. Fellows must be competent to perform and interpret: ^(Outcome)
- VIII.A.11.a) bone marrow aspiration and biopsy; ^(Outcome)
- VIII.A.11.b) lumbar puncture with evaluation of cerebrospinal fluid; ^(Outcome)
- VIII.A.11.c) microscopic interpretation of peripheral blood films; and, ^(Outcome)
- VIII.A.11.d) hematologic laboratory diagnostic tests. ^(Outcome)
- VIII.A.12. Fellows should develop the skills needed to review and interpret peripheral blood smear, bone marrow aspiration, and biopsy. ^(Outcome)
- VIII.B. Medical Knowledge
- VIII.B.1. The training program should provide structured educational instruction in the related basic sciences. ^(Core)
- VIII.B.1.a) This should include, but not be limited to: the structure and function of hemoglobin and iron metabolism, the phagocytic system, splenic function, cell kinetics, immunology, coagulation, genetics, the principles of radiation therapy, the characteristics of malignant cells, tissue typing, blood groups, pharmacology of chemotherapeutic agents, molecular biology, microbiology and anti-infective agents in the compromised host, and nutrition. ^(Detail)
- VIII.B.2. Within the research conferences and clinical experiences, the program

must address multi-site or multi-center collaborative clinical and research activities (such as those exemplified by the pediatric oncology cooperative groups, regional hemophilia, or thalassemia programs), as well as the problems and issues of data collection and analysis. ^(Detail)

***Core Requirements:** Statements that define structure, resource, or process elements essential to every graduate medical educational program.

Detail Requirements: Statements that describe a specific structure, resource, or process, for achieving compliance with a Core Requirement. Programs and sponsoring institutions in substantial compliance with the Outcome Requirements may utilize alternative or innovative approaches to meet Core Requirements.

Outcome Requirements: Statements that specify expected measurable or observable attributes (knowledge, abilities, skills, or attitudes) of residents or fellows at key stages of their graduate medical education.

Osteopathic Recognition

For programs seeking Osteopathic Recognition for the entire program, or for a track within the program, the Osteopathic Recognition Requirements are also applicable.

(http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/Osteopathic_Recognition_Requirements.pdf)