

GENERAL PROGRAM REQUIREMENTS FOR THE SUBSPECIALTIES OF PEDIATRICS

I. Introduction

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.

An accredited pediatric subspecialty program must exist in conjunction with and be an integral part of a core pediatric residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME). Interaction of the subspecialty residents/fellows (hereafter called fellows) and faculty with the residents in the core pediatrics residency program is required. Lines of responsibility for the pediatric residents and the fellows must be clearly defined. The presence of a subspecialty program should not adversely affect the education of the pediatric residents.

This document includes the ACGME Common Program Requirements, involving the incorporation of the competencies into fellowship training. Core and subspecialty Program Directors should work together to achieve this goal. Close coordination between and among core and subspecialty Program Directors will foster consistent expectations for residents and fellows with regard to their achievement of competencies, and for faculty with regard to evaluation processes.

A. Duration of Educational Experience

Unless specified otherwise in the program requirements for a specific subspecialty, pediatric subspecialty programs must provide 3 years of training.

B. Scope of Educational Experience

Each subspecialty program must be organized and conducted in a way that ensures an appropriate environment for the well-being and care of the patients, and that provides adequate training for the fellows in the diagnosis and management of these 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.

The subspecialty program must develop in its fellows a commitment to lifelong learning, and must emphasize scholarship, self-instruction, development of critical analysis of clinical problems, and the ability to make appropriate decisions. Progressive acquisition of skill in investigative efforts related to the subspecialty is essential.

The program must provide the fellows with instruction and opportunities to ensure effective interaction with patients, patients' families, professional associates, and others in carrying out their responsibilities as physicians in the specialty. They must be taught how 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.

II. **Institutions**

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 institutions.

The pediatric subspecialty program must be sponsored by the same institution that sponsors the related core pediatrics program.

B. **Participating Institutions**

1. **Assignment to an institution must be based on a clear educational rationale, integral to the program curriculum, with clearly-stated activities and objectives. When multiple participating institutions are used, there should be assurance of the continuity of the educational experience.**
2. **Assignment to a participating institution requires a letter of agreement with the sponsoring institution. Such a letter of agreement should:**
 - a) **identify the faculty who will assume both educational and supervisory responsibilities for fellows;**
 - b) **specify their responsibilities for teaching, supervision, and formal evaluation of fellows, as specified later in this document;**
 - c) **specify the duration and content of the educational experience;**
 - d) **state the policies and procedures that will govern fellow education during the assignment; and**
 - e) **relate specifically to the subspecialty program; the letter must be current, no more than five years old, at the time of the site visit.**

Copies of these written arrangements, specifying administrative, organizational, and educational relationships, must accompany an application for initial accreditation. At subsequent reviews, these documents need not be submitted, but must be available for review by the site-visitor.

An accredited program may occur in one or more institutions. Use of an affiliated institution that provides 6 or more months of the inpatient and/or outpatient training requires approval by the Residency Review Committee (RRC).

III. Program Personnel and Resources

A. Program Director

1. **There must be a single Program Director responsible for the program. The person designated with this authority is accountable for the operation of the program. In the event of a change of either Program Director or department chair, the Program Director should promptly notify the executive director of the Residency Review Committee through the Web Accreditation Data System of the Accreditation Council for Graduate Medical Education.**
2. **The Program Director, together with the faculty, is responsible for the general administration of the program, and for the establishment and maintenance of a stable educational environment. Adequate lengths of appointment for both the Program Director and faculty are essential to maintaining such an appropriate continuity of leadership.**
3. **Qualifications of the Program Director are as follows:**
 - a) **The Program Director must possess the requisite specialty expertise, as well as documented educational and administrative abilities.**
 - b) **The Program Director must be certified in the subspecialty by the American Board of Pediatrics, or possess qualifications judged to be acceptable by the RRC.** Qualifications other than certification by the American Board of Pediatrics will be considered only in exceptional circumstances. Qualifications would include subspecialty training 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.

- c) **The Program Director must be appointed in good standing and based at the primary teaching site.**
- d) The Program Director should have 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).

4. **Responsibilities of the Program Director are as follows:**

- a) **The Program Director must oversee and organize the activities of the educational program in all institutions that participate in the program. This includes selecting and supervising the faculty and other program personnel at each participating institution, appointing a local site director, and monitoring appropriate fellow supervision at all participating institutions.**
- b) **The Program Director is responsible for preparing an accurate statistical and narrative description of the program as requested by the RRC, as well as updating annually both program and fellow records through the ACGME's Accreditation Data System.**
- c) **The Program Director must ensure the implementation of fair policies, grievance procedures, and due process, as established by the sponsoring institution and in compliance with the Institutional Requirements.**
- d) **The Program Director must seek the prior approval of the RRC for any changes in the program that may significantly alter the educational experience of the fellows. Such changes, for example, include:**
 - (1) **the addition or deletion of a participating institution;**
 - (2) **a change in the format of the educational program;**
 - (3) **a change in the approved fellow complement for those specialties that approve fellow complement**

On review of a proposal for any such major change in a program, the RRC may determine that a site visit is necessary.

- e) The Program Director must ensure that the fellows are mentored in their development of clinical, educational, and administrative skills.
- f) The Program Director is also responsible for the creation of a core curriculum in scholarly activities, the identification of a mentor, and the identification and monitoring of a scholarship oversight committee responsible for overseeing and assessing the progress of each fellow. Where appropriate, the core curriculum in scholarly activities should be a collaborative effort involving all of the pediatric subspecialty programs in the institution.
- g) Lines of supervision of fellows for the care of patients must be described in explicit written guidelines that identify appropriate back-up. 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.
- h) Monitoring and documenting the procedural skills of the fellows.

5. Program Administration

The Program Director must devote sufficient time to administration of the program and receive commensurate support.

B. Faculty

1. **At each participating institution, there must be a sufficient number of faculty with documented qualifications to instruct and supervise adequately all fellows in the program.** When assessing the adequacy of the number of faculty, the total number of fellows will be considered.

In addition to the subspecialty Program Director, there must be at least one other member of the teaching staff who is qualified in the subspecialty. In some of the subspecialties, 2 or more additional subspecialists are required. Specific details are included in the related specialty-specific section of the requirements.

If the program is conducted at more than one institution, a member of the teaching staff of each participating institution must be designated to assume responsibility for the day-to-day activities of the program at that institution, with overall coordination by the Program Director.

Appropriate teaching and consultant faculty in the full range of pediatric subspecialties and in other related disciplines also must be available. An anesthesiologist, pathologist, and a radiologist who have substantial experience with pediatric problems and who interact with the fellows are essential. The other related disciplines should include medical genetics, child neurology, child and adolescent psychiatry, as well as pediatric surgery and surgical subspecialties, as appropriate to the subspecialty.

2. **The faculty, furthermore, must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities. They must demonstrate a strong interest in the education of fellows, and must support the goals and objectives of the educational program of which they are a member.**
3. **Qualifications of the physician faculty are as follows:**
 - a) **The physician faculty must possess the requisite specialty expertise and competence in clinical care and teaching abilities, as well as documented educational and administrative abilities and experience in their field.**
 - b) **The physician faculty must be certified in the subspecialty by the American Board of Pediatrics, or possess qualifications judged to be acceptable by the RRC.**

Acceptable qualifications for the required key subspecialty faculty include:

 - (1) certification, if eligible, by the American Board of Pediatrics (ABP) or other appropriate board of the American Board of Medical Specialties (ABMS); or
 - (2) if trained elsewhere and not eligible for certification, documented subspecialty training and peer-reviewed publications in the field with evidence of active participation in applicable local and national professional societies.
 - c) **The physician faculty must be appointed in good standing to the staff of an institution participating in the program.**
4. **The responsibility for establishing and maintaining an environment of inquiry and scholarship rests with the faculty, and an active research component must be included in each program. *Scholarship* is defined as the following:**

- a) **the scholarship of *discovery*, as evidenced by peer-reviewed funding or by publication of original research in a peer-reviewed journal;** this may be research in a variety of fields related to the subspecialty (e.g., basic science, clinical, health services, health policy, or educational research);
- b) **the scholarship of *dissemination*, as evidenced by review articles or chapters in textbooks;**
- c) **the scholarship of *application*, as evidenced by the publication or presentation of, for example, case reports or clinical series at local, regional, or national professional and scientific society meetings;**

Complementary to the above scholarship is the regular participation of the teaching staff in clinical discussions, rounds, journal clubs, and research conferences in a manner that promotes a spirit of inquiry and scholarship (e.g., the offering of guidance and technical support for fellows involved in research such as research design and statistical analysis); and the provision of support for fellows' participation, as appropriate, in scholarly activities. This should include the mentoring of fellows as they apply scientific principles, epidemiology, biostatistics, and evidence-based medicine to the clinical care of patients.

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. 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. A scholarly environment outside of the training program can supplement but not replace the scholarly environment within the training program.

Although an individual faculty member may not be accomplished in all three areas of scholarship, the program faculty must exhibit all three. In particular, 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 and by the fellows will be assessed at the time of each RRC 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.

5. **Qualifications of the nonphysician faculty are as follows:**

- a) **Nonphysician faculty must be appropriately qualified in their field.**
- b) **Nonphysician faculty must possess appropriate institutional appointments.**

C. **Other Program Personnel**

Additional necessary professional, technical, and clerical personnel must be provided to support the program.

The 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.

D. **Resources**

The program must ensure that adequate resources (e.g., sufficient laboratory space and equipment, computer and statistical consultation services) are available.

1. **Inpatient and Outpatient Facilities**

Adequate inpatient and outpatient facilities, as specified in the requirements for each subspecialty, must be available. These must be of sufficient size and be appropriately staffed and equipped to meet the educational needs of the subspecialty program.

2. **Support Services**

Support services must include the clinical laboratories, intensive care, nutrition, occupational and physical therapy, pathology, pharmacology, mental health, diagnostic imaging, respiratory therapy, and social services.

3. **Patient Population**

Patients should range in age from newborn through young adulthood, as appropriate. Adequate numbers of pediatric subspecialty inpatients and outpatients, both new and follow up, must be available to provide a broad experience for the fellows. The program must maintain an appropriate balance among the number and variety of patients, the number of preceptors, and the number of fellows in the program. Occasionally

programs may use defined clinical experiences at participating institutions to supplement the clinical experience and patient population at the primary clinical site. Where that is the case, the Program Director must submit detailed information to demonstrate that the clinical exposure to the population(s) in question is sufficiently consistent to provide each fellow with an adequate experience during the limited time at the affiliated institution(s); (e.g., if a fellow is spending two months at an affiliated institution to meet required exposure to patients with congenital heart disease, annual data regarding numbers and types of patients in this category must be provided).

4. Library Facilities and Computer Access

Subspecialty fellows must have access to an on-site library or collection of appropriate texts and journals in each participating institution, or must have access to electronic databases and other data processing applications.

5. Resources for Research and Scholarly Activities

There must be adequate resources for scholarly activity, research and critical analysis. These must include adequate laboratory space, equipment, financial support, and computer services.

IV. Fellow Appointments

A. Eligibility Criteria

The Program Director must comply with the criteria for fellow eligibility as specified in the Institutional Requirements.

Prerequisite training for entry into a pediatric subspecialty program should include the satisfactory completion of an ACGME-accredited pediatric residency or other training judged suitable by the Program Director. (N.B.: 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.)

B. Number of Fellows

The RRC may approve the number of fellows based upon the established written criteria that include the adequacy of resources for fellow education (e.g., the quality and volume of patients and related clinical material available for education), faculty-fellow ratio, institutional funding, and the quality of faculty teaching.

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.

C. Fellow Transfers

To determine the appropriate level of education for fellows who are transferring from another residency program, the Program Director must receive written verification of previous educational experiences and a statement regarding the performance evaluation of the transferring fellow prior to their acceptance into the program. A Program Director is required to provide verification of residency education for fellows who may leave the program prior to completion of their education.

D. Appointment of Fellows and Other Students

The appointment of fellows and other specialty residents or students must not dilute or detract from the educational opportunities available to regularly appointed fellows.

V. Program Curriculum

A. Program Design

1. Format

The program design and sequencing of educational experiences will be approved by the RRC as part of the review process.

2. Goals and Objectives

The program must possess a written statement that outlines its educational goals with respect to the knowledge, skills, and other attributes of fellows for each major assignment and for each level of the program. This statement must be distributed to fellows and faculty, and must be reviewed with the fellows prior to their assignments.

3. Collaboration Between Programs

There must be 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).

B. Specialty Curriculum

The program must possess a well-organized and effective curriculum, both didactic and clinical. The curriculum must also provide fellows with direct experience in progressive responsibility for patient management. The specialty-specific clinical curriculum is found in the program requirements for each subspecialty.

The program must provide a structured curriculum that leads to 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 for all subspecialty fellows. The curriculum should lead to an understanding of the principles of adult learning, and provide skills to participate effectively in curriculum development, delivery of information, provision of feedback to learners, and assessment of educational outcomes. Graduates should be effective in teaching both individuals and groups of learners in clinical settings, classrooms, lectures, and seminars, and also by electronic and print modalities.

C. Fellows Scholarly Activities

Each program must provide an opportunity for fellows to participate in research or other scholarly activities, and fellows must participate actively in such scholarly activities.

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. The program must provide a scholarship oversight committee for each fellow to evaluate the fellow's progress as related to scholarly activity. The scholarly experience must begin in the first year and continue for the entire period of training. Time must be adequate to allow for the development of requisite skills, project completion, and presentation of results to a local scholarship oversight committee established for this review. Where applicable, the process of establishing fellow scholarship oversight committees should be a collaborative effort involving other pediatric subspecialty programs in the institution.

D. ACGME Competencies

The residency program must require its fellows to obtain competence in the six areas listed below to the level expected of a new practitioner. Programs must define the specific knowledge, skills, behaviors, and attitudes required, and provide educational experiences as needed in order for their fellows to demonstrate the following:

1. ***Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health;***

a) Clinical Skills

A pediatric subspecialty program must offer supervised training to ensure the acquisition of the necessary clinical skills used in the subspecialty, including 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.

b) Diagnostic Tests and Procedures

The program must offer 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. Each fellow's experience in such procedures must be documented by the Program Director and such documentation must be available for review.

2. ***Medical Knowledge about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patient care;***

There must be a formally-structured educational program for the fellows in the clinical and basic sciences related to the subspecialty that utilizes lectures, seminars, and practical experience. Subspecialty conferences must be regularly scheduled, and should involve active participation by the fellows in the planning and implementation of these meetings.

The curriculum should include basic and fundamental disciplines related to each subspecialty, as appropriate, such as anatomy, physiology, biochemistry, embryology, pathology, microbiology, pharmacology, immunology, genetics, and nutrition/metabolism.

Instruction in the pathophysiology of disease, reviews of recent advances in clinical medicine and biomedical research, conferences dealing with complications and death, and instruction in the scientific, ethical, and legal implications of confidentiality and of informed consent should also be included.

One outcome measure of the quality of an educational program is the performance of its graduates on the certifying examination of the sub-board. In its evaluation of pediatric subspecialty programs, the RRC will take into consideration the information in the PIF and that which is provided by the American Board of Pediatrics. A program will be judged deficient if, over a 6 year period, fewer than 75% of fellows eligible for the certifying examination take it and of those who take it, fewer than 75% pass it on the first attempt. The Committee will take into consideration noticeable improvements or declines during this same period. An exception may be made for programs with small numbers of fellows. A subspecialty Program Director will be expected to provide the requested information at the time of each RRC review.

3. ***Practice-based learning and improvement that involves the investigation and evaluation of care for their patients, the appraisal and assimilation of scientific evidence, and improvements in patient care;***

Programs are responsible for ensuring that fellows have or develop the skills necessary to utilize information technology in the acquisition of knowledge, including the ability to appraise and assimilate evidence from scientific studies related to their patient's health problems.

The program must provide fellows with the necessary background to participate in clinical/professional quality improvement activities. Evidence of self-evaluation incorporating faculty, peer and patient assessments must be demonstrated in the fellow's development of his or her individual learning plan.

Fellows must actively participate in the education of patients, families, residents, students, and other health professionals. They must be given the opportunity to teach and participate in undergraduate, graduate, and continuing education activities, as well as to assume some departmental administrative responsibilities. The program should also provide fellows with instruction in curriculum design, information delivery in clinical settings and classrooms, provision of feedback to learners, assessment of educational outcomes, and the development of teaching materials.

4. ***Interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals;***

The program must educate the fellow about the unique roles of the consultant, team member and team leader.

5. ***Professionalism, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to patients of diverse backgrounds;***

A subspecialty program must provide an environment in which high standards of professionalism and a commitment to continued improvement are evident. Professionalism must be fostered throughout training. Bioethics must be addressed in the formal curriculum, including attention to physician-patient, physician-family, physician-physician/allied health professional, and physician-society relationships.

6. ***Systems-based practice, as manifested by actions that 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.***

In addition to topics covered in the core subspecialty content, the curriculum must include instruction 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, and clinical outcomes. Programs must provide didactics and experience in the prevention of medical errors.

E. Instruction in Program Administration

Fellowship programs that are three years must address the following areas of administration:

1. An awareness of regional and national access to care, resources, workforce, and financing appropriate to their specialty through guided reading and discussion.
2. Organization and management of a subspecialty service within one's own delivery system by engaging fellows as active participants in discussions (e.g., through already scheduled division activities/meetings) that involve:
 - a) staffing a service or unit, including managing personnel and making and adhering to a schedule;
 - b) drafting policies and procedures, leading interdisciplinary meetings and conferences, providing in-service teaching sessions;
 - c) discussions/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;

- d) business planning and practice management that includes billing and coding, personnel management policies and professional liability;
- e) division or program development, organization, and maintenance; and
- f) necessary collaborations within (e.g., pathology, radiology, surgery) and beyond the institution (e.g., participation in national specialty societies, cooperative care groups, multi-center research collaboratives) as appropriate to their specialty.

VI. Fellow Duty Hours and the Working Environment

Providing fellows with a sound academic and clinical education must be carefully planned and balanced with concerns for patient safety and fellow well-being. Each program must ensure that the learning objectives of the program are not compromised by excessive reliance on fellows to fulfill service obligations. Didactic and clinical education must have priority in the allotment of fellows' time and energy. Duty hour assignments must recognize that faculty and fellows collectively have responsibility for the safety and welfare of patients.

A. Supervision of Fellows

- 1. **All patient care must be supervised by qualified faculty. The Program Director must ensure, direct, and document adequate supervision of fellows at all times. Fellows must be provided with rapid, reliable systems for communicating with supervising faculty.**
- 2. **Faculty schedules must be structured to provide fellows with continuous supervision and consultation.**
- 3. **Faculty and fellows must be educated to recognize the signs of fatigue, and adopt and apply policies to prevent and counteract the potential negative effects.**

B. Duty Hours

- 1. **Duty hours are defined as all clinical and academic activities related to the fellowship program, i.e., patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities such as conferences. Duty hours do *not***

include reading and preparation time spent away from the duty site.

2. **Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.**
3. **Fellows must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. *One day* is defined as one continuous 24-hour period free from all clinical, educational, and administrative duties.**
4. **Adequate time for rest and personal activities must be provided. This should consist of a 10 hour time period provided between all daily duty periods and after in-house call. The RRC will not consider requests for a rest period that is less than 10 hours.**

C. **On-Call Activities**

The objective of on-call activities is to provide fellows with continuity of patient care experiences throughout a 24-hour period. *In-house call* is defined as those duty hours beyond the normal work-day, when fellows are required to be immediately available in the assigned institution.

1. **In-house call must occur no more frequently than every third night, averaged over a 4-week period.**
2. **Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Fellows may remain on duty for up to 6 additional hours to participate in didactic activities, transfer care of patients, conduct outpatient clinics and maintain continuity of medical and surgical care. Post-call fellows may not attend any outpatient clinics other than continuity clinics.**
3. **No new patients may be accepted after 24 hours of continuous duty.** A new patient is defined as any patient for whom the fellow has not provided care during the previous 24 hour period or who is not a part of the fellow's continuity panel or the panel of the fellow's continuity team, if such exists.
4. ***At-home call (or pager call)* is defined as a call taken from outside the assigned institution.**
 - a) **The frequency of at-home call is not subject to the every-third-night limitation. At-home call must not be so frequent as to preclude rest and reasonable personal time for each fellow. Fellows taking at-home call must be provided with 1 day in 7 completely free from all educational and clinical**

responsibilities, averaged over a 4-week period.

- b) **When fellows are called into the hospital from home, the hours they spend in-house are counted toward the 80-hour limit.**
- c) **The Program Director and the faculty must monitor the demands of at-home call in their programs and make scheduling adjustments as necessary to mitigate excessive service demands and/or fatigue.**
- d) When evaluating the acceptability of a program's schedule for at-home call, the RRC will take into consideration the number and frequency of calls taken by the fellows, the number of consecutive nights fellows have such call, and include the number of times the fellow comes into the hospital.

D. Moonlighting

- 1. **Because fellowship education is a full-time endeavor, the Program Director must ensure that moonlighting does not interfere with the ability of the fellow to achieve the goals and objectives of the educational program.**
- 2. **The Program Director must comply with the sponsoring institution's written policies and procedures regarding moonlighting, in compliance with the ACGME Institutional Requirements.**
- 3. **Any hours a fellow works for compensation at the sponsoring institution or any of the sponsor's primary clinical sites must be considered part of the 80-hour weekly limit on duty hours. This refers to the practice of *internal moonlighting*.**

E. Oversight

- 1. **Each program must have written policies and procedures consistent with the Institutional and Program Requirements for fellow duty hours and the working environment. These policies must be distributed to the fellows and the faculty. Duty hours must be monitored with a frequency sufficient to ensure an appropriate balance between education and service.**
- 2. **Back-up support systems must be provided when patient care responsibilities are unusually difficult or prolonged, or if unexpected circumstances create fellow fatigue sufficient to jeopardize patient care.**

F. Duty Hours Exceptions

An RRC may grant exceptions for up to 10% of the 80-hour limit to individual programs based on a sound educational rationale. Prior permission of the institution's GMEC, however, is required. The RRC for Pediatrics will not consider requests for exceptions to the 80 hour limit to a fellow's work week.

VII. Evaluation

A. Fellow

1. Formative Evaluation

The faculty must evaluate in a timely manner the fellows whom they supervise. In addition, the fellowship program must demonstrate that it has an effective mechanism for assessing fellow performance throughout the program, and for utilizing the results to improve fellow performance.

- a) **Assessment should include the use of methods that produce an accurate assessment of fellows' competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice.**
- b) **Assessment should include the regular and timely performance feedback to fellows that includes at least semiannual written evaluations. Such evaluations are to be communicated to each fellow in a timely manner, and maintained in a record that is accessible to each fellow.**
- c) **Assessment should include the use of assessment results, including evaluation by faculty, patients, peers, self, and other professional staff, to achieve progressive improvements in fellows' competence and performance.**

2. Final Evaluation

The Program Director must provide a final evaluation for each fellow who completes the program. This evaluation must include a review of the fellow's performance during the final period of education, and should verify that the fellow has demonstrated sufficient professional ability to practice competently and independently. The final evaluation must be part of the fellow's permanent record maintained by the institution.

B. Faculty

The performance of the faculty must be evaluated by the program no less frequently than at the midpoint of the accreditation cycle, and again prior to the next site visit. The evaluations should include a review of their teaching abilities, commitment to the educational program, clinical knowledge, and scholarly activities. This evaluation must include annual written confidential evaluations by fellows. Faculty should receive formal feedback from these evaluations.

C. Program

The educational effectiveness of a program must be evaluated at least annually in a systematic manner.

- 1. Representative program personnel (i.e., at least the Program Director, representative faculty, and one fellow) must be organized to review program goals and objectives, and the effectiveness with which they are achieved. This group must conduct a formal documented meeting at least annually for this purpose. In the evaluation process, the group must take into consideration written comments from the faculty, the most recent report of the GMEC of the sponsoring institution, and the fellows' confidential written evaluations. If deficiencies are found, the group should prepare an explicit plan of action, which should be approved by the faculty and documented in the minutes of the meeting.**

The annual evaluation should include the use of the resources available to the program. The contribution of the participating institutions, the financial and administrative support of the program, the volume and variety of patients available for educational purposes, the performance of the teaching staff, and the quality of supervision of fellows should be considered in the evaluation. Information gained from these evaluations should be used to implement improvements in the program.

- 2. The program should use fellow performance and outcome assessment in its evaluation of the educational effectiveness of the residency program. Performance of program graduates on the certification examination should be used as one measure of evaluating program effectiveness. The program should maintain a process for using assessment results together with other program evaluation results to improve the fellowship program.**

D. Collaboration with Core on Evaluation Mechanisms

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.

E. Evaluation by the RRC

Each subspecialty program will be evaluated by the RRC at regular intervals, in conjunction with a review of the related core pediatrics program when possible.

VIII. **Experimentation and Innovation**

Since responsible innovation and experimentation are essential to improving professional education, experimental projects along sound educational principles are encouraged. Requests for experimentation or innovative projects that may deviate from the program requirements must be approved in advance by the RRC, and must include the educational rationale and method of evaluation. The sponsoring institution and program are jointly responsible for the quality of education offered to fellows for the duration of such a project.

IX. **Certification**

Fellows who plan to seek certification in the specific subspecialty by the American Board of Pediatrics should communicate with the office of the board regarding the full requirements for certification.

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Effective: January 1, 2007

Minor Revision: June 27, 2006

Companion Document (Guidelines for Subspecialty PIF Documentation)

The revised Program Requirements document for the Subspecialties of Pediatrics reflects a transition from a process orientation to one of outcomes. In order to provide assistance to Program Directors, this Companion Document includes some explanation and guidelines for the types of documentation that will be expected. The numeric designations refer to sections of the Program Requirements.

Goals and Objectives (Section V.A.2)

Written goals and objectives are required for each learning experience. These must be level specific since you would expect more expertise as learners progress through fellowship training. Goals are broad statements of what the learner is expected to accomplish over time. Objectives are specific statements about what the learner is expected to do. Learning objectives should begin with a verb. The choice of verbs is important as the verb gives an indication of the level of complexity of the task. For example, it is easier to “identify” or “explain” than it is to “apply” and “evaluate.” The verb that one chooses also needs to be one that describes a measurable behavior. So verbs like learn or understand are not useful for writing learning objectives because it is difficult for an evaluator to directly observe whether the objective has been met. Responsibilities should not be confused with learning objectives and should not be included here. For example, “respond to the arrest team pager when you are on the ICU and ED rotations” is a responsibility and not a true learning objective. The level of detail of the learning objectives should be such that an evaluator would be able to say that a goal has been reached because the requisite set of behaviors needed to reach the goal have all been witnessed. The goals and objectives for each learning experience must be distributed to and reviewed with each learner.

Collaboration Between Programs (Section V.A.3)

For departments/institutions with more than one pediatric subspecialty fellowship program, there should be evidence of a collaborative effort among the fellowship directors in: 1) the preparation and delivery of required general curricular content areas (e.g., biostatistics, critical literature review, preparation of grant applications, etc.), 2) the formation and implementation of the scholarship oversight committees such that, to the extent possible, each fellow’s committee is consistent in function, level of responsibility and expectations of fellow accountability. Written guidelines for the operation of the scholarship oversight committee should be developed as a collaborative effort among subspecialty program directors. A mechanism for fellows to document their research progress is available through the American Academy of Pediatrics (AAP) “Fellow Center” of PediaLink (www.PediaLink.org),

ACGME Competencies (Section V.D)

Practice-based Learning and Improvement (Section V.D.3)

In order for fellows to adopt this competency as a life-long habit of practice, they should be guided in the process of reflection with the intent of identifying strengths, needed areas for improvement, and plans to implement strategies that will lead to practice improvement. Fellows should be paired with a faculty mentor with whom they can develop a meaningful relationship to guide them in this process. Faculty development is necessary to ensure that mentors have the needed skills to address the full scope of their responsibilities and function as a valuable resource to fellows. Mentors should meet with mentees a minimum of twice per year along with ongoing interaction via email, phone conversations, etc., during these intervals.

The process of self-assessment is most valuable when discussed with a mentor. The mentor should guide the fellow in reviewing evaluations from health care team members and patients to understand: 1) how one's performance /behavior can impact others, and 2) how to incorporate this feedback into future practice improvement. The fellow can then build on this self-assessment and reflective process by developing an individualized learning plan (e.g., documenting a minimum of three personal learning objectives to address identified areas of needed improvement and strategies to achieve the objectives). This plan should be updated at least annually with the final plan focusing on transition to the next phase of one's career and a plan for life-long learning. The "Fellow Center" of PediaLink provides a mechanism to guide fellows through a self-assessment and reflective process that culminates in documentation of their learning plan.

In addition to knowledge content, it is critical that fellows demonstrate their ability to use technology to access scientific evidence, interpret the evidence they uncover, and then apply it to the care of their patients. The program must document that a fellow is able to perform these skills and that the faculty have a structured way of teaching and evaluating such skill. Having the fellows present at Journal Club or complete a critically-appraised topic are examples of ideal ways of teaching and assessing skills. Necessary components include faculty guidance, criteria for demonstrating competence that are transparent to both fellows and faculty, and documented achievement of competence using the established criteria.

The program must also document that fellows acquire the skills needed to analyze and improve the quality of their practice. Each fellow should engage in a quality improvement project/activity under the guidance of the faculty. The Plan-Do-Study-Act (PDSA) cycle, as described by Berwick, which can be completed in a minimum of two week cycles, provides a practical method for engaging fellows in this process. This requirement may also be met through fellow membership on a QI Committee. In this case there must be evidence of the fellow's active participation in the planning, implementation and analysis of an intervention on a practice outcome.

Programs must provide skilled teachers as role models who demonstrate the value of teaching students, residents, patients and families. Structured learning activities that address teaching skills should be incorporated into the curriculum. Fellows should have opportunities to practice these skills and in turn be evaluated in so doing so that feedback can be used to bring about ongoing improvement.

Interpersonal and Communication Skills (Section V.D.4)

Effective written and verbal communication is critical to practicing the science of medicine; style and content of communication is critical to practicing the art of medicine.

Providing fellows a structured curriculum to address the needed skills as well as engaging them in interactive methods of learning, such as role modeling, role playing, direct observation and feedback, etc., are necessary to enable them to become competent in this area. Based on the need for subspecialists to engage in the delivery of critical/complex and sometimes devastating information regarding diagnosis, process and treatment, particular attention must be given to teaching and assessing competence in conducting family meetings for these purposes. “On-the-job” training without structured teaching and feedback is not sufficient.

Effective communication is a requisite skill for optimal functioning of the health care team. The ability to function as both a member and leader of a team are critical skills for the subspecialist who works with referring physicians and agencies, patient and families, as well as other members of the health care system.

One effective way of evaluating communication is through review of the fellow’s correspondence with other health care professionals. A structured process for review of written communication, particularly consults and letters to referring physicians is required. Ad hoc review of written communication does not meet this requirement. Timeliness of completion as well as quality of information provided should be assessed and a mechanism for delivering feedback to the fellow must be ensured. Documentation of competence should be included as part of the written evaluation process.

Professionalism (Section V.D.5)

Medical ethics and professionalism should be emphasized in the didactic curriculum and modeled by the faculty in all aspects of their practice. A structured curriculum with meaningful venues for teaching that extend beyond the traditional lecture to include interactive learning (e.g., small group discussions of vignettes or case studies, computer-based modules, role plays, etc.) will meet this requirement.

Multi-source feedback that includes patients/families and allied health professionals is critical to the professional formation of fellows. Since the fellow will relate to each individual in a unique way it is important to have team members (including the patient and family as part of the team) contribute to the assessment of a fellow’s professionalism. The program should provide a

mechanism to ensure that patients/families and representatives of the health care team assess appropriate aspects of the fellow's professionalism and that this feedback is given to the fellows, preferably as aggregate data, that preserves the anonymity of the evaluators. These evaluations should supplement the evaluations of faculty and peers. A structured mechanism for dissemination and collection of evaluations as well as delivery of feedback to the fellows is required. Timeliness of feedback is also important particularly when there has been a breach of professionalism. A structured mechanism for timely documentation, such as the use of critical incidents or instant evaluations, should be in place. In cases where remediation is needed, the steps should include immediate feedback, the development of an action plan with the fellow that specifically addresses the infraction, ongoing monitoring of behavior, and an identified consequence if improvement is not demonstrated.

Systems-Based Practice (Section V.B.6.)

In order to best serve a patient population, one must develop a familiarity with the natural history and epidemiology of major health problems in the community. A background understanding of the health literacy of the community, along with knowledge of the cultural norms and health beliefs, will improve care delivery. This information becomes helpful in improving patient/family compliance as well. The program must provide a structured curriculum to address all of the elements of this competency as well as opportunities to apply this learning. Particularly relevant to subspecialty fellows is their ability to apply the elements of this competency (e.g., preventive care, resource allocation, cost-effective care, etc.) to help patients navigate the complexities of the health care delivery system. A clinical setting that particularly lends itself to experiential learning and demonstration of the requisite skills is a continuity clinic setting where the fellow has an ongoing therapeutic relationship with patients.

In addition, for three year fellowship programs, fellows must have exposure to the administrative aspects of the delivery of care appropriate to their subspecialty discipline. The required elements may be addressed by having fellows be active participants in division meetings and division conferences where these issues are discussed and solutions to identified problems developed and/or by participating with designated faculty in carrying out administrative responsibilities within the division.

Programs must provide a safe environment that encourages practitioners to identify weaknesses, deficiencies, and errors. The program must ensure that each fellow is actively engaged in activities, under the guidance of experienced faculty, to identify system problems/errors, and to develop and implement system solutions. Morbidity and mortality conference provides an ideal venue for a structured approach to the examination of system errors and the development of system solutions provided the interdisciplinary team that represents the system is involved and the fellow is an active participant in identifying and addressing the problems/errors.

Evaluation (Section VII)

An important consideration in the evaluation of competence is that multiple methods of assessment provide a more comprehensive and valid assessment of the learner. Global evaluations are helpful when used in conjunction with other methods but should not be used as the only method of assessment. The type of assessment methods/tools should be paired in a meaningful way to the tasks of real world practice to be evaluated. For example, if it is important for learners to demonstrate competence as evidence-based practitioners then they need to demonstrate competence in systematically accessing, analyzing and applying evidence which can be accomplished in activities like journal club and care delivery in the clinical setting. The former task may be assessed using direct observation of performance in delivering an evidence-based journal club while the latter may be best assessed using a global assessment of the learner by a faculty member directly interacting with the fellow over some period of time such as a block rotation or several months of a longitudinal experience. The learner and the evaluator should be clear about the criteria on which the judgment of competence will be based. Formative feedback is critical in helping the learner meet the bar that has been set to define competence. Faculty development becomes important for those who will serve as evaluators, ensuring that they understand how to use the assessment tools. Training evaluators has been shown to improve the consistency of the assessment process. Self-assessment is critical in the evaluation of competence. Multi source feedback from various stakeholders such as peers, patients, families and other health care professionals provides valuable feedback to the learner and should be used to inform the process of self-assessment.