

Program Requirements for Graduate Medical Education in the Subspecialties of Anesthesiology

Common Program Requirements are in BOLD

Effective: July 1, 1998

Preface

The program requirements set forth here are to be considered common to all specialties, and are complete only when supplemented, where indicated and individually, by each specialty.

These requirements apply to all of the accredited subspecialty areas and should be consulted along with the individual subspecialty Program Requirements.

I. General Information

- I.A. A residency education program in a subspecialty of anesthesiology is an educational experience of at least 1 year designed to develop advanced knowledge and skills in a specific clinical area. All educational components of the program should be related to program goals. The program design and/or structure must be approved by the Residency Review Committee (RRC) as part of the regular review process.

Completion of an Accreditation Council for Graduate Medical Education (ACGME)- accredited anesthesiology residency, or its equivalent, is a prerequisite for entry into a subspecialty program of anesthesiology.

- I.B. Residency education programs in the subspecialties of anesthesiology may be accredited only in an institution that either sponsors a residency education program in anesthesiology accredited by the ACGME or is related by formal integration agreement with the core program. (The pediatric anesthesiology program is an exception to this requirement. See Program Requirements for Pediatric Anesthesiology, Sec. II.A) Close cooperation between the subspecialty and residency program directors is required.
- I.C. Subspecialty programs will not be approved if they have substantial negative impact on the education of the anesthesiology residents in the core program.

II Institutions

II.A. Sponsoring Institution

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

II.B. Participating Institutions

- II.B.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.**
- II.B.2. Assignment to a participating institution requires a letter of agreement with the sponsoring institution. Such a letter of agreement should:**
 - II.B.2.a) identify the faculty who will assume both educational and supervisory responsibilities for fellows;**
 - II.B.2.b) specify their responsibilities for teaching, supervision, and formal evaluation of fellows, as specified later in this document;**
 - II.B.2.c) specify the duration and content of the educational experience; and**
 - II.B.2.d) state the policies and procedures that will govern resident education during the assignment.**

III Program Personnel and Resources

III.A. Program Director

- III.A.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 program director, the program director should promptly notify the executive director of the Residency Review Committee (RRC) through the Web Accreditation Data System of the Accreditation Council for Graduate Medical Education (ACGME).**
- III.A.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.**
- III.A.3. Qualifications of the program director are as follows:**
 - III.A.3.a) The program director must possess the requisite specialty expertise, as well as documented educational and administrative abilities.**

- III.A.3.b) **The program director must be certified in the specialty by the American Board of Anesthesiology, or possess qualifications judged to be acceptable by the RRC, and shall have had post residency experience in the subspecialty, preferably fellowship training (See Program Requirements for Residency Education in the individual subspecialties for subspecialty certification requirements.)**
- III.A.3.c) **The program director must be appointed in good standing and based at the primary teaching site.**
- III.A.3.d) The program director must be a member of the anesthesiology faculty, spend essentially all professional time in the subspecialty, and devote sufficient time to fulfill all responsibilities inherent in meeting the educational goals of the program.
- III.A.4. **Responsibilities of the program director are as follows:**
- III.A.4.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 supervision of fellows at all participating institutions.**
- III.A.4.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.**
- III.A.4.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.**
- III.A.4.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:**
- III.A.4.d).(1) **the addition or deletion of a participating institution;**
- III.A.4.d).(2) **a change in the format of the educational program;**
- III.A.4.d).(3) **a change in the number of fellows for which the program is approved by the RRC.**
- III.A.4.d).(4) **On review of a proposal for any such major change in a program, the RRC may determine that a site visit is**

necessary.

III.B. Faculty

III.B.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.

III.B.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, sound clinical and teaching abilities, a commitment to their own continuing medical education, and participation in scholarly activities, and must support the goals and objectives of the educational program of which they are a member.

III.B.3. Qualifications of the physician faculty are as follows:

III.B.3.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.

III.B.3.b) The physician faculty must be certified by the American Board of Anesthesiology, or possess qualifications judged to be acceptable by the RRC.

III.B.3.c) The physician faculty must be appointed in good standing to the staff of an institution participating in the program.

III.B.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:

III.B.4.a) the scholarship of *discovery*, as evidenced by peer-reviewed funding or by publication of original research in a peer-reviewed journal;

III.B.4.b) the scholarship of *dissemination*, as evidenced by review articles or chapters in textbooks;

III.B.4.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.

III.B.5. Qualifications of the nonphysician faculty are as follows:

III.B.5.a) Nonphysician faculty must be appropriately qualified in their field.

III.B.5.b) Nonphysician faculty must possess appropriate institutional appointments.

III.B.6. The teaching staff must be organized and have regular documented meetings to review program goals and objectives as well as program effectiveness in achieving them. At least one fellow representative should participate in these reviews.

III.B.7. The teaching staff should periodically evaluate the utilization of the resources available to the program, the contribution of each institution participating in the program, the financial and administrative support of the program, the volume and variety of patients available to the program for educational purposes, the performance of members of the teaching staff, and the quality of supervision of fellows.

III.C. Other Program Personnel

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

III.D. Facilities and Resources

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

III.D.1. Space and Equipment

(See Program Requirements for Residency Education in the individual subspecialties for space and equipment requirements.)

III.D.2. Library

Residents must have ready access to a major medical library, either at the institution where the fellows are located or through arrangement with convenient nearby institutions. There must be access to an on-site library or to a collection of appropriate texts and journals in each institution participating in a residency program. Access to computerized literature search facilities is necessary. On-site libraries and/or collections of texts and journals must be readily available during nights and weekends.

IV Appointment of Fellows

IV.A. Eligibility Criteria

The program director must comply with the criteria for fellow eligibility as specified in the Institutional Requirements and the Program Requirements for Residency Education in the individual subspecialties of Anesthesiology.

IV.B. Number of Fellows

The RRC will approve the number of fellows based upon the adequacy of resources for 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.

IV.C. Transfer of Fellows

To determine the appropriate level of education for fellows who are transferring from another subspecialty fellowship 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 fellowship training for fellows who may leave the program prior to completion of their education.

IV.D. Subspecialty Fellow/Core Residents

The subspecialty fellowship program must not dilute or detract from the educational opportunities available to residents in the core anesthesiology residency program.

V Program Curriculum

V.A. Program Design

V.A.1. Format

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

V.A.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 fellows prior to their assignments.

The director and teaching staff must prepare and comply with written goals for the program. All educational components of the program should be related to the program goals. A written statement of the educational objectives must be given to each fellow. A postgraduate residency must provide advanced education so that the fellows can acquire special skill and knowledge in the specific subspecialty. This education should consist of a cognitive and a technical component. The cognitive component should emphasize the scholarly attributes of self-instruction, teaching, skilled clinical analysis, sound judgment, and research creativity. The technical component must provide appropriate opportunity for the fellows to acquire the operative and other psychomotor skills required for the practice of the subspecialty.

V.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.

V.C. Scholarly Activities: Fellows

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.

V.D. Clinical Components

A sufficient number of patients must be available to ensure appropriate inpatient and outpatient experience for each subspecialty fellow, without adversely affecting the experience of residents in the anesthesiology core program. The total number of fellows is dependent on the program's resources and its capacity to provide an excellent educational experience.

V.E. Didactic Components

Subspecialty conferences, including review of all current complications and deaths, seminars, and clinical and basic science instruction must be regularly scheduled. Active participation of the subspecialty fellow in the planning and the production of these meetings is essential.

VI Duty Hours and the Working Environment

Providing fellows with a sound didactic and clinical education must be carefully planned and balanced with concerns for patient safety and resident 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.

VI.A. Supervision of Fellows

VI.A.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.

VI.A.2. Faculty schedules must be structured to provide fellows with continuous supervision and consultation.

VI.A.3. Faculty and fellows must be educated to recognize the signs of fatigue, and adopt and apply policies to prevent and counteract its potential negative effects.

VI.A.4. A fellow must have the opportunity to provide consultation with faculty supervision. He or she should have clearly defined educational responsibilities for anesthesiology residents, medical students, and professional personnel. These teaching experiences should correlate basic biomedical knowledge with the clinical aspects of the subspecialty.

VI.A.5. There must be close interaction between the core residency program in anesthesiology and the subspecialty program. Lines of responsibility for the anesthesiology fellows and the subspecialty fellow must be clearly defined. It is imperative that the educational program for the subspecialty fellow not adversely affect the education of the anesthesiology residents, in terms of either experience or patient responsibility.

VI.B. Duty Hours and Conditions of Work

VI.B.1. Duty hours are defined as all clinical and academic activities related to the subspecialty program; i.e., patient care (both inpatient and outpatient), administrative duties relative 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.

VI.B.2. Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities.

VI.B.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 1 continuous 24-hour period free from all clinical, educational, and administrative duties.

VI.B.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.

VI.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.

VI.C.1. In-house call must occur no more frequently than every third night, averaged over a 4-week period.

VI.C.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.

VI.C.3. No new patients may be accepted after 24 hours of continuous duty.

VI.C.4. *At-home call (or pager call)* is defined as a call taken from outside the assigned institution.

VI.C.4.a) The frequency of at-home call is not subject to the every-third- night limitation. At-home call, however, 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.

VI.C.4.b) When fellows are called into the hospital from home, the hours they spend in-house are counted toward the 80-hour limit.

VI.C.4.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.

VI.D. Moonlighting

VI.D.1. Because residency 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.

VI.D.2. The program director must comply with the sponsoring institution's written policies and procedures regarding moonlighting, in compliance with the ACGME Institutional Requirements.

VI.D.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*.

VI.E. Oversight

VI.E.1. Each program must have written policies and procedures consistent with the Institutional and Program Requirements for 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.

VI.E.2. Back-up support systems must be provided when patient care responsibilities are unusually difficult or prolonged, or if unexpected circumstances create fatigue sufficient to jeopardize patient care.

VI.F. Duty Hours Exceptions

The RRC for Anesthesiology will not consider requests for exception to the limit to 80 hours per week, averaged monthly.

VI.G. Substance Abuse

The program must have a written policy specifically addressing the needs of anesthesiology and an education program regarding substance abuse.

VII Evaluation

VII.A. Fellow

VII.A.1. Formative Evaluation

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

VII.A.1.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.

VII.A.1.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.

VII.A.1.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.

VII.A.2. Final Evaluation

The program director must provide a written 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.

VII.B. Faculty

The performance of the faculty must be evaluated by the program no less 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.

VII.C. Program

The educational effectiveness of a program must be evaluated at least annually in a systematic manner. In particular, the quality of the curriculum and the extent to which the educational goals have been met by fellows must be assessed by the subspecialty program director, the core anesthesiology program director, and by the Institutional Review Committee on a regular basis. Written evaluations by fellows should be utilized in this process.

VII.C.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.**

VII.C.2. **The program should use fellow performance and outcome assessment in its evaluation of the educational effectiveness of the subspecialty program. The program should maintain a process for using assessment results together with other program evaluation results to improve the subspecialty program.**

VII.C.3. There must be continuing quality improvement, utilization review, and evaluation.

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

(See Program Requirements for Residency Education in the individual subspecialties of Anesthesiology for subspecialty certification requirements for program graduates.)

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