

DRAFT

Program Requirements for Fellowship (CA-4) Education in Obstetric Anesthesiology

In addition to complying with the Program Requirements for Fellowship Education in the Subspecialties of Anesthesiology, programs must comply with the following requirements, which in some cases exceed the Common Requirements (**BOLD**).

I. Introduction

A. Definition and Scope of the Specialty

Obstetric anesthesiology is the subspecialty of anesthesiology devoted to the comprehensive anesthetic management, perioperative care and pain management of women during pregnancy and the puerperium.

B. Duration and Scope of Education

Subspecialty training in obstetric anesthesiology shall be a minimum of twelve months in duration, beginning only after satisfactory completion of an Accreditation Council for Graduate Medical Education (ACGME) accredited residency program in anesthesiology, as required for entrance into the examination system of the American Board of Anesthesiology. Subspecialty training in obstetric anesthesiology is in addition to the minimum requirements described in the Program Requirements for the core program in anesthesiology. Because obstetric anesthesiology education requires an intensive continuum of training, it should not be interrupted by frequent and/or prolonged periods of absence. The majority of the training in obstetric anesthesiology must be spent in the clinical care of pregnant women (and their fetuses).

Goals and Objectives

The subspecialty training program in obstetric anesthesiology must be structured to ensure optimal patient care while at the same time providing fellows with the opportunity to develop skills in clinical care and judgement, teaching, and research. The subspecialist, upon completion of training in obstetric anesthesiology, should be proficient beyond the level of a non-obstetric anesthesiologist, in providing anesthesia care for women, at various degrees of risk, during labor and vaginal delivery and for women undergoing cesarean section, postpartum tubal ligation, dilation and curettage, removal of placenta and similar procedures. They should also be proficient in the anesthetic management of patients with obstetric conditions of early pregnancy. Training should include experience with patients having anesthesia for non-obstetric surgery during pregnancy, women undergoing nonoperative diagnostic and interventional procedures requiring anesthesia and assisted reproductive technology interventions. It is desirable to have training include anesthetic management of women undergoing in utero surgery on the fetus or ex-utero intrapartum treatment (EXIT) procedures with and without neonatal transfer to extracorporeal membrane oxygenation (ECMO). In addition, the subspecialist in obstetric anesthesiology should develop skills in the antenatal evaluation and preparation of both high and low risk parturients and their fetuses prior to and after

anesthesia. The program should provide exposure to a wide variety of clinical problems that can occur in obstetric patients. It must include provision of neuraxial labor analgesia utilizing a variety of techniques, provision of analgesia and anesthesia for spontaneous vaginal delivery, operative vaginal delivery, and elective and emergent cesarean delivery, including general anesthesia for cesarean delivery. In particular, the subspecialist must also have experience with the assessment and management of pregnant women with preexisting chronic illnesses. These may include hereditary thrombophilias and coagulopathy, morbid obesity, moderate to severe cardiac, pulmonary, renal, endocrine and neurologic disease. There must be training in the anesthetic management of pregnant women with infectious diseases affecting women of reproductive age such as herpes and HIV infection. There must also be training in the assessment and management of obstetric conditions such as preeclampsia, management of multiple gestations or abnormal fetal presentation; obstetric hemorrhage and pre-term labor and/or delivery. There must be particular emphasis on exposure to the anesthetic care of pregnant women who are normally referred to maternal fetal medicine specialists for obstetric care. The fellow should also have the opportunity to interact in collegial and collaborative patient care efforts not only with multispecialty medical staff but also with nursing and other allied health professionals caring for obstetric patients. The obstetric anesthesia training program must also emphasize education and scholarship involving the anesthesia care of women during the reproductive years, particularly during pregnancy and the puerperium.

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. There should be an institutional policy governing the educational resources committed to the obstetric anesthesiology 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; and**
- d) **state the policies and procedures that will govern fellow education during the assignment.**

C. Relationship to the Core Residency Program.

Accreditation of the subspecialty program in obstetric anesthesiology will be granted only when there are ACGME accredited core residency programs in anesthesiology and obstetrics and gynecology at the sponsoring institution or by affiliation. The director of the core anesthesiology residency program is responsible for the appointment of the director of the obstetric anesthesiology subspecialty program and determines the activities of the appointee and the duration of the appointment. There must be evidence of close cooperation between the core program and the subspecialty training program. The division of responsibilities between the residents in the core program and the fellows in the subspecialty program must be clearly delineated. The presence of an obstetric anesthesiology fellowship must not compromise the clinical experience and ACGME required number of cases available to the residents in a core program in anesthesiology.

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 (RRC) through the Web Accreditation Data System of the ACGME.**
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. **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 Web 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. Preparation, periodic review and, if necessary, revision of a written outline of the educational goals of the program with respect to the knowledge, skills and other attributes that residents may expect to acquire from each rotation or other aspects of program assignments. This statement must be distributed to residents and members of the teaching staff. It should be readily available for review.**
- f. Selection of residents for appointment to the program should be done in accordance with institutional and departmental policies and procedures guiding interviewing and selection of applicants.**
- g. Selection, supervision and career development of the teaching staff and other program personnel.**
- h. Supervision of residents will be governed by explicit written delineation of supervisory lines of responsibility for the care of patients and education of the residents. Such guidelines must be communicated to all members of the program staff. Residents must be provided with prompt, reliable systems for communication and interaction with supervisory physicians.**

- i. **Implementation of fair procedures, as established by the sponsoring institution, regarding academic discipline and resident complaints or grievances.**
- j. **Preparation of an accurate statistical and narrative description of the program, as requested by the Residency Review Committee (RRC).**
- k. She or he must devote sufficient time to provide substantial leadership to the program and supervision for the fellows.
- l. The Program Director must possess the requisite specialty expertise, as well as documented educational and administrative abilities. The Program Director must have training and/or experience in providing anesthesia care for obstetric patients beyond the requirement for completion of a core anesthesiology residency. The program director should have formal training and/or experience that would generally meet or exceed that associated with the completion of a one-year obstetric anesthesiology fellowship.
- m. The program director in obstetric anesthesiology must be an anesthesiologist who is certified in the specialty by the American Board of Anesthesiology, or possess qualifications judged to be acceptable by the RRC.
- n. The Program Director must be appointed in good standing and based at the primary teaching site for the fellowship program. The program director also must be licensed to practice medicine in the state where the institution that sponsors the program is located (in certain federal programs unrestricted medical licensure in any state may be accepted) and have an appointment in good standing to the medical staff of an institution participating in the program.

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.** Although the number of faculty members involved in teaching fellows in obstetric anesthesiology may vary; it is recommended but not required that at least three faculty members, with substantial experience in the anesthetic management of pregnant women be involved and that the work effort of these 3 individuals be equal to or greater than two full-time equivalents, including the program director. The RRC understands that full-time means that the faculty member devotes essentially all of his or her professional time to the obstetric anesthesia program.
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. There must be substantial evidence of active participation (greater than 50% of the time during normal work hours) by qualified physicians with substantial training and/or expertise in obstetric anesthesiology beyond the requirement for completion of a core anesthesiology residency.

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 obstetric anesthesiology.** The faculty must have either training or experience that would generally meet or exceed that associated with the completion of a one-year obstetric anesthesiology fellowship. The faculty must possess expertise in the care of obstetric patients and must have a continuous and meaningful role in the subspecialty training program. The program must include teaching which is multidisciplinary; by conferences, rounds, seminars, and facilitated self-learning by faculty in obstetrics, particularly maternal-fetal fellowship, neonatology, and obstetric anesthesiology. It is strongly encouraged that the obstetric anesthesia program exist in an environment with a maternal-fetal residency training program but at the very least that there must be active perinatology and neonatology services. The obstetric anesthesiology program director and faculty responsible for teaching fellows in obstetric anesthesiology must maintain an active role in scholarly pursuits specific to obstetric anesthesiology and women's health, as evidenced by participation in continuing medical education, as well as by involvement in research that pertains to the care of woman during the reproductive years, particularly obstetric patients.
- b) **The physician faculty must be certified in the specialty by the American Board of Anesthesiology, or possess qualifications judged to be acceptable by the RRC.**
- c) **The physician faculty must be appointed in good standing to the staff of an institution participating in the program.**
- d. There should be faculty in obstetrics, maternal-fetal medicine, and neonatology to provide multidisciplinary instruction.
- e. The faculty may include members from the core anesthesiology program who have subspecialty expertise, including critical care.

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;

- 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, facilitated self learning 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 that pertain specifically to the care of women during the reproductive years, particularly during pregnancy and the puerperium.

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 obstetric anesthesiology fellowship program.

IV. Clinical and Educational Facilities and Resources

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

- A. A labor and delivery unit with labor and operating rooms adequately designed and equipped for the management of obstetric patients and neonates. A postanesthesia care area adequately designed and equipped for the management of obstetric patients must be located nearby.
- B. Critical care of both newborns and obstetric patients.

- C. Both high and low risk obstetric patients in sufficient volume and variety to provide a broad educational experience for each fellow without adversely affecting the experience of residents in the anesthesiology core program. More emphasis should be placed on the variety and acuity of obstetric patients rather than the volume. The presence of a maternal-fetal medicine training program is preferred but at the very least, maternal-fetal medicine specialists must be available.
- D. The Labor and Delivery Unit must have the personnel and other resources required for performing a trial of labor and vaginal delivery in women who have had a prior cesarean delivery.
- E. Maternal and fetal monitoring and advanced life-support equipment representative of current levels of technology.
- F. Allied health staff and other support personnel.
- G. Facilities that are readily available at all times to provide prompt diagnostic and laboratory measurements pertinent to the care of obstetric patients. These include but are not limited to measurement of blood chemistries, blood gases and pH, oxygen saturation, hematocrit/hemoglobin, and coagulation function.
- H. Conveniently located library facilities and space for research and teaching conferences in obstetric anesthesiology.
- I. Adequate office area, computer, printer, internet connection with access to on-line medical publications, call rooms and facilities to support fellowship training.

IV. Fellow Appointments

A. Eligibility Criteria

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

B. Number of Fellows

The RRC may approve the number of fellows based upon 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. Clinical resources must be adequate to support the education of fellows and of residents in the affiliated core residency program in anesthesiology.

C. Fellow Transfers

To determine the appropriate level of education for fellows who are transferring from another 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 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 fellows 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. All educational components should be related to the program goals.

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.

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.

1. Clinical Curriculum

The fellow in obstetric anesthesiology must gain clinical experience in a variety of clinical scenarios affecting the care of pregnant and peripartum women. Although the fellow in obstetric anesthesiology should gain the majority of her/his clinical experience providing hands-on clinical care, they should also care for some patients while simultaneously supervising core residents in anesthesiology, both being ultimately supervised by a faculty anesthesiologist with substantial expertise in obstetric anesthesia as discussed above. It is the expectation that the fellow will have a significantly different and essential experience when simultaneously caring for a patient and functioning in the role of teacher/supervisor of a core resident. The goal of having subspecialty fellows teach and supervise core residents while also caring for patients is to prepare the subspecialty fellows to become faculty supervisors and teachers for the next generation of obstetric anesthesiologists. The following represents a guideline for the minimum acceptable clinical experience for each fellow:

- a. A minimum of 8 months operating room and labor and delivery clinical activity is required. The fellow must have exposure to the management of pregnant women with a (suspected) difficult airway. In addition, the fellow should provide anesthetic management for high risk parturients. High risk parturients include but are not limited to women with preeclampsia, morbid obesity, cardiac, pulmonary, renal, endocrine or neurologic disease; multiple gestations or abnormal fetal presentation; molar pregnancies, obstetric hemorrhage, pre-term labor and/or delivery, substance abuse, maternal thrombophilias and coagulopathies. The fellow should participate in the management of high-risk patients who also require advanced airway management and invasive monitoring.
- b. The fellow must personally provide anesthesia for a minimum of 199 procedures involving pregnant women to include the following:

Anesthesia for Vaginal Delivery with a maternal co-morbidity	60
Anesthesia for Vaginal Delivery with a high risk obstetric/fetal condition	40
Anesthesia for Cesarean Delivery with a maternal co-morbidity	40
Anesthesia for Cesarean Delivery with a high risk obstetric/fetal condition	40
Anesthesia during the 1 st , 2 nd , 3 rd trimester – other than cesarean delivery	15
General Anesthesia for Cesarean Delivery	4

The obstetric anesthesia fellow is also required to have experience in the anesthetic management of both spontaneous and operative vaginal delivery, retained placenta, cervical dilation and uterine curettage, postpartum tubal ligation, cervical cerclage, and assisted reproductive endocrinology interventions. The anesthetic management of vaginal delivery should include experience with all types of neuraxial analgesia (including epidural, spinal, combined spinal and epidural analgesia), and different methods of maintaining analgesia (such as bolus, continuous infusion, patient controlled epidural analgesia). Experience with the anesthetic management of ex-utero intrapartum treatment (EXIT) procedures with and without neonatal transfer to extracorporeal membrane oxygenation (ECMO) and anesthesia for fetal surgery is desirable.

- a. Additional clinical experience within the full one-year fellowship should include consultation and management for pregnant patients requiring non-obstetric surgery.
- b. The program must develop methods for the fellow to gain knowledge in interpretation of antepartum and intrapartum fetal surveillance tests. A rotation in antepartum testing/antepartum management unit is desirable.
- c. The program must develop methods for fellows to acquire the knowledge and skills necessary for routine and advanced neonatal resuscitation and NALS (Neonatal Advanced Life Support) certification. It is desirable that

there be at least a 2 week rotation in a neonatal critical care unit, with concentrated experience in neonatal resuscitation, and NALS certification before graduation.

- d. The fellow must conduct or at minimum be substantially involved in a scholarly project during the course of training, which ideally leads to presentation at a national meeting and publication. The project may be related to the scholarship of discovery, the scholarship of dissemination, or the scholarship of case management. The fellow must have a faculty mentor for the project with evidence of support and guidance from that mentor. The time for scholarly pursuits can be designated in blocks or can run through the entire continuum of training.

2. Didactic Curriculum

The didactic curriculum can be provided through lectures, conferences, facilitated self learning and workshops and should supplement clinical experience necessary for the fellow to acquire the knowledge to care for obstetric patients and conditions as outlined in the guidelines for the minimum clinical experience. The didactic components should focus on the following areas with specific emphasis on the anesthetic implications of the altered maternal physiologic state, the impact of interventions on the fetus, and the care of the high-risk pregnant patient. Some of the topics listed constitute components of the Core Residency in Anesthesiology. They are included in the requirements for the Obstetric Anesthesiology Fellowship to emphasize their importance to the foundation of the discipline of obstetric anesthesiology and stress the need to reinforce and enrich them in the fellowship educational program. It is expected that the obstetric anesthesiology fellow will acquire knowledge that is significantly broader and deeper than that expected of a core program resident. For instance, whereas both core residents and fellows should be expected to know that fetal acidosis results in increased fetal drug exposure with amide local anesthetics, only the fellow would be expected to know the potential differential effects of local anesthetics on cardiovascular adaptations to asphyxia at various points during gestation. This must include in-depth knowledge and application of literature supporting evidence-based obstetric anesthesiology care.

1. Maternal physiology
2. Embryology and teratogenicity
3. Fetal and placental physiology and pathophysiology
4. Neonatal physiology and neonatal resuscitation
5. Obstetric management of labor, including normal labor and abnormal labor; indications for urgent and emergent delivery
6. Tocolytic therapy
7. Pain of labor, pain pathways
8. Local anesthetic use in obstetrics; recognition and treatment of complications
9. Neuraxial opioid use in obstetrics; recognition and treatment of complications
10. Regional anesthetic techniques; recognition and treatment of complications
11. General anesthesia use in obstetrics; recognition and treatment of complications
12. Anesthetic and obstetric management of obstetric complications and emergencies including preeclampsia, eclampsia, placental abruption, placenta previa, placenta accreta, vasa previa, uterine rupture, uterine atony, amniotic fluid embolism, and umbilical cord prolapse

13. Medical disease and pregnancy: hypertensive disorders, morbid obesity, respiratory disorders, cardiac disorders, endocrine disorders, autoimmune disorders, hematologic and coagulation disorders, neurologic disorders, substance abuse, HIV infection and AIDS
14. Cardiopulmonary resuscitation and advanced cardiac life support of the pregnant women.
15. Postpartum tubal ligation
16. Post-operative pain management in the parturient
17. Non-obstetric surgery during pregnancy
18. Effects of maternal medications on breastfeeding
19. Ethical issues during pregnancy
20. Principles and ethics of research in the pregnant women, their fetuses and neonates.
21. Organization and management of an obstetric anesthesia service
22. Transport and monitoring of critically ill parturients within the hospital and between hospitals
23. Maternal mortality
24. Medical economics and public health of women during reproductive years as it applies to obstetric anesthesiology. For example, availability of obstetric analgesia, reducing cesarean section rates, etc.

Obstetric anesthesiology subspecialty conferences, including lectures, interactive conferences, hands-on workshops, morbidity and mortality conferences, obstetric case review conferences, journal reviews, and research seminars must be regularly attended. Active participation of the obstetric anesthesiology fellow in the planning and production of these conferences is essential. However, the faculty should be the conference leaders in the majority of the sessions. Attendance by subspecialty fellows at multidisciplinary conferences, especially maternal fetal medicine and neonatology relevant to obstetric anesthesiology, is encouraged.

3. Curriculum of Scholarly Activity

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 related to obstetric anesthesiology and women's health care during reproductive years. Graduate medical education must take place in an environment of inquiry and scholarship in which fellows participate in the development of new knowledge, learn to evaluate research findings, and develop habits of inquiry as a continuing professional responsibility. The responsibility for establishing and maintaining an environment of inquiry and scholarship rests with the program director and the faculty. While not all members of a teaching staff must be investigators, the staff as a whole must demonstrate broad involvement in scholarly activity. This activity should include:

1. Active participation of the teaching staff in clinical discussions, rounds, and conferences in a manner that promotes a spirit of inquiry and scholarship. Scholarship implies an in-depth understanding of basic mechanisms of normal and abnormal states and the application of current evidence-based knowledge to practice.
2. Participation in journal clubs and research conferences.

3. Active participation in regional or national professional and scientific societies specific to women's health, particularly through presentations at the organizations' meetings and publications in their journals.
4. Participation in research, particularly in projects that result in publications or presentations at regional and national scientific meetings.
5. Offering of guidance and technical support (eg, research design, statistical analysis) for residents involved in research.
6. Provision of support for resident participation in scholarly activities.
7. Opportunity to participate in the teaching of residents in the core anesthesiology program, obstetric residents and other allied health care providers and patients.

F. The ACGME Competencies

Each program must require its fellows to obtain competence in the six areas listed below to the level expected of a new practitioner in Obstetric Anesthesiology. 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;**
- 2. *Medical Knowledge* about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patient care;**
- 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;**
- 4. *Interpersonal and communication skills* that result in the effective exchange of information and collaboration with patients, their families, and other health professionals;**
- 5. *Professionalism*, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to patients of diverse backgrounds;**
- 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.**

The training program in obstetric anesthesiology should continue to develop training in the six global competencies beyond that of the core program. The Program Director, together with the

teaching staff, must provide a plan of instruction for teaching and evaluating the global competencies as they relate specifically to women's health, particularly during pregnancy. Obstetric anesthesiologists usually attend to patients who are awake and alert for extended periods of time and interact with a variety of health care professionals. Furthermore, women are more frequently victims of unique societal problems such as domestic violence, abortion trauma, and rape which can affect a physician's interactions with a patient. Teaching/evaluating patient care skills, interpersonal/communication skills and professionalism are critical to the success of a trainee in a women's health care – particularly since they will interact with a wide range of medical and allied health professionals. There must be a system in place for feedback and 360° evaluation of the fellow.

VI. Fellow 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 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 its 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 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.**
- 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 1 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.

D. 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.

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

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, 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.

b) When fellows are called into the hospital from home, the hours fellows 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. 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.

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. Faculty responsible for teaching must provide critical evaluations of each fellow's progress and competence to the Program Director at the end of 3, 6 and 12 months of training.

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. The Program Director or designee must inform each fellow of the results of the evaluations at 3, 6 and 12 months during training, and advise the fellow of areas needing improvement and document the communication.

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.

d) Assessment should include essential and acquired character attributes, acquired character attributes, fund of knowledge, clinical judgment, and clinical psychomotor skills, as well as specific tasks and skills for patient management and critical analysis of clinical situations, including the ACGME global competencies.

e) Periodic evaluation of patient care (quality assurance) is mandatory. Fellows in obstetric anesthesiology should be involved in continuing quality improvement and risk management.

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. Fellows in obstetric anesthesiology must obtain overall satisfactory evaluations at the completion of 12 months training to receive credit for training.

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.

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.**

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

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 by the American Board of Anesthesiology should communicate with the office of the board regarding the full requirements for certification.