Accreditation Council for
Graduate Medical Education

ACGME Program Requirements for Graduate Medical Education in Anesthesiology

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Common Program Requirements are in BOLD

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

Introduction

Int.A. **Residency is an essential dimension of the transformation of the medical student to the independent practitioner along the continuum of medical education. It is physically, emotionally, and intellectually demanding, and requires longitudinally-concentrated effort on the part of the resident.**

The specialty education of physicians to practice independently is experiential, and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires the resident physician to assume personal responsibility for the care of individual patients. For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept--graded and progressive responsibility--is one of the core tenets of American graduate medical education. Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring each resident's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishing a foundation for continued professional growth.

Int.B. Definition and Scope of the Specialty

The Review Committee representing the medical specialty of anesthesiology exists in order to foster and maintain the highest standards of education and educational facilities in anesthesiology, which the Review Committee defines as the practice of medicine dealing with the peri-operative management of patients. This includes the peri-operative/peri-procedural management of patients during surgical and other therapeutic and diagnostic procedures. This management encompasses the pre-operative preparation of the patient and their peri-operative maintenance of normal physiology, as well as the post-operative relief and prevention of pain. An anesthesiologist is skilled in the management and diagnosis of critically-ill patients, including those experiencing cardiac arrest, and in the diagnosis and management of acute, chronic, and cancer-related pain. These goals are achieved through a thorough understanding of physiology and pharmacology, and the ability to conduct, interpret, and apply the results of medical research. Finally, the anesthesiologist is skilled in the leadership of health services delivery, prudent fiscal resource stewardship, and quality

improvement, as well as the supervision, education, and evaluation of the performance of personnel, both medical and paramedical, involved in peri-operative and peri-procedural care.

Int.C. The educational programs in anesthesiology are configured in 36-month and 48-month formats. The latter includes 12 months of education in fundamental clinical skills of medicine, and both include 36 months of education in clinical anesthesia (CA-1, CA-2, and CA-3 years). (Core)*

I. Institutions

I.A. Sponsoring Institution

One sponsoring institution must assume ultimate responsibility for the program, as described in the Institutional Requirements, and this responsibility extends to resident assignments at all participating sites. (Core)

The sponsoring institution and the program must ensure that the program director has sufficient protected time and financial support for his or her educational and administrative responsibilities to the program. (Core)

I.A.1. The sponsoring institution must also sponsor or be affiliated with ACGME-accredited residencies in at least the specialties of general surgery and internal medicine. (Core)

I.B. Participating Sites

I.B.1. There must be a program letter of agreement (PLA) between the program and each participating site providing a required assignment. The PLA must be renewed at least every five years. (Core)

I.B.1.a) The PLA should:

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

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

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

I.B.1.e) state the policies and procedures that will govern resident education during the assignment. (Detail)

I.B.2. The program director must submit any additions or deletions of participating sites routinely providing an educational experience, required for all residents, of one month full time equivalent (FTE) or more through the Accreditation Council for Graduate Medical Education (ACGME) Accreditation Data System (ADS). (Core)

I.B.3. The majority of rotations for the anesthesiology program must occur at the sponsoring institution. (Core)

I.B.3.a) Participating sites must provide rotations that the sponsoring institution is unable to provide. (Core)

I.B.3.a).(1) These sites must be identified in ADS with the educational justification and be supported through Case Log data. (Core)

I.B.3.a).(2) Residents should not be required to rotate among multiple participating sites. (Detail)

I.B.3.a).(3) Assignments to a participating site should not exceed six months. (Detail)

I.B.3.a).(3).(a) Assignments of greater than six months to a participating site must be approved in advance by the Review Committee. (Core)

I.B.3.a).(4) International rotations should be limited to the final year of training and should be limited to three months or less. (Detail)

I.B.3.a).(4).(a) International rotations must be approved by the Review Committee through a written request submitted by the program director. (Detail)

I.B.3.a).(4).(b) There should be a signed agreement between the program and the international site or organization which addresses educational resources; responsibilities for expenses for the rotation, including travel and living expenses; and the plan for monitoring ACGME duty hour requirements. (Detail)

I.B.3.a).(4).(c) The program director should reapply for approval of the international rotation if there is a change in educational resources; responsibilities for expenses for the rotation, including travel and living expenses; or the plan for monitoring ACGME duty hour requirements. (Detail)

II. Program Personnel and Resources

II.A. Program Director

II.A.1. There must be a single program director with authority and accountability for the operation of the program. The sponsoring institution's GMEC must approve a change in program director. (Core)

II.A.1.a) The program director must submit this change to the ACGME

via the ADS. (Core)

II.A.2. **The program director should continue in his or her position for a length of time adequate to maintain continuity of leadership and program stability.** (Detail)

II.A.3. **Qualifications of the program director must include:**

II.A.3.a) **requisite specialty expertise and documented educational and administrative experience acceptable to the Review Committee;** (Core)

II.A.3.b) **current certification in the specialty by the American Board of** Anesthesiology**,** the American Osteopathic Board of Anesthesiology (AOBA), **or specialty qualifications that are acceptable to the Review Committee;** (Core)

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

II.A.3.d) faculty experience, leadership, organizational, and administrative qualifications; and, (Core)

II.A.3.e) demonstrated ongoing academic achievements in anesthesiology, including publications, the development of educational programs, or the conduct of research. (Core)

II.A.4. **The program director must administer and maintain an educational environment conducive to educating the residents in each of the ACGME competency areas.** **(Core)**

The program director must:

II.A.4.a) **oversee and ensure the quality of didactic and clinical education in all sites that participate in the program;** (Core)

II.A.4.b) **approve a local director at each participating site who is accountable for resident education;** (Core)

II.A.4.c) **approve the selection of program faculty as appropriate;** (Core)

II.A.4.d) **evaluate program faculty;** (Core)

II.A.4.e) **approve the continued participation of program faculty based on evaluation;** (Core)

II.A.4.f) **monitor resident supervision at all participating sites;** (Core)

II.A.4.g) **prepare and submit all information required and requested by the ACGME.** (Core)

II.A.4.g).(1) **This includes but is not limited to the program application forms and annual program updates to the ADS, and ensure that the information submitted is accurate and complete.** (Core)

II.A.4.h) **ensure compliance with grievance and due process procedures as set forth in the Institutional Requirements and implemented by the sponsoring institution;** (Detail)

II.A.4.i) **provide verification of residency education for all residents, including those who leave the program prior to completion;** (Detail)

II.A.4.j) **implement policies and procedures consistent with the institutional and program requirements for resident duty hours and the working environment, including moonlighting,** (Core)

II.A.4.j).(1) **and, to that end, must:**

II.A.4.j).(2) **distribute these policies and procedures to the residents and faculty;** (Detail)

II.A.4.j).(3) **monitor resident duty hours, according to sponsoring institutional policies, with a frequency sufficient to ensure compliance with ACGME requirements;** (Core)

II.A.4.j).(4) **adjust schedules as necessary to mitigate excessive service demands and/or fatigue; and,** (Detail)

II.A.4.j).(5) **if applicable, monitor the demands of at-home call and adjust schedules as necessary to mitigate excessive service demands and/or fatigue.** (Detail)

II.A.4.k) **monitor the need for and ensure the provision of back up support systems when patient care responsibilities are unusually difficult or prolonged;** (Detail)

II.A.4.l) **comply with the sponsoring institution's written policies and procedures, including those specified in the Institutional Requirements, for selection, evaluation and promotion of residents, disciplinary action, and supervision of residents;** (Detail)

II.A.4.m) **be familiar with and comply with ACGME and Review Committee policies and procedures as outlined in the ACGME Manual of Policies and Procedures;** (Detail)

II.A.4.n) **obtain review and approval of the sponsoring institution's GMEC/DIO before submitting information or requests to the ACGME, including:** (Core)

II.A.4.n).(1) **all applications for ACGME accreditation of new programs;** (Detail)

II.A.4.n).(2) **changes in resident complement;** (Detail)

II.A.4.n).(3) **major changes in program structure or length of training;** (Detail)

II.A.4.n).(4) **progress reports requested by the Review Committee;** (Detail)

II.A.4.n).(5) **requests for increases or any change to resident duty hours;** (Detail)

II.A.4.n).(6) **voluntary withdrawals of ACGME-accredited programs; and,** (Detail)

II.A.4.n).(7) **requests for appeal of an adverse action;** (Detail)

II.A.4.n).(8) **appeal presentations to a Board of Appeal or the ACGME.** (Detail)

II.A.4.o) **obtain DIO review and co-signature on all program application forms, as well as any correspondence or document submitted to the ACGME that addresses:** (Detail)

II.A.4.o).(1) **program citations, and/or,** (Detail)

II.A.4.o).(2) **request for changes in the program that would have significant impact, including financial, on the program or institution.** (Detail)

II.A.4.p) receive protected time to lead the program, including time for administrative duties, curriculum and faculty development, Milestone validation, and education research, as well as didactic and other resident education activities such as simulation. (Core)

II.A.4.p).(1) Programs with one-20 residents must provide a minimum of 20~~%~~ percent protected time for the program director. (Core)

II.A.4.p).(2) Programs with more than 20 residents must provide a minimum of 40~~%~~ percent protected time for the program director. (Core)

II.A.4.q) maintain oversight of resident education in fundamental clinical skills of medicine; (Core)

II.A.4.q).(1) When 12 months of education in fundamental clinical skills of medicine is approved as part of the accredited program,

the program director must maintain oversight for all rotations, and must approve the rotations for individual residents. (Core)

II.A.4.q).(1).(a) The program director must review written resident performance evaluations from each clinical service on which each resident rotates on a quarterly basis. (Core)

II.A.4.q).(2) When a resident completes education in fundamental clinical skills of medicine in another accredited program, the anesthesiology program director must ensure that he/she receives the resident's quarterly written performance evaluations. (Core)

II.A.4.r) ensure regular review of the residents' clinical experience logs and verify their accuracy and completeness when they are transmitted to the Review Committee; (Core)

II.A.4.r).(1) The program director must ensure that experience logs are submitted annually to the Review Committee in accordance with the format and the due date specified by the Committee. (Core)

II.A.4.s) ensure that the program has a written policy and an educational program regarding substance abuse as it relates to physician well-being that specifically addresses the needs of anesthesiology; (Core)

II.A.4.t) determine sequencing of rotations; (Detail)

II.A.4.u) monitor the appropriate distribution of cases among the residents; and, (Core)

II.A.4.v) ensure that service commitments do not compromise the achievement of educational goals and objectives. (Core)

II.B. Faculty

II.B.1. At each participating site, there must be a sufficient number of faculty with documented qualifications to instruct and supervise all residents at that location. (Core)

The faculty must:

II.B.1.a) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; and to demonstrate a strong interest in the education of residents; and, (Core)

II.B.1.b) administer and maintain an educational environment conducive to educating residents in each of the ACGME

competency areas. (Core)

II.B.2. **The physician faculty must have current certification in the specialty by the American Board of** Anesthesiology (ABA), the American Osteopathic Board of Anesthesiology (AOBA)**, or possess qualifications judged acceptable to the Review Committee.** (Core)

II.B.3. **The physician faculty must possess current medical licensure and appropriate medical staff appointment.** (Core)

II.B.4. **The nonphysician faculty must have appropriate qualifications in their field and hold appropriate institutional appointments.** (Core)

II.B.5. **The faculty must establish and maintain an environment of inquiry and scholarship with an active research component.** (Core)

II.B.5.a) **The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.** (Detail)

II.B.5.b) **Some members of the faculty should also demonstrate scholarship by one or more of the following:**

II.B.5.b).(1) **peer-reviewed funding;** (Detail)

II.B.5.b).(2) **publication of original research or review articles in peer reviewed journals, or chapters in textbooks;** (Detail)

II.B.5.b).(3) **publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings; or,** (Detail)

II.B.5.b).(4) **participation in national committees or educational organizations.** (Detail)

II.B.5.c) **Faculty should encourage and support residents in scholarly activities.** (Core)

II.B.5.d) In aggregate, the total of the program's faculty scholarly productivity should have all of these types of scholarly activity. (Detail)

II.B.5.e) If the program is unable to fulfill one aspect of this requirement, the curriculum must include educational activities for the residents in the deficient component. (Core)

II.B.6. The members of the faculty must have varying interests, capabilities, and backgrounds, and include individuals who have specialized expertise in the subspecialties of anesthesiology, including critical care, obstetric anesthesia, pediatric anesthesia, neuroanesthesia, cardiothoracic anesthesia, and pain medicine, and also in research. (Core)

II.B.6.a) Didactic and clinical teaching should be provided by faculty members with documented interests and expertise in the subspecialty involved. (Detail)

II.B.7. The number of faculty members must be sufficient to provide each resident with adequate supervision, which shall not vary substantially with the time of day or the day of the week. (Core)

II.B.8. Designated faculty members must be readily and consistently available for consultation and teaching. (Core)

II.C. Other Program Personnel

The institution and the program must jointly ensure the availability of all necessary professional, technical, and clerical personnel for the effective administration of the program. (Core)

II.D. Resources

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

II.D.1. There must be adequate space and equipment for the educational program, including meeting rooms, classrooms with visual and other educational aids, study areas for residents, office space for faculty members and residents, diagnostic and therapeutic facilities, laboratory facilities, computer support, and appropriate on-call facilities for male and female residents and faculty members. (Core)

II.E. Medical Information Access

Residents must have ready access to specialty-specific and other appropriate reference material in print or electronic format. Electronic medical literature databases with search capabilities should be available. (Detail)

III. Resident Appointments

III.A. Eligibility Criteria

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

III.A.1. Eligibility Requirements – Residency Programs

III.A.1.a) All prerequisite post-graduate clinical education required for initial entry or transfer into ACGME-accredited residency programs must be completed in ACGME-accredited residency programs, or in Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians

of Canada (CFPC)-accredited residency programs located in Canada. Residency programs must receive verification of each applicant's level of competency in the required clinical field using ACGME or CanMEDS Milestones assessments from the prior training program. (Core)

III.A.1.a).(1) Residents entering a 36-month anesthesiology program that does not include education in fundamental clinical skills of medicine must have successfully completed 12 months of education in fundamental clinical skills of medicine in a program that is ACGME-accredited or RCPSC-accredited located in Canada. (Core)

III.A.1.a).(1).(a) If such residents have also been accepted into an anesthesiology program, then in order to be accepted into the CA-1 year, they must demonstrate satisfactory abilities on quarterly written performance evaluations prior to starting their education in fundamental clinical skills of medicine. (Core)

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

III.A.1.c) **A Review Committee may grant the exception to the eligibility requirements specified in Section III.A.2.b) for residency programs that require completion of a prerequisite residency program prior to admission.** (Core)

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

III.A.2. **Eligibility Requirements – Fellowship Programs**

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

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

III.A.2.b) **Fellow Eligibility Exception**

III.A.2.b).(1) **A Review Committee may grant the following exception to the fellowship eligibility requirements:**

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

III.A.2.b).(3) **Assessment by the program director and fellowship selection committee of the applicant's suitability to enter the program, based on prior training and review of the summative evaluations of training in the core specialty; and** (Core)

III.A.2.b).(4) **Review and approval of the applicant's exceptional qualifications by the GMEC or a subcommittee of the GMEC; and** (Core)

III.A.2.b).(5) **Satisfactory completion of the United States Medical Licensing Examination (USMLE) Steps 1, 2, and, if the applicant is eligible, 3, and;** (Core)

III.A.2.b).(6) **For an international graduate, verification of Educational Commission for Foreign Medical Graduates (ECFMG) certification; and,** (Core)

III.A.2.b).(7) **Applicants accepted by this exception must complete fellowship Milestones evaluation (for the purposes of establishment of baseline performance by the Clinical Competency Committee), conducted by the receiving fellowship program within six weeks of matriculation. This evaluation may be waived for an applicant who has completed an ACGME International-accredited residency based on the applicant's Milestones evaluation conducted at the conclusion of the residency program.** (Core)

III.A.2.b).(7).(a) **If the trainee does not meet the expected level of Milestones competency following entry into the fellowship program, the trainee must undergo a period of remediation, overseen by the Clinical Competency Committee and monitored by the GMEC or a subcommittee of the GMEC. This period of remediation must not count toward time in fellowship training.** (Core)

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

III.B. Number of Residents

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

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

III.B.2. There must be a minimum of nine residents with, on average, three appointed in each of the CA-1, CA-2, and CA-3 years. (Core)

III.B.3. Any proposed increase in the number of residents must receive prior approval from the Review Committee. (Core)

III.C. Resident Transfers

III.C.1. Before accepting a resident who is transferring from another program, the program director must obtain written or electronic verification of previous educational experiences and a summative competency-based performance evaluation of the transferring resident. **(Detail)**

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

III.D. Appointment of Fellows and Other Learners

The presence of other learners (including, but not limited to, residents from other specialties, subspecialty fellows, PhD students, and nurse practitioners) in the program must not interfere with the appointed residents' education. (Core)

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

IV. Educational Program

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

IV.A.1. Overall educational goals for the program, which the program must make available to residents and faculty; (Core)

IV.A.1.a) The education must culminate in sufficiently independent responsibility for clinical decision-making and patient care, so that the graduating resident exhibits sound clinical judgment in a wide variety of clinical situations and can function as a leader of peri-operative care teams. (Core)

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

IV.A.2.a) As the resident advances through the program, goals and objectives must reflect the opportunity to learn to plan and administer anesthesia care for patients with more severe and complicated diseases, as well as for patients who undergo more complex surgical procedures. (Core)

IV.A.3. Regularly scheduled didactic sessions; (Core)

IV.A.3.a) The curriculum must contain didactic instruction through a variety of learning opportunities occurring in conference, in the clinical setting or online that encompasses clinical anesthesiology and related areas of basic science. (Core)

IV.A.3.b) Other topics from internal medicine that are important for the pre-operative preparation of the patient, from surgery as to the nature of the surgical procedure affecting anesthetic care, and from obstetrics that impacts anesthetic management of the patient, should be included. (Core)

IV.A.3.b).(1) The material covered in the didactic program must demonstrate appropriate continuity and sequencing to ensure that residents are ultimately exposed to all subjects at regularly held learning exercises. (Core)

IV.A.3.b).(2) There should be evidence of regular faculty member participation in didactic sessions. Detail)

IV.A.3.b).(3) The program director and faculty members from other disciplines and other institutions should conduct these sessions. (Detail)

IV.A.4. Delineation of resident responsibilities for patient care, progressive responsibility for patient management, and supervision of residents over the continuum of the program; and, (Core)

IV.A.5. ACGME Competencies

The program must integrate the following ACGME competencies into the curriculum: (Core)

IV.A.5.a) Patient Care and Procedural Skills

IV.A.5.a).(1) Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents: (Outcome)

IV.A.5.a).(1).(a) must demonstrate competence in fundamental clinical skills of medicine, including:

IV.A.5.a).(1).(a).(i) obtaining a comprehensive medical history; (Outcome)

IV.A.5.a).(1).(a).(ii) performing a comprehensive physical examination; (Outcome)

IV.A.5.a).(1).(a).(iii) assessing a patient's medical conditions; (Outcome)

IV.A.5.a).(1).(a).(iv) making appropriate use of diagnostic studies and tests; (Outcome)

IV.A.5.a).(1).(a).(v) integrating information to develop a differential diagnosis; and, (Outcome)

IV.A.5.a).(1).(a).(vi) implementing a treatment plan. (Outcome)

IV.A.5.a).(1).(b) must demonstrate competence in anesthetic management, including care for:

IV.A.5.a).(1).(b).(i) patients younger than 12 years of age undergoing surgery or other procedures requiring anesthetics; (Outcome)

IV.A.5.a).(1).(b).(i).(a) This experience must involve care for 100 patients younger than 12 years of age. (Core)

IV.A.5.a).(1).(b).(i).(b) Within this patient group, 20 children must be younger than three years of age, including five younger than three months of age. (Core)

IV.A.5.a).(1).(b).(ii) patients who are evaluated for management of acute, chronic, or cancer-related pain

disorders; (Outcome)

IV.A.5.a).(1).(b).(ii).(a) This experience must involve care for 20 patients presenting for initial evaluation of pain. (Core)

IV.A.5.a).(1).(b).(ii).(b) Residents must be familiar with the breadth of pain management, including clinical experience with interventional pain procedures. (Outcome)

IV.A.5.a).(1).(b).(iii) patients scheduled for evaluation prior to elective surgical procedures; (Outcome)

IV.A.5.a).(1).(b).(iv) patients immediately after anesthesia, including direct care of patients in the post-anesthesia-care unit, and responsibilities for management of pain, hemodynamic changes, and emergencies related to the post-anesthesia care unit; and, (Outcome)

IV.A.5.a).(1).(b).(v) critically-ill patients. (Outcome)

IV.A.5.a).(2) **Residents must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. Residents:** (Outcome)

must achieve competence in the delivery of anesthetic care to:

IV.A.5.a).(2).(a) patients undergoing vaginal delivery; (Outcome)

IV.A.5.a).(2).(a).(i) This experience must involve care for 40 patients. (Core)

IV.A.5.a).(2).(b) patients undergoing cesarean sections; (Outcome)

IV.A.5.a).(2).(b).(i) This experience must involve care for 20 patients. (Core)

IV.A.5.a).(2).(c) patients undergoing cardiac surgery; (Outcome)

IV.A.5.a).(2).(c).(i) This experience must involve care for 20 patients. (Core)

IV.A.5.a).(2).(c).(i).(a) The care provided to 10 of these patients must involve the use of cardiopulmonary bypass. (Core)

IV.A.5.a).(2).(d) patients undergoing open or endovascular procedures on major vessels, including carotid surgery, intrathoracic vascular surgery, intra-abdominal vascular surgery, or peripheral vascular surgery; (Outcome)

IV.A.5.a).(2).(d).(i) This experience must involve care for 20 patients, not including surgery for vascular access or repair of vascular access. (Core)

IV.A.5.a).(2).(e) patients undergoing non-cardiac intrathoracic surgery, including pulmonary surgery and surgery of the great vessels, esophagus, and the mediastinum and its structures; (Outcome)

IV.A.5.a).(2).(e).(i) This experience must involve care for 20 patients. (Core)

IV.A.5.a).(2).(f) patients undergoing intracerebral procedures, including those undergoing intracerebral endovascular procedures; (Outcome)

IV.A.5.a).(2).(f).(i) This experience must involve care for 20 patients, the majority of which must involve an open cranium. (Core)

IV.A.5.a).(2).(g) patients for whom epidural anesthetics are used as part of the anesthetic technique or epidural catheters are placed for peri-operative analgesia; (Outcome)

IV.A.5.a).(2).(g).(i) This experience must involve care for 40 patients. (Core)

IV.A.5.a).(2).(h) patients undergoing procedures for complex, immediate life-threatening pathology; (Outcome)

IV.A.5.a).(2).(h).(i) This experience must involve care for 20 patients. (Core)

IV.A.5.a).(2).(i) patients undergoing surgical procedures, including cesarean sections, with spinal anesthetics; (Outcome)

IV.A.5.a).(2).(i).(i) This experience must involve care for 40 patients. (Core)

IV.A.5.a).(2).(j) patients undergoing surgical procedures in whom peripheral nerve blocks are used as part of the anesthetic technique or peri-operative analgesic management; (Outcome)

IV.A.5.a).(2).(j).(i) This experience must involve care for 40 patients. (Core)

IV.A.5.a).(2).(k) patients with acute post-operative pain, including those with patient-controlled intravenous techniques, neuraxial blockade, and other pain-control modalities; (Outcome)

IV.A.5.a).(2).(l) patients whose peri-operative care requires specialized techniques, including: (Outcome)

IV.A.5.a).(2).(l).(i) a broad spectrum of airway management techniques, to include laryngeal masks, fiberoptic intubation, and lung isolation techniques, such as double lumen endotracheal tube placement and endobronchial blockers; (Outcome)

IV.A.5.a).(2).(l).(ii) central vein and pulmonary artery catheter placement, and the use of transesophageal echocardiography and evoked potentials; and, (Outcome)

IV.A.5.a).(2).(l).(iii) use of electroencephalography (EEG) or processed EEG monitoring as part of the procedure, or adequate didactic instruction to ensure familiarity with EEG use and interpretation. (Outcome)

IV.A.5.a).(2).(m) patients undergoing a variety of diagnostic or therapeutic procedures outside the surgical suite. (Outcome)

This must include competency in:

IV.A.5.a).(2).(m).(i) using surface ultrasound and transesophageal and transthoracic echocardiography to guide the performance of invasive procedures and to evaluate organ function and pathology as related to anesthesia, critical care, and resuscitation; (Outcome)

IV.A.5.a).(2).(m).(ii) understanding the principles of ultrasound, including the physics of ultrasound transmission, ultrasound transducer construction, and transducer selection for specific applications, to include being able to obtain images with an understanding of limitations and artifacts; (Outcome)

IV.A.5.a).(2).(m).(iii) obtaining standard views of the heart and inferior vena cava with transthoracic echocardiography allowing the evaluation of myocardial function, estimation of central venous pressure, and gross pericardial/cardiac pathology (e.g., large pericardial effusion); (Outcome)

IV.A.5.a).(2).(m).(iv) obtaining standard views of the heart with transesophageal echocardiography allowing the evaluation of mycardial function and gross pericardial/cardiac pathology (e.g., large pericardial effusion); (Outcome)

IV.A.5.a).(2).(m).(v) using transthoracic ultrasound for the detection of pneumothorax and pleural effusion; (Outcome)

IV.A.5.a).(2).(m).(vi) using surface ultrasound to guide vascular access (both central and peripheral) and to guide regional anesthesia procedures; and, (Outcome)

IV.A.5.a).(2).(m).(vii) describing techniques, views, and findings in standard language. (Outcome)

IV.A.5.b) Medical Knowledge

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

IV.A.5.b).(1) must demonstrate appropriate medical knowledge in the topics related to the anesthetic care of patients, including:

IV.A.5.b).(1).(a) practice management to address issues such as: (Outcome)

IV.A.5.b).(1).(a).(i) operating room management; (Outcome)

IV.A.5.b).(1).(a).(ii) evaluation of types of practice; (Outcome)

IV.A.5.b).(1).(a).(iii) contract negotiations; (Outcome)

IV.A.5.b).(1).(a).(iv) billing arrangements; (Outcome)

IV.A.5.b).(1).(a).(v) professional liability; (Outcome)

IV.A.5.b).(1).(a).(vi) health care finance, legislative, and regulatory issues; and, (Outcome)

IV.A.5.b).(1).(a).(vii) fiscal stewardship of health services delivery. (Outcome)

IV.A.5.b).(1).(b) management skills, to include basic knowledge of organizational culture, decision making, change management, conflict resolution, and negotiation and advocacy; (Outcome)

IV.A.5.b).(1).(c) care of the patient in the continuum of the peri-operative period, to include collaboration with medical and surgical colleagues to: (Outcome)

IV.A.5.b).(1).(c).(i) optimize preoperative patient condition; (Outcome)

IV.A.5.b).(1).(c).(ii) optimize recovery; and, (Outcome)

IV.A.5.b).(1).(c).(iii) engage in discharge planning. (Outcome)

IV.A.5.b).(1).(d) management of the specific needs of patients undergoing diagnostic or therapeutic procedures outside of the surgical suite. (Outcome)

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

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

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

IV.A.5.c).(1) identify strengths, deficiencies, and limits in one's knowledge and expertise; (Outcome)

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

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

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

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

IV.A.5.c).(6) locate, appraise, and assimilate evidence from

scientific studies related to their patients' health problems; (Outcome)

IV.A.5.c).(7) **use information technology to optimize learning; and,** (Outcome)

IV.A.5.c).(8) **participate in the education of patients, families, students, residents and other health professionals.** (Outcome)

IV.A.5.d) **Interpersonal and Communication Skills**

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

Residents are expected to:

IV.A.5.d).(1) **communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;** (Outcome)

IV.A.5.d).(2) **communicate effectively with physicians, other health professionals, and health related agencies;** (Outcome)

IV.A.5.d).(3) **work effectively as a member or leader of a health care team or other professional group;** (Outcome)

IV.A.5.d).(4) **act in a consultative role to other physicians and health professionals; and,** (Outcome)

IV.A.5.d).(5) **maintain comprehensive, timely, and legible medical records, if applicable.** (Outcome)

IV.A.5.d).(6) maintain a comprehensive anesthesia record for each patient, including evidence of pre- and post-operative anesthesia assessment, the drugs administered, the monitoring employed, the techniques used, the physiologic variations observed, the therapy provided, and the fluids administered; and, (Outcome)

IV.A.5.d).(7) create and sustain a therapeutic relationship with patients, engage in active listening, provide information using appropriate language, ask clear questions, provide an opportunity for comments and questions. (Outcome)

IV.A.5.e) **Professionalism**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical

principles. (Outcome)

Residents are expected to demonstrate:

IV.A.5.e).(1) **compassion, integrity, and respect for others;** (Outcome)

IV.A.5.e).(2) **responsiveness to patient needs that supersedes self-interest;** (Outcome)

IV.A.5.e).(3) **respect for patient privacy and autonomy;** (Outcome)

IV.A.5.e).(4) **accountability to patients, society and the profession; and,** (Outcome)

IV.A.5.e).(5) **sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.** (Outcome)

IV.A.5.f) **Systems-based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. (Outcome)

Residents are expected to:

IV.A.5.f).(1) **work effectively in various health care delivery settings and systems relevant to their clinical specialty;** (Outcome)

IV.A.5.f).(2) **coordinate patient care within the health care system relevant to their clinical specialty;** (Outcome)

IV.A.5.f).(3) **incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;** (Outcome)

IV.A.5.f).(4) **advocate for quality patient care and optimal patient care systems;** (Outcome)

IV.A.5.f).(5) **work in interprofessional teams to enhance patient safety and improve patient care quality; and,** (Outcome)

IV.A.5.f).(6) **participate in identifying system errors and implementing potential systems solutions.** (Outcome)

IV.A.6. Curriculum Organization and Resident Experiences

IV.A.6.a) 12 months of the resident's educational program must provide

broad education in fundamental clinical skills of medicine relevant to the practice of anesthesiology. (Core)

IV.A.6.a).(1) Fundamental clinical skills of medicine education completed as part of an anesthesiology residency need not be contiguous, but must be completed before starting the final year of the program. (Core)

IV.A.6.a).(2) At least six months of fundamental clinical skills of medicine education must include experience in caring for inpatients in family medicine, internal medicine, neurology, obstetrics and gynecology, pediatrics, surgery or any of the surgical specialties, or any combination of these. (Core)

IV.A.6.b) During the first 12 months of the program, there must be at least one month, but not more than two month(s) each of critical care and emergency medicine. (Core)

IV.A.6.c) Thirty-six months of education must be in peri-operative medicine. (Core)

IV.A.6.c).(1) This must include experience with a wide spectrum of disease processes and surgical procedures available within the CA-1 through CA-3 years to provide each resident with broad exposure to different types of anesthetic management. (Core)

IV.A.6.c).(2) The program must ensure that the rotations for residents beginning the peri-operative medicine component of the residency be in surgical anesthesia, critical care medicine, and pain medicine. (Core)

IV.A.6.c).(3) Residents must receive training in the complex technology and equipment associated with the practice of anesthesiology. (Core)

IV.A.6.c).(4) Clinical experience in surgical anesthesia, pain medicine, and critical care medicine must be distributed throughout the curriculum in order to provide progressive responsibility in the later stages of the program. (Core)

IV.A.6.d) Residents must have a rotation of at least two weeks in pre-operative medicine. (Core)

IV.A.6.e) Residents must have a rotation of at least two weeks in post-anesthesia care. (Core)

IV.A.6.e).(1) Resident clinical responsibilities in the post-operative care unit must be limited to the care of post-operative patients, with the exception of providing emergency response capability for cardiac arrests and rapid response situations

within the facility. (Core)

IV.A.6.f) Resident education must include a minimum of four months of critical care medicine, (Core)

IV.A.6.f).(1) No more than two months of this experience should occur prior to the CA-1 year. (Core)

IV.A.6.f).(2) Each critical care medicine rotation must be at least one month in duration, with progressive patient care responsibility in advanced rotations. (Core)

IV.A.6.f).(3) Training must take place in units, providing care for both men and women, in which the majority of patients have multisystem disease. (Core)

IV.A.6.f).(4) Residents must actively participate in all patient care activities as fully integrated members of the critical care team. (Core)

IV.A.6.f).(5) During at least two of the required four months of critical care medicine, faculty anesthesiologists experienced in the practice and teaching of critical care must be actively involved in the care of the critically-ill patients seen by residents, and in the educational activities of the residents. (Core)

IV.A.6.g) Resident education must include a minimum of two one-month rotations each in obstetric anesthesia, pediatric anesthesia, neuroanesthesia, and cardiothoracic anesthesia. (Core)

IV.A.6.g).(1) Additional subspecialty and research rotations are encouraged, but resident rotations in a single anesthesia subspecialty must not exceed six months. (Detail)

IV.A.6.g).(2) Advanced subspecialty rotations must not compromise the learning opportunities for residents participating in their initial subspecialty rotations. (Core)

IV.A.6.h) Resident education must include a minimum of three months in pain medicine, including: (Core)

IV.A.6.h).(1) one month in an acute peri-operative pain management rotation; (Core)

IV.A.6.h).(2) one month in a rotation for the assessment and treatment of inpatients and outpatients with chronic pain; and, (Core)

IV.A.6.h).(3) one month of a regional analgesia experience rotation. (Core)

IV.A.6.i) Residents must have at least two weeks of experience managing the anesthetic care of patients undergoing diagnostic or therapeutic procedures outside of the surgical suite. (Core)

IV.A.6.j) In the clinical anesthesia setting, faculty members must not direct anesthesia at more than two anesthetizing locations simultaneously when supervising residents. (Core)

IV.A.6.j).(1) Clinical instruction of residents by non-physician personnel should be limited to not more than 10 percent of total instruction, and should use such personnel only when access to their specific expertise will enhance the educational experience of residents. (Detail)

IV.A.6.k) All residents must obtain advanced cardiac life support (ACLS) certification at least once during the program. (Core)

IV.A.6.l) Residents must participate in at least one simulated clinical experience each year. (Core)

IV.B. Residents' Scholarly Activities

IV.B.1. The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. (Core)

IV.B.2. Residents should participate in scholarly activity. (Core)

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

IV.B.4. Each resident must complete, under faculty member supervision, an academic assignment. (Core)

IV.B.4.a) Academic assignments should include grand rounds presentations; preparation and publication of review articles, book chapters, manuals for teaching or clinical practice; or development, performance, or participation in one or more clinical or laboratory investigations. (Detail)

IV.B.4.a).(1) The outcome of resident investigations should be suitable for presentation at local, regional, or national scientific meetings, and/or result in peer-reviewed abstracts or manuscripts. (Detail)

V. Evaluation

V.A. Resident Evaluation

V.A.1. The program director must appoint the Clinical Competency

Committee. (Core)

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

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

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

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

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

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

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

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

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

V.A.2. **Formative Evaluation**

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

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

V.A.2.b).(1) **provide objective assessments of competence in patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice based**

on the specialty-specific Milestones; (Core)

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

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

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

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

V.A.3. **Summative Evaluation**

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

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

This evaluation must:

V.A.3.b).(1) **become part of the resident's permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy;** (Detail)

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

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

V.B. **Faculty Evaluation**

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

V.B.2. **These evaluations should include a review of the faculty's clinical teaching abilities, commitment to the educational program, clinical knowledge, professionalism, and scholarly activities.** (Detail)

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

V.C. Program Evaluation and Improvement

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

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

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

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

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

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

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

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

V.C.1.a).(3).(d) reviewing the program annually using evaluations of faculty, residents, and others, as specified below. (Detail)

V.C.2. The program, through the PEC, must document formal, systematic evaluation of the curriculum at least annually, and is responsible for rendering a written, annual program evaluation. (Core)

The program must monitor and track each of the following areas:

V.C.2.a) resident performance; (Core)

V.C.2.b) faculty development; (Core)

V.C.2.c) graduate performance, including performance of program graduates on the certification examination; (Core)

V.C.2.c).(1) Upon completion of the program, all residents ~~will~~ should enter the process of certification and take the required examinations at the earliest possible date. At least 70 percent of a program's graduates who are eligible for ABA board certification, averaged over five years, should pass on the first attempt. (Outcome)

V.C.2.c).(2) At least 70 percent of a program's graduates who take the AOBA certification exam, averaged over five years, should pass on the first attempt.(Outcome)

V.C.2.d) program quality; and, (Core)

V.C.2.d).(1) Residents and faculty must have the opportunity to evaluate the program confidentially and in writing at least annually, and (Detail)

V.C.2.d).(2) The program must use the results of residents' and faculty members' assessments of the program together with other program evaluation results to improve the program. (Detail)

V.C.2.e) progress on the previous year's action plan(s). (Core)

V.C.3. The PEC must prepare a written plan of action to document initiatives to improve performance in one or more of the areas listed in section V.C.2., as well as delineate how they will be measured and monitored. (Core)

V.C.3.a) The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes. (Detail)

VI. The Learning and Working Environment

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

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

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

VI.A.1. Patient Safety and Quality Improvement

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

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

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

VI.A.1.a) **Patient Safety**

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

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

VI.A.1.a).(1).(a) **The program, its faculty, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety.** **(Core)**

VI.A.1.a).(1).(b) **The program must have a structure that promotes safe, interprofessional, team-based care.** **(Core)**

VI.A.1.a).(2) **Education on Patient Safety**

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques. **(Core)**

VI.A.1.a).(3) **Patient Safety Events**

Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal

mechanisms for improving patient safety, and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.

VI.A.1.a).(3).(a) **Residents, fellows, faculty members, and other clinical staff members must:**

VI.A.1.a).(3).(a).(i) **know their responsibilities in reporting patient safety events at the clinical site; (Core)**

VI.A.1.a).(3).(a).(ii) **know how to report patient safety events, including near misses, at the clinical site; and, (Core)**

VI.A.1.a).(3).(a).(iii) **be provided with summary information of their institution's patient safety reports. (Core)**

VI.A.1.a).(3).(b) **Residents must participate as team members in real and/or simulated interprofessional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions. (Core)**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

VI.A.2. **Supervision and Accountability**

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

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

VI.A.2.a).(1) **Each patient must have an identifiable and appropriately-credentialed and privileged attending**

physician (or licensed independent practitioner as specified by the applicable Review Committee) who is responsible and accountable for the patient's care. (Core)

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

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

VI.A.2.b) ***Supervision may be exercised through a variety of methods. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member, fellow, or senior resident physician, either on site or by means of telephonic and/or electronic modalities. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback.***

VI.A.2.b).(1) **The program must demonstrate that the appropriate level of supervision in place for all residents is based on each resident's level of training and ability, as well as patient complexity and acuity. Supervision may be exercised through a variety of methods, as appropriate to the situation.** (Core)

VI.A.2.c) **Levels of Supervision**

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

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

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

VI.A.2.c).(2).(a) **with Direct Supervision immediately available – the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision.** (Core)

VI.A.2.c).(2).(b) **with Direct Supervision available – the**

supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision. (Core)

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

VI.A.2.d) **The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members.** (Core)

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

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

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

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

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

VI.A.2.e).(1).(a) **Initially, PGY-1 residents must be supervised either directly, or indirectly with direct supervision immediately available.** (Core)

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

VI.B. Professionalism

VI.B.1. **Programs, in partnership with their Sponsoring Institutions, must**

educate residents and faculty members concerning the professional responsibilities of physicians, including their obligation to be appropriately rested and fit to provide the care required by their patients. (Core)

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

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

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

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

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

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

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

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

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

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

VI.B.4.c).(2) **recognition of impairment, including from illness, fatigue, and substance use, in themselves, their peers, and other members of the health care team.** (Outcome)

VI.B.4.d) **commitment to lifelong learning;** (Outcome)

VI.B.4.e) **monitoring of their patient care performance improvement indicators; and,** (Outcome)

VI.B.4.f) **accurate reporting of clinical and educational work hours, patient outcomes, and clinical experience data.** (Outcome)

VI.B.5. **All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. This includes the recognition that under certain circumstances, the best interests of the patient may be served by transitioning that patient's care to another qualified and rested provider.** (Outcome)

VI.B.6. **Programs must provide a professional, respectful, and civil environment that is free from mistreatment, abuse, or coercion of students, residents, faculty, and staff. Programs, in partnership with their Sponsoring Institutions, should have a process for education of residents and faculty regarding unprofessional behavior and a confidential process for reporting, investigating, and addressing such concerns.** (Core)

VI.C. Well-Being

In the current health care environment, residents and faculty members are at increased risk for burnout and depression. Psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician. Self-care is an important component of professionalism; it is also a skill that must be learned and nurtured in the context of other aspects of residency training. Programs, in partnership with their Sponsoring Institutions, have the same responsibility to address well-being as they do to evaluate other aspects of resident competence.

VI.C.1. **This responsibility must include:**

VI.C.1.a) **efforts to enhance the meaning that each resident finds in the experience of being a physician, including protecting time with patients, minimizing non-physician obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships;** (Core)

VI.C.1.b) **attention to scheduling, work intensity, and work compression that impacts resident well-being;** (Core)

VI.C.1.c) **evaluating workplace safety data and addressing the safety of residents and faculty members;** (Core)

VI.C.1.d) **policies and programs that encourage optimal resident and faculty member well-being; and,** (Core)

VI.C.1.d).(1) **Residents must be given the opportunity to attend medical, mental health, and dental care appointments, including those scheduled during their working hours.** (Core)

VI.C.1.e) **attention to resident and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and residents in identification of the symptoms of burnout, depression, and substance abuse, including means to assist those who experience these conditions. Residents and faculty members must also be educated to recognize those symptoms in themselves and**

how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must: (Core)

VI.C.1.e).(1) **encourage residents and faculty members to alert the program director or other designated personnel or programs when they are concerned that another resident, fellow, or faculty member may be displaying signs of burnout, depression, substance abuse, suicidal ideation, or potential for violence;** (Core)

VI.C.1.e).(2) **provide access to appropriate tools for self-screening; and,** (Core)

VI.C.1.e).(3) **provide access to confidential, affordable mental health assessment, counseling, and treatment, including access to urgent and emergent care 24 hours a day, seven days a week.** (Core)

VI.C.2. **There are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, and family emergencies. Each program must have policies and procedures in place that ensure coverage of patient care in the event that a resident may be unable to perform their patient care responsibilities. These policies must be implemented without fear of negative consequences for the resident who is unable to provide the clinical work.** (Core)

VI.D. **Fatigue Mitigation**

VI.D.1. **Programs must:**

VI.D.1.a) **educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation;** (Core)

VI.D.1.b) **educate all faculty members and residents in alertness management and fatigue mitigation processes; and,** (Core)

VI.D.1.c) **encourage residents to use fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning.** (Detail)

VI.D.2. **Each program must ensure continuity of patient care, consistent with the program's policies and procedures referenced in VI.C.2, in the event that a resident may be unable to perform their patient care responsibilities due to excessive fatigue.** (Core)

VI.D.3. **The program, in partnership with its Sponsoring Institution, must ensure adequate sleep facilities and safe transportation options for residents who may be too fatigued to safely return home.** (Core)

VI.E. **Clinical Responsibilities, Teamwork, and Transitions of Care**

VI.E.1. Clinical Responsibilities

The clinical responsibilities for each resident must be based on PGY level, patient safety, resident ability, severity and complexity of patient illness/condition, and available support services. (Core)

VI.E.2. Teamwork

Residents must care for patients in an environment that maximizes communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty and larger health system. (Core)

VI.E.3. Transitions of Care

VI.E.3.a) Programs must design clinical assignments to optimize transitions in patient care, including their safety, frequency, and structure. (Core)

VI.E.3.b) Programs, in partnership with their Sponsoring Institutions, must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety. (Core)

VI.E.3.c) Programs must ensure that residents are competent in communicating with team members in the hand-over process. (Outcome)

VI.E.3.d) Programs and clinical sites must maintain and communicate schedules of attending physicians and residents currently responsible for care. (Core)

VI.E.3.e) Each program must ensure continuity of patient care, consistent with the program's policies and procedures referenced in VI.C.2, in the event that a resident may be unable to perform their patient care responsibilities due to excessive fatigue or illness, or family emergency. (Core)

VI.F. Clinical Experience and Education

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

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

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

home, and all moonlighting. (Core)

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

VI.F.2.a) **The program must design an effective program structure that is configured to provide residents with educational opportunities, as well as reasonable opportunities for rest and personal well-being.** (Core)

VI.F.2.b) **Residents should have eight hours off between scheduled clinical work and education periods.** (Detail)

VI.F.2.b).(1) **There may be circumstances when residents choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements.** (Detail)

VI.F.2.c) **Residents must have at least 14 hours free of clinical work and education after 24 hours of in-house call.** (Core)

VI.F.2.d) **Residents must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days.** (Core)

VI.F.3. Maximum Clinical Work and Education Period Length

VI.F.3.a) **Clinical and educational work periods for residents must not exceed 24 hours of continuous scheduled clinical assignments.** (Core)

VI.F.3.a).(1) **Up to four hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or resident education.** (Core)

VI.F.3.a).(1).(a) **Additional patient care responsibilities must not be assigned to a resident during this time.** (Core)

VI.F.4. Clinical and Educational Work Hour Exceptions

VI.F.4.a) **In rare circumstances, after handing off all other responsibilities, a resident, on their own initiative, may elect to remain or return to the clinical site in the following circumstances:**

VI.F.4.a).(1) **to continue to provide care to a single severely ill or**

unstable patient; (Detail)

VI.F.4.a).(2) **humanistic attention to the needs of a patient or family; or,** (Detail)

VI.F.4.a).(3) **to attend unique educational events.** (Detail)

VI.F.4.b) **These additional hours of care or education will be counted toward the 80-hour weekly limit.** (Detail)

VI.F.4.c) **A Review Committee may grant rotation-specific exceptions for up to 10 percent or a maximum of 88 clinical and educational work hours to individual programs based on a sound educational rationale.**

The Review Committee for Anesthesiology will not consider requests for exceptions to the 80-hour limit to the residents' work week.

VI.F.4.c).(1) **In preparing a request for an exception, the program director must follow the clinical and educational work hour exception policy from the *ACGME Manual of Policies and Procedures*.** (Core)

VI.F.4.c).(2) **Prior to submitting the request to the Review Committee, the program director must obtain approval from the Sponsoring Institution's GMEC and DIO.** (Core)

VI.F.5. **Moonlighting**

VI.F.5.a) **Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program, and must not interfere with the resident's fitness for work nor compromise patient safety.** (Core)

VI.F.5.b) **Time spent by residents in internal and external moonlighting (as defined in the ACGME Glossary of Terms) must be counted toward the 80-hour maximum weekly limit.** (Core)

VI.F.5.c) **PGY-1 residents are not permitted to moonlight.** (Core)

VI.F.6. **In-House Night Float**

Night float must occur within the context of the 80-hour and one-day-off-in-seven requirements. (Core)

VI.F.7. **Maximum In-House On-Call Frequency**

Residents must be scheduled for in-house call no more frequently than every third night (when averaged over a four-week period). (Core)

VI.F.8. At-Home Call

VI.F.8.a) Time spent on patient care activities by residents on at-home call must count toward the 80-hour maximum weekly limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one day in seven free of clinical work and education, when averaged over four weeks. (Core)

VI.F.8.a).(1) At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident. (Core)

VI.F.8.b) Residents are permitted to return to the hospital while on at-home call to provide direct care for new or established patients. These hours of inpatient patient care must be included in the 80-hour maximum weekly limit. (Detail)

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

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

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

Osteopathic Recognition

For programs seeking Osteopathic Recognition for the entire program, or for a track within the program, the Osteopathic Recognition Requirements are also applicable. (http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/Osteopathic_Recogniton_Requirements.pdf)