

ACGME Program Requirements for Graduate Medical Education in Vascular Surgery

Common Program Requirements are in BOLD

Effective: July 1, 2007

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

Vascular Surgery is the surgical specialty involving diseases of the arterial, venous, and lymphatic circulatory systems, exclusive of those circulatory vessels intrinsic to the heart and intracranial vessels. Specialists in this discipline must demonstrate not only the knowledge, skills, and understanding of the medical science relative to the vascular system, but also the acquisition of mature technical skills and surgical judgment.

Int.C. Duration and Scope of Education

Two types of programs offer education in vascular surgery.

Int.C.1. Integrated Program

Residents complete five years of vascular surgery education following completion of an MD or DO degree from an institution accredited by the Liaison Committee of Medical Education (LCME) or by the American Osteopathic Association (AOA).

Graduates of schools of medicine from countries other than the United States or Canada must present evidence of final certification by the Education Commission for Foreign Medical Graduates (ECFMG).

- Int.C.1.a) The integrated curriculum must contain five years of clinical surgical education under the authority and direction of the vascular surgery program director.
- Int.C.1.b) Two of these five years must include documented educational experiences in core surgical education, including pre- and post-operative evaluation and care; critical care and trauma management; and basic technical experience in skin and soft tissue, abdomen and alimentary track, airway management, laparoscopic surgery, and thoracic surgery.
- Int.C.1.c) Three of the five years must include documented educational experiences concentrated in vascular surgery.
- Int.C.1.d) The last year of the program must comprise chief resident responsibility on the vascular surgery service at an integrated site.
- Int.C.1.e) Residents must complete, at minimum, the last two years of vascular surgery education in the same institution.
- Int.C.1.f) No more than six months of the five-year program may be dedicated to research.
- Int.C.2. Independent Program
- Vascular surgery education in the independent format is limited to one of the following:
- Int.C.2.a) A minimum of three years of education with progressive responsibility in a general surgery residency program and three years of education with progressive responsibility in vascular surgery, both within the same institution, accredited by the Accreditation Council of Graduate Medical Education (ACGME). A transitional year may not be used to fulfill any of the three year designated preliminary surgery requirement. The last year of the program must comprise chief resident responsibility on the vascular surgery service at an integrated site.
- Int.C.2.b) A successfully completed general surgery residency program accredited by the ACGME. During the general surgery residency, up to one year of credit toward a vascular surgery residency can be achieved as long as there is demonstration of 12 months of appropriate

vascular surgery education. This would shorten the subsequent required vascular surgery residency education to two years, instead of three years. In this format, the residents must complete, at minimum, the last two years of vascular surgery education at the same institution.

Int.C.2.c) A successfully completed general surgery residency portion of the Early Specialization Program (ESP) that has been approved by the Review Committee. In the ESP, four years of general surgery are completed before entering the vascular surgery residency in the same institution. Up to one year of credit toward the vascular surgery residency can be achieved in the first four years of the ESP.

Int.C.3. Before entering the program, each resident must be notified in writing of the required length of the educational program.

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.

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.

I.A.1. The program should be conducted in sites accredited by the Joint Commission on Accreditation of Healthcare Organizations, or its equivalent, and classified as general hospitals.

I.A.2. A vascular surgery program may be sponsored by an institution having a general surgery residency program accredited by the ACGME or that is educationally related to an ACGME-accredited general surgery residency program. Requests for an exemption to this policy will be reviewed on a case-by-case basis.

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.

The PLA should:

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

I.B.1.b) specify their responsibilities for teaching, supervision, and

formal evaluation of residents, as specified later in this document;

- I.B.1.c) **specify the duration and content of the educational experience; and,**
- I.B.1.d) **state the policies and procedures that will govern resident education during the assignment.**

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).

I.B.3. Integrated sites

Sites may be integrated with the sponsoring institution through an integration agreement specifying that the program director must:

- I.B.3.a) appoint the members of the faculty at the integrated site;
- I.B.3.b) appoint the chief or director of the teaching service in the integrated site;
- I.B.3.c) appoint all residents in the program; and,
- I.B.3.d) determine all rotations and assignments of both residents and members of the faculty.

I.B.4. As a general rule, integrated sites must be in geographic proximity to allow all residents to attend joint conferences, basic science lectures, and morbidity and mortality reviews on a regular documented basis at a central location. If the sites are geographically so remote that joint conferences cannot be held, an equivalent educational program of lectures and conferences at the integrated site must be fully documented.

I.B.5. The Review Committee will not approve integration between two sponsoring institutions, each with an accredited residency program in the same specialty.

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. After approval, the program director must submit this change to the ACGME via the ADS.

- 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.**
- II.A.2.a) The term of appointment, as a general rule, must be for at least the duration of the program plus one year.
- 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;**
- II.A.3.b) **current certification in the specialty by the American Board of Surgery, or specialty qualifications that are acceptable to the Review Committee; and,**
- II.A.3.c) **current medical licensure and appropriate medical staff appointment.**
- II.A.3.d) devoting his or her principal effort to the management and administration, as well as to the teaching, research and clinical care in the sponsoring and integrated site. Dedication to surgical education and scholarship will be evaluated by his or her curriculum vitae.
- 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. 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;**
- II.A.4.b) **approve a local director at each participating site who is accountable for resident education;**
- II.A.4.c) **approve the selection of program faculty as appropriate;**
- II.A.4.d) **evaluate program faculty and approve the continued participation of program faculty based on evaluation;**
- II.A.4.e) **monitor resident supervision at all participating sites;**
- II.A.4.f) **prepare and submit all information required and requested by the ACGME, including but not limited to the program information forms and annual program resident updates to the ADS, and ensure that the information submitted is accurate and complete;**
- II.A.4.g) **provide each resident with documented semiannual evaluation of performance with feedback;**

- 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;**
- II.A.4.i) provide verification of residency education for all residents, including those who leave the program prior to completion;**
- 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, and, to that end, must:**
 - II.A.4.j).(1) distribute these policies and procedures to the residents and faculty;**
 - II.A.4.j).(2) monitor resident duty hours, according to sponsoring institutional policies, with a frequency sufficient to ensure compliance with ACGME requirements;**
 - II.A.4.j).(3) adjust schedules as necessary to mitigate excessive service demands and/or fatigue; and,**
 - II.A.4.j).(4) if applicable, monitor the demands of at-home call and adjust schedules as necessary to mitigate excessive service demands and/or fatigue.**
- 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;**
- 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;**
- 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;**
- II.A.4.n) obtain review and approval of the sponsoring institution's GMEC/DIO before submitting to the ACGME information or requests for the following:**
 - II.A.4.n).(1) all applications for ACGME accreditation of new programs;**
 - II.A.4.n).(2) changes in resident complement;**
 - II.A.4.n).(3) major changes in program structure or length of training;**

- II.A.4.n).(4) progress reports requested by the Review Committee;
 - II.A.4.n).(5) responses to all proposed adverse actions;
 - II.A.4.n).(6) requests for increases or any change to resident duty hours;
 - II.A.4.n).(7) voluntary withdrawals of ACGME-accredited programs;
 - II.A.4.n).(8) requests for appeal of an adverse action;
 - II.A.4.n).(9) appeal presentations to a Board of Appeal or the ACGME; and,
 - II.A.4.n).(10) proposals to ACGME for approval of innovative educational approaches.
- II.A.4.o) obtain DIO review and co-signature on all program information forms, as well as any correspondence or document submitted to the ACGME that addresses:
- II.A.4.o).(1) program citations, and/or
 - II.A.4.o).(2) request for changes in the program that would have significant impact, including financial, on the program or institution.
- II.A.4.p) seek Review Committee approval for any resident spending a portion of the chief year at a participating site; and,
- II.A.4.q) seek Review Committee approval for participating sites where residents will be assigned for six months or more, as well as for all integrations.

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.

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

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

competency areas.

- II.B.2. The physician faculty must have current certification in the specialty by the American Board of Surgery, or possess qualifications acceptable to the Review Committee.**
- II.B.2.a) In addition to the program director, there must be, for each approved residency position, at least one full-time faculty member whose major function is to support the residency program. These faculty appointments must be of a sufficient length to ensure adequate continuity in the supervision of the residents. At minimum, one surgeon on the faculty, in addition to the program director, must be certified in Vascular Surgery by the American Board of Surgery, or possess suitable equivalent qualifications as determined by the Review Committee.
- II.B.2.b) The physician faculty must reflect sufficient diversity of interest to represent the many facets of vascular surgery.
- II.B.3. The physician faculty must possess current medical licensure and appropriate medical staff appointment.**
- II.B.4. The nonphysician faculty must have appropriate qualifications in their field and hold appropriate institutional appointments.**
- II.B.5. The faculty must establish and maintain an environment of inquiry and scholarship with an active research component.**
- II.B.5.a) **The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences.**
- 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;**
- II.B.5.b).(2) **publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;**
- 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,**
- II.B.5.b).(4) **participation in national committees or educational organizations.**
- II.B.5.c) **Faculty should encourage and support residents in scholarly activities.**
- II.B.5.d) Both faculty and residents must participate actively in scholarly activity.

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.

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.

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.

III. Resident Appointments

III.A. Eligibility Criteria

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

III.B. Number of Residents

The program director may not appoint more residents than approved by the Review Committee, unless otherwise stated in the specialty-specific requirements. The program's educational resources must be adequate to support the number of residents appointed to the program.

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.

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

III.C.2.a) Although residents may transfer from one program to another, they may not transfer from an independent to an integrated program, or vice versa, without approval in advance by the Review Committee.

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. The program director must report the presence of other learners to the DIO and GMEC in accordance with sponsoring institution guidelines.

- III.D.1. Lines of responsibility for general surgery residents and vascular surgery residents must be clearly defined when both are assigned to the same site. Ideally, the roles of general and vascular surgery residents should complement each other for a mutual educational benefit in operative experience, patient responsibility, and faculty interaction.
- III.D.2. A vascular surgery resident may be a teaching assistant for residents other than general surgery chief residents.
- III.D.3. Although a vascular surgery resident and a chief resident in general surgery may function together on a service with the same junior residents, they may not have primary responsibility for the same patients.

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 distribute to residents and faculty annually;

IV.A.2. Competency-based goals and objectives for each assignment at each educational level, which the program must distribute to residents and faculty annually, in either written or electronic form. These should be reviewed by the resident at the start of each rotation;

IV.A.3. Regularly scheduled didactic sessions;

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,

IV.A.5. ACGME Competencies

The program must integrate the following ACGME competencies into the curriculum:

IV.A.5.a) Patient Care

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:

- IV.A.5.a).(1) must demonstrate manual dexterity appropriate for their educational level;
- IV.A.5.a).(2) must develop and execute patient care plans appropriate for their educational level;
- IV.A.5.a).(3) must have operative skills essential for surgeons that can be acquired only through personal experience and education. The program must provide sufficient operative experience to educate competent vascular surgeons. A sufficient number and distribution of complex cases, as determined by the Review Committee, must be provided for the achievement of adequate operative skill and surgical judgment. The program director must ensure that the operative experience of individual residents in the same program is comparable;
- IV.A.5.a).(3).(a) In an integrated program, residents should perform a minimum of 500 operations, to include 250 major vascular reconstructive procedures that reflect an adequate representation of current trends, as well as a breadth and balance of experience in the surgical care of vascular diseases. Operative experience in excess of 1500 total cases must be justified by the program director.
- IV.A.5.a).(3).(b) In an independent program, residents should perform a minimum of 250 major vascular reconstructive procedures that reflect an adequate representation of current trends as well as a breadth and balance of experience in the surgical care of vascular diseases. Operative experience in excess of 900 total cases must be justified by the program director.
- IV.A.5.a).(4) are considered to be surgeons when they can document a significant role in the following aspects of patient management: determination or confirmation of the diagnosis; provision of preoperative care; selection and accomplishment of the appropriate operative procedure; direction of postoperative care; and accomplishment of sufficient follow-up to be acquainted with both the course of the disease and the outcome of its treatment. Participation in the operation only, without preoperative and postoperative care, is inadequate;
- IV.A.5.a).(5) must have continuity of primary responsibility for patient care. This must be taught in a longitudinal way, and must include ambulatory care, inpatient care, referral and consultation, and utilization of community resources;

- IV.A.5.a).(6) must be provided with progressive senior surgical responsibilities in the total care of vascular surgery patients, including preoperative evaluation, therapeutic decision-making, operative experience, and postoperative management;
- IV.A.5.a).(7) must have the opportunity to provide consultation with faculty supervision. They should have clearly defined educational responsibilities for other residents, medical students, and professional personnel. These teaching experiences should correlate basic biomedical knowledge with the clinical aspects of vascular surgery;
- IV.A.5.a).(8) should act as teaching assistants, when operative experience justifies a teaching role, and should report such cases to the Review Committee during the final two years of their residency;
- IV.A.5.a).(9) must receive education in the special diagnostic techniques for the management of vascular disease. It is essential that residents understand the methods and techniques of angiography, CT scanning, MRI and MRA and other vascular imaging modalities. They should be competent in the assessment of the vascular portion of such images. Residents must also have experience in the application, assessment, and limitations of noninvasive vascular diagnostic techniques; and,
- IV.A.5.a).(10) must have experience with outpatient activities, as these constitute an essential component of adequate experience in continuity of patient care. One-half day per week, on average, should be devoted to these outpatient activities.

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:

- IV.A.5.b).(1) must be able to critically evaluate and demonstrate knowledge of pertinent scientific information;
- IV.A.5.b).(2) should have education in the entire vascular system. Instruction in each area should be associated with relevant patient exposure. If this is not possible, instructional materials must be provided to ensure adequate education;
- IV.A.5.b).(3) must have instruction and become knowledgeable in the fundamental sciences, including anatomy, biology, embryology, microbiology, physiology, and pathology as

they relate to the pathophysiology, diagnosis, and treatment of vascular lesions;

IV.A.5.b).(4) must have instruction in critical thinking, design of experiments and evaluation of data, as well as in the technological advances that relate to vascular surgery and the care of patients with vascular diseases. The program must encourage the participation of residents in clinical and/or laboratory research, and make appropriate facilities available; and,

IV.A.5.b).(5) will have educational conferences that are adequate in quality and quantity to provide a review of vascular surgery as well as recent advances. The conferences should be scheduled to permit the residents to attend on a regular basis. Participation by both residents and faculty must be documented. Active participation by vascular surgery residents in the planning and production of these conferences is essential. The following types of conferences must exist within a program:

IV.A.5.b).(5).(a) a review, held at least biweekly, of all current complications and deaths, including radiological and pathological correlation of surgical specimens and autopsies when relevant;

IV.A.5.b).(5).(b) a course or a structured series of conferences to ensure coverage of the basic and clinical sciences fundamental to vascular surgery (a sole reliance on textbook review is inadequate);

IV.A.5.b).(5).(c) regular organized clinical teaching, such as ward rounds and clinical conferences; and,

IV.A.5.b).(5).(d) a regular review of recent literature, such as a journal club format.

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. 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;**

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

- IV.A.5.c).(3) identify and perform appropriate learning activities;
- IV.A.5.c).(4) systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;
- IV.A.5.c).(5) incorporate formative evaluation feedback into daily practice;
- IV.A.5.c).(6) locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;
- IV.A.5.c).(7) use information technology to optimize learning; and,
- IV.A.5.c).(8) participate in the education of patients, families, students, residents and other health professionals.
- IV.A.5.c).(9) critique personal practice outcomes;
- IV.A.5.c).(10) demonstrate a recognition of the importance of lifelong learning in surgical practice.

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. 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;
- IV.A.5.d).(2) communicate effectively with physicians, other health professionals, and health related agencies;
- IV.A.5.d).(3) work effectively as a member or leader of a health care team or other professional group;
- IV.A.5.d).(4) act in a consultative role to other physicians and health professionals; and,
- IV.A.5.d).(5) maintain comprehensive, timely, and legible medical records, if applicable.
- IV.A.5.d).(6) counsel and educate patients and families, and
- IV.A.5.d).(7) effectively document practice activities.

IV.A.5.e) Professionalism

- IV.A.5.f).(6) **participate in identifying system errors and implementing potential systems solutions.**
- IV.A.5.f).(7) practice high quality, cost effective patient care;
- IV.A.5.f).(8) demonstrate a knowledge of risk-benefit analysis; and,
- IV.A.5.f).(9) demonstrate an understanding of the role of different specialists and other health care professionals in overall patient management.

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.**
- IV.B.2. **Residents should participate in scholarly activity.**
- IV.B.3. **The sponsoring institution and program should allocate adequate educational resources to facilitate resident involvement in scholarly activities.**

V. Evaluation

V.A. Resident Evaluation

V.A.1. Formative Evaluation

- V.A.1.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.**
- V.A.1.b) **The program must:**
 - V.A.1.b).(1) **provide objective assessments of competence in patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice;**
 - V.A.1.b).(2) **use multiple evaluators (e.g., faculty, peers, patients, self, and other professional staff);**
 - V.A.1.b).(3) **document progressive resident performance improvement appropriate to educational level; and,**
 - V.A.1.b).(4) **provide each resident with documented semiannual evaluation of performance with feedback.**

V.A.1.c) The evaluations of resident performance must be accessible for review by the resident, in accordance with institutional policy.

V.A.2. Summative Evaluation

The program director must provide a summative evaluation for each resident upon completion of the program. This evaluation must 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. This evaluation must:

V.A.2.a) document the resident's performance during the final period of education, and

V.A.2.b) verify that the resident has demonstrated sufficient competence to enter practice without direct supervision.

V.B. Faculty Evaluation

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

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.

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

V.C. Program Evaluation and Improvement

V.C.1. The program must document formal, systematic evaluation of the curriculum at least annually. The program must monitor and track each of the following areas:

V.C.1.a) resident performance;

V.C.1.b) faculty development;

V.C.1.c) graduate performance, including performance of program graduates on the certification examination; and,

V.C.1.d) program quality. Specifically:

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

V.C.1.d).(2) The program must use the results of residents'

assessments of the program together with other program evaluation results to improve the program.

V.C.2. If deficiencies are found, the program should prepare a written plan of action to document initiatives to improve performance in the areas listed in section V.C.1. The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes.

VI. Resident Duty Hours in the Learning and Working Environment

VI.A. Professionalism, Personal Responsibility, and Patient Safety

VI.A.1. Programs and sponsoring institutions must educate residents and faculty members concerning the professional responsibilities of physicians to appear for duty appropriately rested and fit to provide the services required by their patients.

VI.A.2. The program must be committed to and responsible for promoting patient safety and resident well-being in a supportive educational environment.

VI.A.3. The program director must ensure that residents are integrated and actively participate in interdisciplinary clinical quality improvement and patient safety programs.

VI.A.4. The learning objectives of the program must:

VI.A.4.a) be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; and,

VI.A.4.b) not be compromised by excessive reliance on residents to fulfill non-physician service obligations.

VI.A.5. The program director and institution must ensure a culture of professionalism that supports patient safety and personal responsibility. Residents and faculty members must demonstrate an understanding and acceptance of their personal role in the following:

VI.A.5.a) assurance of the safety and welfare of patients entrusted to their care;

VI.A.5.b) provision of patient- and family-centered care;

VI.A.5.c) assurance of their fitness for duty;

VI.A.5.d) management of their time before, during, and after clinical assignments;

- VI.A.5.e) recognition of impairment, including illness and fatigue, in themselves and in their peers;
- VI.A.5.f) attention to lifelong learning;
- VI.A.5.g) the monitoring of their patient care performance improvement indicators; and,
- VI.A.5.h) honest and accurate reporting of duty hours, patient outcomes, and clinical experience data.
- VI.A.6. All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. Physicians must recognize 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.
- VI.B. Transitions of Care
 - VI.B.1. Programs must design clinical assignments to minimize the number of transitions in patient care.
 - VI.B.2. Sponsoring institutions and programs must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety.
 - VI.B.3. Programs must ensure that residents are competent in communicating with team members in the hand-over process.
 - VI.B.4. The sponsoring institution must ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient's care.
- VI.C. Alertness Management/Fatigue Mitigation
 - VI.C.1. The program must:
 - VI.C.1.a) educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation;
 - VI.C.1.b) educate all faculty members and residents in alertness management and fatigue mitigation processes; and,
 - VI.C.1.c) adopt fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning, such as naps or back-up call schedules.
 - VI.C.2. Each program must have a process to ensure continuity of patient care in the event that a resident may be unable to perform his/her patient care duties.

VI.C.3. The sponsoring institution must provide adequate sleep facilities and/or safe transportation options for residents who may be too fatigued to safely return home.

VI.D. Supervision of Residents

VI.D.1. In the clinical learning environment, each patient must have an identifiable, appropriately-credentialed and privileged attending physician (or licensed independent practitioner as approved by each Review Committee) who is ultimately responsible for that patient's care.

VI.D.1.a) This information should be available to residents, faculty members, and patients.

VI.D.1.b) Residents and faculty members should inform patients of their respective roles in each patient's care.

VI.D.2. The program must demonstrate that the appropriate level of supervision is in place for all residents who care for patients.

Supervision may be exercised through a variety of methods. Some activities require the physical presence of the supervising faculty member. 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 or resident physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback as to the appropriateness of that care.

VI.D.3. Levels of Supervision

To ensure oversight of resident supervision and graded authority and responsibility, the program must use the following classification of supervision:

VI.D.3.a) Direct Supervision – the supervising physician is physically present with the resident and patient.

VI.D.3.b) Indirect Supervision:

VI.D.3.b).(1) 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.

VI.D.3.b).(2) 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.

- VI.D.3.c) Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.**
- VI.D.4. 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.**
- VI.D.4.a) The program director must evaluate each resident’s abilities based on specific criteria. When available, evaluation should be guided by specific national standards-based criteria.**
- VI.D.4.b) Faculty members functioning as supervising physicians should delegate portions of care to residents, based on the needs of the patient and the skills of the residents.**
- VI.D.4.c) Senior residents or fellows should serve in a supervisory role of 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.**
- VI.D.5. Programs must set guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions.**
- VI.D.5.a) Each resident must know the limits of his/her scope of authority, and the circumstances under which he/she is permitted to act with conditional independence.**
- VI.D.5.a).(1) In particular, PGY-1 residents should be supervised either directly or indirectly with direct supervision immediately available.**
- VI.D.5.a).(1).(a) The program must define those physician tasks for which PGY-1 residents may be supervised indirectly, with direct supervision available, and must define “direct supervision” in the context of the program.**
- VI.D.5.a).(1).(b) The program must define those physician tasks for which PGY-1 residents must be supervised directly until they have demonstrated competence as defined by the program director, and must maintain records of such demonstrations of competence.**

VI.D.5.a).(1).(c) The program should use the template of definitions provided in the FAQ or a variation of the template to develop these definitions.

VI.D.6. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility.

VI.E. Clinical Responsibilities

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

VI.E.1. The workload associated with optimal clinical care of surgical patients is a continuum from the moment of admission to the point of discharge.

VI.E.2. During the residency education process, surgical teams should be made up of attending surgeons, residents at various PG levels, medical students (when appropriate), and other health care providers.

VI.E.3. The work of the caregiver team should be assigned to team members based on each member's level of education, experience, and competence.

VI.E.4. As residents progress through levels of increasing competence and responsibility, it is expected that work assignments will keep pace with their advancement.

VI.F. Teamwork

Residents must care for patients in an environment that maximizes effective 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.

VI.F.1. Effective surgical practices entail the involvement of members with a mix of complementary skills and attributes (physicians, nurses, and other staff). Success requires both an unwavering mutual respect for those skills and contributions, and a shared commitment to the process of patient care.

VI.F.2. Residents must collaborate with fellow surgical residents, and especially with faculty, other physicians outside of their specialty, and non-traditional health care providers, to best formulate treatment plans for an increasingly diverse patient population.

VI.F.3. Residents must assume personal responsibility to complete all tasks to which they are assigned (or which they voluntarily assume) in a timely

fashion. These tasks must be completed in the hours assigned, or, if that is not possible, residents must learn and utilize the established methods for handing off remaining tasks to another member of the resident team so that patient care is not compromised.

VI.F.4. Lines of authority should be defined by programs, and all residents must have a working knowledge of these expected reporting relationships to maximize quality care and patient safety.

VI.G. Resident Duty Hours

VI.G.1. Maximum Hours of Work per Week

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

VI.G.1.a) Duty Hour Exceptions

A Review Committee may grant exceptions for up to 10% or a maximum of 88 hours to individual programs based on a sound educational rationale.

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

VI.G.1.a).(1) In preparing a request for an exception the program director must follow the duty hour exception policy from the ACGME Manual on Policies and Procedures.

VI.G.1.a).(2) Prior to submitting the request to the Review Committee, the program director must obtain approval of the institution's GMEC and DIO.

VI.G.2. Moonlighting

VI.G.2.a) Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program.

VI.G.2.b) Time spent by residents in Internal and External Moonlighting (as defined in the ACGME Glossary of Terms) must be counted towards the 80-hour Maximum Weekly Hour Limit.

VI.G.2.c) PGY-1 residents are not permitted to moonlight.

VI.G.3. Mandatory Time Free of Duty

Residents must be scheduled for a minimum of one day free of duty every week (when averaged over four weeks). At-home call cannot

be assigned on these free days.

VI.G.4. Maximum Duty Period Length

VI.G.4.a) Duty periods of PGY-1 residents must not exceed 16 hours in duration.

VI.G.4.b) Duty periods of PGY-2 residents and above may be scheduled to a maximum of 24 hours of continuous duty in the hospital. Programs must encourage residents to use alertness management strategies in the context of patient care responsibilities. Strategic napping, especially after 16 hours of continuous duty and between the hours of 10:00 p.m. and 8:00 a.m., is strongly suggested.

VI.G.4.b).(1) It is essential for patient safety and resident education that effective transitions in care occur. Residents may be allowed to remain on-site in order to accomplish these tasks; however, this period of time must be no longer than an additional four hours.

VI.G.4.b).(2) Residents must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.

VI.G.4.b).(3) In unusual circumstances, residents, on their own initiative, may remain beyond their scheduled period of duty to continue to provide care to a single patient. Justifications for such extensions of duty are limited to reasons of required continuity for a severely ill or unstable patient, academic importance of the events transpiring, or humanistic attention to the needs of a patient or family.

VI.G.4.b).(3).(a) Under those circumstances, the resident must:

VI.G.4.b).(3).(a).(i) appropriately hand over the care of all other patients to the team responsible for their continuing care; and,

VI.G.4.b).(3).(a).(ii) document the reasons for remaining to care for the patient in question and submit that documentation in every circumstance to the program director.

VI.G.4.b).(3).(b) The program director must review each submission of additional service, and track both individual resident and program-wide episodes of additional duty.

VI.G.5. Minimum Time Off between Scheduled Duty Periods

VI.G.5.a) PGY-1 residents should have 10 hours, and must have eight hours, free of duty between scheduled duty periods.

VI.G.5.b) Intermediate-level residents should have 10 hours free of duty, and must have eight hours between scheduled duty periods. They must have at least 14 hours free of duty after 24 hours of in-house duty.

For independent programs, vascular surgery fellows are considered to be in the final years of education.

For integrated programs, PGY-2 and PGY-3 residents are considered to be at the intermediate level.

VI.G.5.c) Residents in the final years of education must be prepared to enter the unsupervised practice of medicine and care for patients over irregular or extended periods.

For independent programs, vascular surgery fellows are considered to be in the final years of education.

For integrated programs, residents at the PGY-4 level and beyond are considered to be in the final years of education.

VI.G.5.c).(1) This preparation must occur within the context of the 80-hour, maximum duty period length, and one-day-off-in-seven standards. While it is desirable that residents in their final years of education have eight hours free of duty between scheduled duty periods, there may be circumstances when these residents must stay on duty to care for their patients or return to the hospital with fewer than eight hours free of duty.

VI.G.5.c).(1).(a) Circumstances of return-to-hospital activities with fewer than eight hours away from the hospital by residents in their final years of education must be monitored by the program director.

VI.G.5.c).(1).(b) The Review Committee defines such circumstances as: required continuity of care for a severely ill or unstable patient, or a complex patient with whom the resident has been involved; events of exceptional educational value; or, humanistic attention to the needs of a patient or family.

VI.G.6. Maximum Frequency of In-House Night Float

Residents must not be scheduled for more than six consecutive nights of night float.

- VI.G.6.a) Any rotation that requires residents to work nights in succession, is considered a night float rotation, and the total time on nights is counted toward the maximum allowable time for each resident over the five-year residency.
- VI.G.6.b) Night float rotations must not exceed two months in succession, or three months in succession for rotations with night shifts alternating with day shifts.
- VI.G.6.c) There can be no more than four months of night float per year.
- VI.G.6.d) There must be at least two months between each night float rotation.
- VI.G.6.e) The total amount of night float for any resident over a five-year residency must be no more than 15 months

VI.G.7. Maximum In-House On-Call Frequency

PGY-2 residents and above must be scheduled for in-house call no more frequently than every-third-night (when averaged over a four-week period).

VI.G.8. At-Home Call

VI.G.8.a) Time spent in the hospital by residents on at-home call must count towards the 80-hour maximum weekly hour 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 duty, when averaged over four weeks.

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

VI.G.8.b) Residents are permitted to return to the hospital while on at-home call to care for new or established patients. Each episode of this type of care, while it must be included in the 80-hour weekly maximum, will not initiate a new “off-duty period”.

VII. Innovative Projects

Requests for innovative projects that may deviate from the institutional, common and/or specialty specific program requirements must be approved in advance by the Review Committee. In preparing requests, the program director must follow Procedures for Approving Proposals for Innovative Projects located in the ACGME Manual on Policies and Procedures. Once a Review Committee approves a project, the sponsoring institution and program are jointly responsible for the quality of education offered to residents for the duration of such a project.

Approved: February 14, 2006 Effective: July 1, 2006
Revised Common Program Requirements Effective: July 1, 2007
ACGME-Approved Minor Revision: February 12, 2008 Effective: July 1, 2008
Revised Common Program Requirements Effective: July 1, 2011