

# ACGME Program Requirements for Graduate Medical Education in Neurotology

Common Program Requirements are in BOLD

Effective: July 1, 2007

## Introduction

**Int.A. Residency and fellowship programs are essential dimensions of the transformation of the medical student to the independent practitioner along the continuum of medical education. They are physically, emotionally, and intellectually demanding, and require longitudinally-concentrated effort on the part of the resident or fellow.**

**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 and fellow physician to assume personal responsibility for the care of individual patients. For the resident and fellow, 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 and fellows 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 and fellow’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 neurotology lateral skull base surgery program will provide advanced education, beyond that afforded in otolaryngology residency, in the diagnosis and management of disorders of the temporal bone, lateral skull base, and related anatomical structures. Surgery of the lateral skull base involving the mesial aspect of the dura or intradural structure requires the joint effort of a neurotology and neurological surgery team. A 24-month educational program will ensure that concentrated time is available for the neurotology fellow to develop advanced diagnostic expertise and advanced medical and surgical management skills in neurotology. These skills include care of the diseases and disorders of the petrous apex, infratemporal fossa, internal auditory canals, cranial nerves (e.g., vestibular nerve section and joint neurosurgical-neurotological resection of intradural VIII nerve tumors), and lateral skull base, including the occipital bone, sphenoid bone, and temporal bone. This advanced education is required so that the neurotology fellow may develop expertise with extradural skull base approaches in collaboration with neurological surgery. The postoperative care of

lateral skull base surgery patients requires the joint management of both neurological surgery and neurotology. This advanced education is also necessary for fellows to gain expertise in the joint collaborative management of patients undergoing lateral skull base surgery. The program will also permit exposure to new research opportunities and time to explore new research ideas.

Int.C. Duration and Scope of Education

- Int.C.1. The duration of the program is 24 months, all of which must be spent at participating sites approved by the Residency Review Committee.
- Int.C.2. Admission to the program is contingent on completion of a residency program in otolaryngology accredited by either the Accreditation Council for Graduate Medical Education (ACGME) or the Royal College of Physicians and Surgeons of Canada.
- Int.C.3. The program must provide structured clinical opportunities for fellows to develop advanced skills in neurotology and lateral skull base surgery, including exposure to intracranial approaches.
- Int.C.4. A sufficient volume and variety of cases must be available to ensure adequate inpatient and outpatient experience for each neurotology fellow.
- Int.C.5. Each neurotology fellow must prepare documentation of surgical experience as both assistant surgeon and surgeon in middle cranial fossa, posterior cranial fossa, and lateral skull base surgical procedures for the treatment of disorders of the auditory and vestibular system; facial nerve disorders; and congenital inflammatory, neoplastic, idiopathic, and traumatic disorders of the extradural petrous bone and apex, occipital bone, sphenoid bone, and related structures.
- Int.C.6. The diagnosis and medical, surgical and rehabilitative management of congenital, traumatic, inflammatory, degenerative, neoplastic, and idiopathic diseases and other disease states of the temporal bone, occipital bone, sphenoid bone, craniovertebral junction, and related structures are required experiences.
- Int.C.7. Fellows must have experiences in audiometric testing, including auditory brainstem responses and otoacoustic emissions, as well as vestibular testing, facial nerve testing, electrophysiologic monitoring strategies, and neuroradiologic procedures used to evaluate the temporal bone, skull base, and related structures.

**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 fellow 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 neurotology program must be associated with an ACGME-accredited otolaryngology program. Fellow experiences in related specialties such as physical medicine and rehabilitation, neurology, neurological surgery, neuroradiology, and neuropathology must be offered by the sponsoring institution.

## **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 fellows;**

**I.B.1.b) specify their responsibilities for teaching, supervision, and formal evaluation of fellows, 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 fellow 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 fellows, of one month full time equivalent (FTE) or more through the Accreditation Council for Graduate Medical Education (ACGME) Accreditation Data System (ADS).**

**I.B.2.a) The Review Committee must approve the addition and deletion of all participating sites.**

## **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.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 Otolaryngology and be certified in the subspecialty of neurotology, 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) licensure to practice medicine in the state where the sponsoring institution is located.
- II.A.4. The program director must administer and maintain an educational environment conducive to educating the fellows 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 fellow 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 fellow 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 fellow updates to the ADS, and ensure that the information submitted is accurate and complete;**
  - II.A.4.g) provide each fellow 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 fellowship education for all fellows,**

**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 fellow 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 fellows and faculty;**
- II.A.4.j).(2) monitor fellow 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 fellows, disciplinary action, and supervision of fellows;**
- 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 fellow 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 fellow 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) maintain a record of neurotology operative cases performed by the service and by each neurotology fellow. These records must be reviewed annually by the program director with the fellow as a part of the director's responsibility for evaluation of the balanced progress of each fellow and of the program's curriculum. These data must be submitted to the Review Committee at the time of the program review; and,
- II.A.4.q) in addition to combined educational conferences with the other disciplines listed in IV.B.2.a, emphasize cooperative diagnostic efforts among neurological surgeons, surgical team approaches to operative therapy with neurosurgeons, and combined approaches to rehabilitative efforts with physical medicine and rehabilitation.

**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 fellows 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 fellows, and**
- II.B.1.b) **administer and maintain an educational environment conducive to educating fellows 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 Otolaryngology, or possess qualifications acceptable to the Review Committee.**

II.B.2.a) There must be at least one neurotology faculty member in addition to the program director.

II.B.2.b) Program faculty must be responsible to the patient and the neurotology fellow. In the event that a neurotologist plans an operation in which the dura may be entered, neurological consultation will be obtained to determine whether a joint surgical effort by both neurotology and neurological surgery is required.

II.B.2.c) Because advanced neurotology is multidisciplinary in nature and because interactions with peers from related disciplines contribute to the quality of education, the faculty from related disciplines such as neurology, neurological surgery, audiology, neuro-ophthalmology, neuroradiology, and neuropathology should participate in the program. Close interaction with physical medicine and neurologic rehabilitation in particular is highly desirable.

**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 fellows in scholarly activities.**

**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 fellow education, as defined in the specialty program requirements.**

**II.D.1.** Additional educational resources for the program in neurotology are required. These include a temporal bone dissection laboratory; testing facilities for complete auditory and vestibular evaluation that include facilities for intracranial nerve monitoring; other diagnostic, therapeutic, and research facilities deemed appropriate.

**II.E. Medical Information Access**

**Fellows 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. Fellow Appointments**

**III.A. Eligibility Criteria**

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

**III.B. Number of Fellows**

**The program director may not appoint more fellows 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 fellows appointed to the program.**

**III.B.1.** One neurotology fellow should be enrolled each year. A program without a fellow for more than two successive years will be administratively withdrawn. The Review Committee will develop an annual fellow reporting system to ensure that ACGME procedures are followed in this respect.

**III.B.2.** A program may not graduate more fellows in any given year than are approved by the Review Committee unless prior approval has been received.

**III.C. Fellow Transfers**

**III.C.1.** Before accepting a fellow 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 fellow.

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

**III.D. Appointment of Fellows and Other Learners**

The presence of other learners (including, but not limited to, fellows from other specialties, subspecialty fellows, PhD students, and nurse practitioners) in the program must not interfere with the appointed fellows' 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 must be clearly delineated between neurotology fellows and otolaryngology fellows in the areas of training, clinical responsibilities, and duration of training. Such information must be supplied to the Review Committee at the time of the review and survey.

**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 fellows and faculty annually;

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

**IV.A.3.** Regularly scheduled didactic sessions;

**IV.A.4.** Delineation of fellow responsibilities for patient care, progressive responsibility for patient management, and supervision of fellows 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

Fellows must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Fellows:

- IV.A.5.a).(1) must have graduated responsibility for patients in both inpatient and outpatient environments. Direct surgical experience in all procedures must be documented. The experience must include neurotology and lateral skull base surgery techniques, with intracranial exposures performed jointly with neurological surgery;
- IV.A.5.a).(2) must gain diagnostic expertise, and develop medical and surgical management strategies, including intracranial exposure, as well as the postoperative care necessary to treat congenital, inflammatory, neoplastic, idiopathic, and traumatic diseases of the petrous apex, internal auditory canal, cerebellopontine angle, cranial nerves, and lateral skull base, including the occipital bone, temporal bone, and craniovertebral junction;
- IV.A.5.a).(3) must have experience in the habilitation and rehabilitation of the vertiginous patient and the treatment of intracranial and intratemporal facial nerve disorders;
- IV.A.5.a).(4) will participate in a multidisciplinary surgical team managing disorders of the temporal bone, cerebellopontine angle, lateral skull base, and related structures. Members of the team should include audiologists, electrophysiologists, head and neck surgeons, neurologists, neuroradiologists, neurological surgeons, neuro-ophthalmologists, neuropathologists, neurotologists, and physiatrists; and,
- IV.A.5.a).(5) will have training in advanced surgical techniques to manage diseases and disorders of the auditory and vestibular systems; the extradural skull base, including the sphenoid bone; the temporal bone. These techniques must include reconstructive repair of deficits in these areas.

#### **IV.A.5.b)**

#### **Medical Knowledge**

**Fellows 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. Fellows:**

- IV.A.5.b).(1) must have a comprehensive and well-organized course of study in neurotology that must provide each resident with progressive responsibility managing patients, in both inpatient and outpatient environments;
- IV.A.5.b).(2) should have education beyond the otolaryngology residency in the basic sciences related to neurotology, including allergy and immunology, audiology and

rehabilitative audiology, genetics, neuroanatomy, neurophysiology, neuropathology, neuropharmacology, neuro-ophthalmology, physical medicine and rehabilitation, temporal bone histopathology, and vestibular pathophysiology. The course of study must reflect the following content areas:

- IV.A.5.b).(2).(a) Neurophysiology, neuropathophysiology, and the diagnosis and therapy of advanced neurotologic disorders, including advanced audiologic and vestibular testing; the evaluation of cranial nerves and related structures; the interpretation of imaging techniques of the temporal bone and lateral skull base; and the electrophysiologic monitoring of cranial nerves VII, VIII, X, XI, and XII;
- IV.A.5.b).(2).(b) Vestibular rehabilitation;
- IV.A.5.b).(2).(c) Auditory and speech rehabilitation of the hearing-impaired; and,
- IV.A.5.b).(2).(d) The management and rehabilitation of extradural cranial nerve defects and those defined in the definition and description of the specialty.

#### **IV.A.5.c)**

#### **Practice-based Learning and Improvement**

**Fellows 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. Fellows 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, fellows and other health professionals.

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

**Fellows must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. Fellows 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.e) Professionalism**

**Fellows must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Fellows are expected to demonstrate:**

- IV.A.5.e).(1) compassion, integrity, and respect for others;  
IV.A.5.e).(2) responsiveness to patient needs that supersedes self-interest;  
IV.A.5.e).(3) respect for patient privacy and autonomy;  
IV.A.5.e).(4) accountability to patients, society and the profession; and,  
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.

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

**Fellows 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. Fellows are expected to:**

- IV.A.5.f).(1) work effectively in various health care delivery settings and systems relevant to their clinical specialty;**
- IV.A.5.f).(2) coordinate patient care within the health care system relevant to their clinical specialty;**
- IV.A.5.f).(3) incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;**
- IV.A.5.f).(4) advocate for quality patient care and optimal patient care systems;**
- IV.A.5.f).(5) work in interprofessional teams to enhance patient safety and improve patient care quality; and,**
- IV.A.5.f).(6) participate in identifying system errors and implementing potential systems solutions.**

**IV.B. Fellows' Scholarly Activities**

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

**IV.B.2. Fellows should participate in scholarly activity.**

IV.B.2.a) Clinical, basic science, and research conferences and seminars, as well as the review of critical literature about the subspecialty must be conducted regularly and as scheduled. The neurotology residents must participate in both the planning and conducting conferences. Both the faculty and neurotology residents must attend and participate in multidisciplinary conferences.

IV.B.2.b) The course of study must include research methodology, not to exceed six months, with protected time for the pursuit of scholarly activities and research. The neurotology resident should study epidemiology, statistical methods, experimental design, and manuscript preparation, including literature searches and the use of computerized databases.

IV.B.2.c) It is highly desirable that the residents prepare and submit, at minimum, one paper for publication in a peer-reviewed journal.

While the specific content will be related to the particular expertise, interest, and capability of the program faculty and institutional resources, the general goal of the research experience should be maintained.

**IV.B.3. The sponsoring institution and program should allocate adequate educational resources to facilitate fellow involvement in scholarly activities.**

**V. Evaluation**

**V.A. Fellow Evaluation**

**V.A.1. Formative Evaluation**

**V.A.1.a) The faculty must evaluate fellow 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 fellow performance improvement appropriate to educational level; and,**

**V.A.1.b).(4) provide each fellow with documented semiannual evaluation of performance with feedback.**

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

**V.A.1.d) The evaluation methods must include observation, assessment, and substantiation of the resident's acquired body of knowledge, skills in physical examination and patient communication, technical proficiency, professional attitudes, humanistic qualities as demonstrated in the clinical setting, consultation skills, patient management, decision making, and critical analysis of clinical situations.**

**V.A.2. Summative Evaluation**

**The program director must provide a summative evaluation for each**

**fellow upon completion of the program. This evaluation must become part of the fellow's permanent record maintained by the institution, and must be accessible for review by the fellow in accordance with institutional policy. This evaluation must:**

- V.A.2.a) document the fellow's performance during the final period of education, and**
- V.A.2.b) verify that the fellow 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 fellows.**

**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) fellow 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) Fellow s 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 fellows' 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. Fellow 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 fellows 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 fellow well-being in a supportive educational environment.**
- VI.A.3. The program director must ensure that fellows 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 fellows 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. Fellows 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 fellows 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 fellows 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 fellows 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 fellows to recognize the signs of fatigue and sleep deprivation;**
- VI.C.1.b) educate all faculty members and fellows 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 fellow 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 fellows who may be too fatigued to safely return home.**
- VI.D. Supervision of Fellows**
- 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 fellows, faculty members, and patients.

**VI.D.1.b)** Fellows 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 fellows 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 fellow can be adequately supervised by the immediate availability of the supervising faculty member or fellow physician, either in the institution, or by means of telephonic and/or electronic modalities. In some circumstances, supervision may include post-hoc review of fellow-delivered care with feedback as to the appropriateness of that care.

**VI.D.3.** Levels of Supervision

To ensure oversight of fellow 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 fellow 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 fellow must be assigned by the program director and faculty members.**

**VI.D.4.a) The program director must evaluate each fellow'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 fellows, based on the needs of the patient and the skills of the fellows.**

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

#### **VI.E. Clinical Responsibilities**

**The clinical responsibilities for each fellow must be based on PGY-level, patient safety, fellow 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 PGY 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 fellow's level of education, experience, and competence.**

**VI.F. Teamwork**

**Fellows 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. Fellows 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. Fellows 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 within the hours assigned, or, if that is not possible, fellows must learn and utilize the established methods for handing off remaining tasks to another member of the fellow team so that patient care is not compromised.

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

**VI.G. Fellow 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 Otolaryngology will not consider requests for exceptions to the 80-hour limit to the fellows' 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 fellow to achieve the goals and objectives of the educational program.
- VI.G.2.b)** Time spent by fellows 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**
- Fellows 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 fellows 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 fellow education that effective transitions in care occur. Fellows 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)** Fellows must not be assigned additional clinical responsibilities after 24 hours of continuous in-house duty.
- VI.G.4.b).(3)** In unusual circumstances, fellows, 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 fellow 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 fellow 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.

Fellows in otolaryngology-otology/neurotology programs are considered to be in the final years of education.

**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.

Fellows in otolaryngology-otology/neurotology programs 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 fellows 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 fellow 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**

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

VI.G.6.a)

Night float rotations must not exceed two months in duration, and there can be no more than three months of night float assignments per year.

VI.G.6.b)

There must be at least two months between each night float rotation.

**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 fellows 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 fellow.**

VI.G.8.b)

**Fellows 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**

