

**UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL  
ANESTHESIOLOGY RESIDENCY PROGRAM**

**GOALS AND OBJECTIVES  
GENERAL OPERATING ROOM ROTATION  
CA-2 REQUIRED**

The CA-2 resident is required to spend three additional months rotating in the general operating rooms of both the University and Memorial campuses. This experience is meant to enhance the CA-1 experience with the addition of more complex cases, as well as greater autonomy in both plan and management of less complex cases with patients with less co-morbidity.

**OBJECTIVES**

**I. MEDICAL KNOWLEDGE**

Residents caring for patients on the General OR rotations need to master a broad knowledge base of both basic and clinical science and apply that knowledge to safe patient care as stated in the Content Outline prepared by the Joint Council On In-Training Examinations of the American Board of Anesthesiology & American Society of Anesthesiologists. This knowledge base is gained during the entire residency, through appropriate readings, experience, didactic sessions, and one-to-one teaching during cases.

Residents are expected to demonstrate understanding of:

- **Physiology:** the physiology and pathophysiology of patients presenting for anesthesia, including the impact of the anesthetic state on normal and abnormal physiologic function of all major organ systems, with an emphasis on cardiovascular, respiratory and CNS physiology; the impact of disease and procedures on all organ systems with an emphasis on the impact of multisystem disease and treatments on physiology; impact of anesthesia on the pathophysiology of patients who are healthy or those with severe or multisystem disease; fluid/electrolyte balance changes related to surgical trauma in patients with severe or multisystem disease; volume assessment and management.
- **Pharmacology:** begin to select appropriate agents for patients along a wide spectrum of health, from ASA I through ASA V, taking into consideration the presence of severe or multisystem disease, across the spectrum of patient ages.
- **Clinical Knowledge:** application of basic and specialized monitoring and anesthetic techniques to patients with no disease to patients with severe or multisystem disease undergoing surgical, diagnostic or interventional procedures. Appropriate preoperative evaluation and preparation of patients, including indications for delay or cancellation of surgery. Appropriate use of consultants in perioperative care. Begin to understand techniques to optimize patient care in the perioperative period, including appropriate use of system resources to facilitate patient care.

**II. PATIENT CARE**

At the conclusion of these rotations, the resident should be able to:

- Perform a complete preoperative evaluation, note significant abnormalities; recognize significant diseases that may benefit from further preoperative evaluation, consultation or treatment

- Identify patients with potential for difficult airway anatomy in consultation with the attending anesthesiologist
- Identify patients in whom specialized monitoring may be indicated, and place indicated catheters (arterial, central venous, pulmonary artery) or monitoring devices with minimal guidance
- Manage straightforward anesthetics with minimal guidance; manage more complex anesthetics with moderate assistance.
- Be able to accurately assess and manage intraoperative changes in patient condition, assess and begin to institute therapy for blood loss and volume deficits, recognize when to call for help.
- Develop plan for control of postoperative pain including appropriate use of techniques such as PCA, recognize appropriate use of consultants for control of postoperative pain, develop alternate pain control plans when appropriate such as catheter-based nerve blocks in consultation with the Anesthesia Consult Service
- Recognize perioperative and post-anesthetic complications, and document patient care and outcome including intraoperative record keeping and postanesthesia visits.
- Demonstrate skills related to the safe practice of anesthesiology including general, regional, MAC and local anesthesia techniques
- Demonstrate skills for straightforward airway management with minimal guidance; demonstrate ability to plan for and carry out more advanced airway management techniques such as fiberoptic intubation, bougie or Glidescope with additional guidance.
- Demonstrate critical thinking and proficiency in airway management in the emergency room, critical care unit or the ward. Know when to call for help
- Demonstrate knowledge of proper patient positioning to ensure patient safety

### **III. INTERPERSONAL AND COMMUNICATION SKILLS**

At the conclusion of these rotations, it is expected that the resident will be able to:

- Obtain fully informed consent from the patient or the patient's legal guardian for general and regional anesthetics
- Understand the procedure planned and communicate to the attending anesthesiologist and, if necessary, the surgical team concerns of any factors that may complicate care of the patient
- Discuss patient positioning and intraoperative needs of the surgeon, especially related to special intraoperative monitoring or physiologic/anesthetic techniques
- Inform team members and discuss intraoperative complications or required interventions under the direction of the attending anesthesiologist
- Provide adequate communication to perioperative care team members when transferring patients to PACU or ICU
- Document legibly, including intraoperative anesthetic records, procedure notes, progress notes and orders, using JCAHO approved abbreviations only

- Communicate with patients and their families about their condition, perioperative care and any additional concerns the patient may have using language the patient is able to understand.
- Facilitate compassionate care of patients by being attentive to patient needs in the perioperative period.

#### **IV. PROFESSIONALISM**

At the conclusion of these rotations, the resident will:

- Act in a professional manner in all interactions with patients, perioperative care team members and other physicians
- Consult with the attending anesthesiologists whenever concerns about patient care issues arise
- Maintain composure in stressful situations during care of the patient undergoing surgical, therapeutic or diagnostic procedures that require anesthesia
- Consistently apply ethical principles to patient care including patient confidentiality and equal care regardless of social, ethnic or economic factors.
- Demonstrate respect and compassion when dealing with patients and their families

#### **V. PRACTICE-BASED LEARNING**

At the conclusion of these rotations, it is expected that the resident will:

- Demonstrate an increase in anesthesia knowledge by improved performance on the biannual Mock Oral exams and the annual In-training exam
- Evaluate the effects of their anesthetic technique on patients undergoing surgical, diagnostic or interventional procedures
- Evaluate the effects of anesthesia on the postoperative care of the patient including the need for postoperative ventilation, perioperative transfusion, reintubation, etc.
- Read the literature regarding anesthesia issues, including approaches to both healthy and ill patients, diagnostic and interventional procedures and problems, research into new modalities of anesthesia care and outcome data related to these modalities.
- Submit a case report or study to a journal and/or presentation at a regional or national meeting.

#### **VI. SYSTEMS-BASED PRACTICE**

At the conclusion of these rotations, it is expected that residents have learned:

- To use consultant services appropriately to facilitate perioperative care of patients undergoing surgical, diagnostic or interventional procedures.

- How to evaluate the impact of therapeutic choices made during perioperative care on the remainder of the hospital course, including the potential for prolonged PACU or ICU stay
- About the role of the consultant anesthesiologist in managing OR resources including scheduling issues, OR efficiency and measure of OR productivity.