Overview

PGY-1 residents involved in the Anesthesiology Clinical Base Year will participate in a one-month Anesthesiology rotation, during which time residents will be introduced to the concepts required for safe and appropriate anesthetic management of patients undergoing all manner of surgical and interventional procedures.

Goals

Upon completion of this rotation, residents should understand and apply the basic principles of pre-anesthetic evaluation, preparation and anesthetic care; this should include focused history and physical examination, assessment of physiologic state, determination of anesthetic risk and basic planning and implementation of perioperative care.

Objectives

I. Patient Care: Upon completion of this rotation, the resident should be able to:

   a. Demonstrate knowledge of operating room safety;
   b. Demonstrate proper techniques of airway management, including mask ventilation, placement of laryngeal mask airway and orotracheal intubation;
   c. Be able to recognize inadvertent endobronchial intubation;
   d. Develop beginning skills for establishment of peripheral intravenous access
   e. Perform an efficient and thorough focused pre-operative assessment, including the need for appropriate laboratory and diagnostic testing;
f. Demonstrate an understanding of the principles of post-anesthesia care, including recognition and management of common post-operative issues, including pain, nausea and vomiting, emergence delirium and post-operative ventilation;

II. Medical Knowledge: Upon completion of this rotation, the resident should be able to:

a. Demonstrate an understanding of the role of physiology and pharmacology, including drug disposition and metabolism, in the anesthetic management of the patient;

b. Demonstrate a basic understanding of the techniques of general and regional anesthesia and conscious sedation, as well as the risks and benefits of each;

c. Demonstrate basic skills in the interpretation of intra-operative monitoring, including capnography, oxygen saturation, arterial blood gas analysis and hemodynamic measures;

d. Demonstrate ability to estimate fluid requirements and provide rationale for volume replacement therapy.

III. Practice-Based Learning: Upon completion of this rotation, the resident should be able to:

a. Evaluate his/her own performance;

b. Accept and incorporate feedback resulting in performance improvement;

c. Demonstrate effective use of technology to gain and manage patient health information and self-improvement.

IV. Interpersonal and Communication Skills: Upon completion of this rotation, the resident should:

a. Demonstrate effective listening and verbal skills in order to elicit information from, and provide information to, both patients, colleagues and attending physicians;

b. Demonstrate the ability to work effectively with others as a member of the Operating Room team;
V. **Professionalism:** Upon completion of this rotation, the resident should:

a. Demonstrate respect, compassion and integrity in their actions with patients, as well as members of the OR team;
b. Demonstrate an understanding and commitment to ethical principles, including confidentiality of patient information and informed consent;
c. Demonstrate sensitivity and responsiveness to all patients, regardless of cultural background, age, gender or abilities.

VI. **Systems-Based Practice:** Upon completion of this rotation, the resident should:

a. Demonstrate a basic understanding of the practices of cost effective health care, particularly as it pertains to anesthetic peri-operative preparation and management;
b. Demonstrate ability to assist patients with the physical, emotional and social complexities of the operative experience.

**Clinical Experience**

PGY-1 residents will participate with anesthesia residents and attending anesthesiologists in pre-anesthetic evaluations, placement of monitors, conduct of general and regional anesthetics, post-anesthesia hand-off and recovery care, as well as post-op rounds. Residents may also have the opportunity to gain exposure to or experience in regional techniques, acute and chronic pain management, and sub-specialty areas such as pediatric, thoracic, cardiac, neurosurgical and interventional anesthesia.

**Didactics**

PGY-1 residents are expected to attend all Anesthesiology Department didactic sessions, including Tuesday and Thursday afternoon resident sessions (3PM – 5PM) and Wednesday morning (7AM – 8AM) Grand Rounds.
Residents are expected to utilize resources for self-education, including anesthesia textbooks, bound journals in the anesthesia and medical school libraries, as well as on-line searching capabilities maintained throughout the institution.

Suggested readings:

1. *Clinical Anesthesia Procedures of the Massachusetts General Hospital* (paperback) – Hurford W, Bailin M, Davison J, Haspel K, Rosow C; Lippincott Williams & Wilkins.


**Schedule**

PGY-1 residents are expected to be in the Operating Room at the same time their precepting anesthesia resident/attending arrives to prepare for the day’s cases (approximately 0600). The day will end at 1700, or later if the resident chooses to remain until the completion of an interesting case. PGY-1 residents must be aware, at all times, not to exceed duty hours rules. There are no call responsibilities during the rotation.

**Evaluations**

Evaluations by attending anesthesia faculty will be done via the E*Value web-based evaluation system at the end of each rotation. Such evaluations may be accessed by each individual resident, and will be reviewed and discussed during a quarterly meeting with the Anesthesiology Residency Program Director.