Curriculum 18

Development of a Comprehensive Perioperative Medicine Exposure for 3rd Year Medical Students

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Learner Audience: Medical Students with an interest in learning more about the specialty of Anesthesiology and the role of Anesthesiologists as Perioperative Physicians.

Needs Assessment: In the early days of anesthesia, the goal was merely to produce temporary unconsciousness for surgery. Today, the role of the modern Anesthesiologist has expanded to the entire perioperative period, including preoperative assessment, intraoperative management and postoperative care and pain management. Given these dramatic changes in anesthesiologists' roles, the traditional one-week anesthesia elective in the OR may not provide the necessary skills that a future physician should understand in order to be a well-rounded provider.

Hypothesis: We sought to develop a new Perioperative Medicine Selective as part of the 3rd year Core Clerkship in Surgery to provide a more comprehensive exposure to the field of anesthesia and the range of issues associated with the management of patients in the perioperative period.

Curriculum Design: Preoperative Assessment Clinic - 1 day. The students will become familiar with ACC/AHA guidelines for preoperative cardiovascular assessment, ASA preoperative assessment guidelines, obstructive sleep apnea screening and guidelines, NPO guidelines, preoperative medication management, and comprehensive history and physical skills. They will gain familiarity with both surgical and anesthetic preoperative evaluations and how these two are similar and different. They will learn how to elicit history from patients and obtain medical records from other facilities to piece together a complete picture of the patient's health status and help to develop an anesthetic plan. These skills will be useful in any rotation or future residencies.

PACU - 2 days. The student will learn about postoperative fluid, electrolyte, access, and pain management issues, evaluating respiratory status and managing hemodynamics.

Regional Anesthesia - 1 day. Basic anatomy will be reviewed, and the student will learn about advanced techniques of nerve blocks and postoperative analgesia.

Acute Pain Service - 2 days will be spent learning about the comprehensive management of postoperative pain via regional techniques, IV, and oral medications. Knowledge of pain management transcends specialty boundaries and will be of use to any student.

Medical Simulation - 1 day will be spent engaging in medical simulation and skills training in a non-threatening realistic clinical environment. The student will practice basic and advanced airway skills, peripheral and central venous access, and crisis management scenarios.

Longitudinal Experience - The student will select one complex patient from the preoperative clinic and follow them for a day through their surgery to understand how the preoperative assessment impacts surgical and anesthetic management and postoperative outcomes.

Elective days - Two remaining days the student can use to customize their experience in the OR, ICU, Labor and Delivery Suite or Pain clinic.

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Assessment: Faculty will evaluate student performance during the various components of the rotation. In addition, the student will complete a scholarly project on perioperative medicine which will be evaluated by the selective coordinator. Student feedback is solicited for on-going improvements.

| Day | Sample Schedule |
|-----|--------------------|
| 1 | PACU |
| 2 | PACU |
| 3 | Pain |
| 4 | Pain |
| 5 | Pre Op |
| 6 | Pre Op |
| 7 | Regional |
| 8 | Simulation |
| 9 | Elective |
| 10 | Elective |