Objective Structured Clinical Exam and Ultrasound Simulation Training

Goals and Objectives

Department of Anesthesiology and Perioperative Medicine
Medical College of Georgia

The Purpose

OSCEs

The American Board of Anesthesiology (ABA) APPLIED Examination, the third and final exam in the staged exams series, will include the traditional standardized oral examination (SOE) and a new objective structured clinical examination (OSCE) component. It will be administered at the ABA Assessment Center in Raleigh, N.C. The OSCEs will launch in March 2018, at which time candidates will be required to pass both components of the exam to become board certified. However, if a candidate fails one component of the exam, the candidate will retake only that component.

The OSCEs will assess two domains that may be difficult to evaluate in written or oral exams - communication and professionalism and technical skills related to patient care. Candidates will participate in a seven-station circuit that will evaluate their proficiency in seven of the nine skills listed in the OSCE Content Outline. Each OSCE encounter will be eight minutes long with four minutes between stations to review the next scenario. The OSCE portion of the APPLIED Exam will take 84 minutes from start to finish.

In some exam rooms, candidates will interact with a standardized patient actor as part of the scenario. In others, they will interact directly with an examiner, but examiners will not be in most exam rooms. Instead, the sessions will be recorded for grading purposes.

Who will take the OSCEs?

- Candidates who complete residency training on or after Oct. 1, 2016, will be required to pass both the SOE and the OSCE to satisfy the APPLIED exam requirement.
- Candidates who complete residency training between June 30 and Sept. 30, 2016, (current CA-3 residents) will not be required to take the OSCE component of the APPLIED exam. They will only be required to pass the SOE component to satisfy the requirement.

Ultrasound

Ultrasound imaging is a simple and noninvasive technique that provides a more accurate clinical assessment and localization of areas of interest. Modern ultrasound machines are more compact and portable, with better resolution and enhanced tissue penetration for identification and desired intervention in various body structures. Anesthesiologists have been performing diverse interventional procedures using anatomical landmarks over the years with variable success rates, risks, and complications. Ultrasound has a role in vascular access, neural access for nerve blocks and regional anesthesia, tranesophagelal echocardiography (TEE) for cardiac imaging with blood flow, and to assess the depth of epidural space in cases of difficult anatomy. It is important to develop a thorough understanding of the sonoanatomy involved and practical skills. The normal or abnormal structures need to be imaged and interpreted before any intervention is proposed. The potential areas of ultrasound interventions in anesthesia are airway assessment, for vascular
access, for regional anesthesia and nerve blocks, pleural drainage, TEE, trauma, urinary catheterization, and nasogastric tube placement. The majority of such procedures are performed using surface markings alone for anatomical guidance. Obscured or pathologically altered anatomy can make procedures difficult and surface landmarks may give no indication of the underlying anatomy. Multiple attempts have been shown to be associated with a greater risk of complications. The ability to visualize cross-sectional images during invasive procedures provides a unique opportunity of success for both normal and variant anatomy. Use of ultrasound to view anatomy and guide interventions would improve the overall success with reduced complication rates.

**The Plan**

Each Tuesday Dr. Vikas Kumar will be assigned to the Pre-Op Clinic. He will not be assigned to cases in the OR on Tuesdays to ensure that he is available for OSCE/US Simulation Training which will be held from 2pm to 5pm. In order to have at least five residents in attendance each week for sim training, it is proposed that we pull from the following areas:

- **Acute Pain**: We will pull the senior resident for sim training each Tuesday during his/her Acute Pain rotation month.
- **CT**: We will pull one resident from the CT rotation month each Tuesday for sim training. This resident will be replaced with one CA-1 and one CRNA. The CRNA will be assigned to the electrophysiology lab.
- **ASMP**: The CA-1 resident who is rotating at the medical prison will be required to return to the campus for sim training.
- **SICU**: The senior resident in SICU will be pulled to go to sim training each Tuesday during the SICU rotation month.
- **Perioperative Management (Safari)**: The CA-3 resident assigned to this rotation will be required to go to sim training each Tuesday during this rotation.
- **ALL FREE RESIDENTS**: Any resident who is free from cases will be required to attend sim training on Tuesdays.

**Goals and Objectives**

- Prepare residents for the ABA APPLIED examination
- Evaluate residents and fellows
- Assess residents’ communication and procedural skills
- Enable training using communication methods such as closed loop communication, SBAR with patients, family and other professionals
- Provide data for Milestones evaluations
- Provide residents with formative and summative evaluations
- Enable learning of ultrasound techniques utilizing deliberate practice method
- Develop trainees’ knowledge, skills, and attitude with immersive simulation
- Enhance residents’ problem solving and decision-making skills

**Author:** V Kumar 12/02/2016