

# OSCE in Anesthesiology – Trials and Tribulations: Update From the Simulation in Education Network (SEN) Meeting

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**In March 2018, the APPLIED Examination replaced the traditional Standard Oral Examination (SOE) for anesthesiology board certification by the American Board of Anesthesiology.** The APPLIED Examination consists of a combination of the SOE and the Objective Structured Clinical Examination (OSCE) components. OSCEs aim to evaluate the six core competencies and corresponding milestones proposed by the ACGME to assess communication and professionalism, as well as technical skills related to patient care. Candidates are expected to pass both the SOE and OSCE component of the APPLIED Examination to attain board certification. Studies have shown that clinical

performance is independently associated with the oral board examination scores;<sup>1</sup> it will be interesting to see how the OSCE component correlates with this assessment.

OSCEs were first introduced in the 1970s as an assessment tool in medical education and certification examinations. OSCEs have been a part of the anesthesiology examination in the U.K. and Israel.<sup>2,3</sup> While residents are already prepared for the SOE component of the examination with mock oral sessions during residency, there is a growing need for preparation for the OSCE component. Besides conducting “mock OSCE” courses, programs are incorporating the OSCE principles in novel ways, including assessment of transfusion



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practices, ultrasound techniques, placement of intra-osseous access, perioperative pain management, as well as use in nurse anesthetist clinical competency evaluations. An important area of focus of the OSCE component is to ascertain the professionalism and communication skills of the graduating residents. A growing body of evidence suggests that communication enhances patient-physician interactions and patient satisfaction. Like any procedure, communication can be taught; incorporating the principles of the OSCE components that correspond with the milestones during residency training can help to better train compassionate physicians with effective communication skills.<sup>4</sup>

In 2017, residency programs across the country were surveyed online as to their preparation of residents for the OSCEs.<sup>5</sup> Sixty-six programs responded (49 percent). While 100 percent of these programs reported conducting mock oral examinations for their candidates, only 31 percent of

the programs provided mock OSCE experiences. Common reasons for not starting or having a mock OSCE program were listed as lack of time for faculty and residents, lack of funding or lack of expertise in OSCE development and assessment. While there are articles detailing the methodology of OSCE, along with roadmaps for designing and implementing mock OSCE for programs,<sup>6</sup> there is little information on how to overcome logistical problems being faced by programs, as well information on how to coordinate such an endeavor with limited resources. Full survey results can be found at [www.asahq.org/oscesurvey](http://www.asahq.org/oscesurvey).

The Simulation Education Network (SEN) has worked to tackle this issue with the creation of an OSCE workgroup in 2017. Under the direction of Dr. Bernstein, workgroup members convene via teleconference meetings. The SEN OSCE workgroup composed draft guidelines to help residency programs

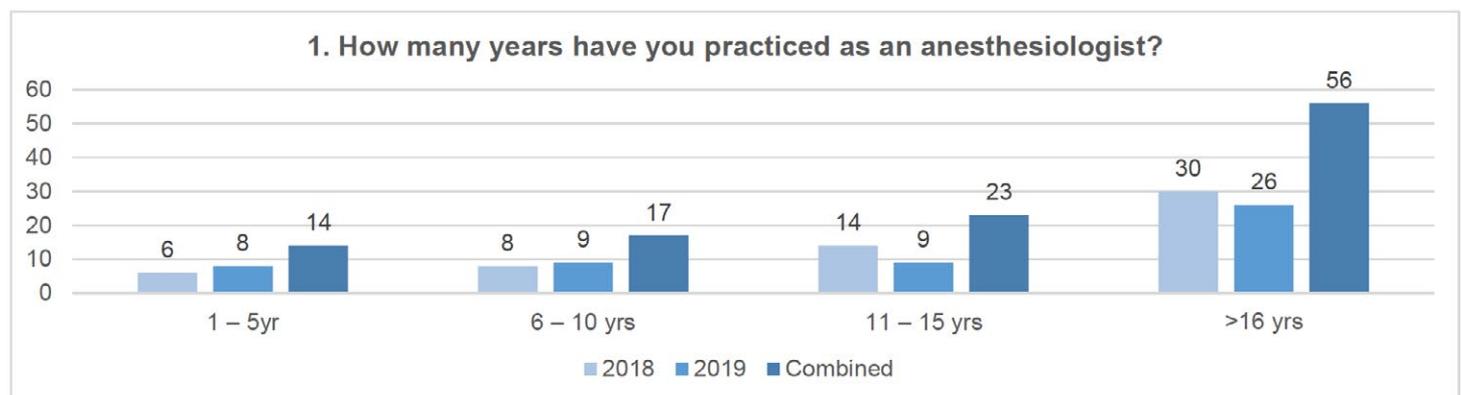
*Continued on page 32*

Session Name	Total Participants
SEN Summit OSCE Poll	2018 69 2019 60

## Results by Question

### 1. How many years have you practiced as an anesthesiologist?

Years in Practice	Responses					
	2018		2019		Combined	
	Percent	Count	Percent	Count	Percent	Count
1-5 year(s)	10%	6	15.38%	8	12.73%	14
6-10 years	14%	8	17.31%	9	15.45%	17
11-15 years	24%	14	17.31%	9	20.91%	23
> 16 years	52%	30	50%	26	50.91%	56
<b>Totals</b>	<b>100%</b>	<b>58</b>	<b>100%</b>	<b>52</b>	<b>100%</b>	<b>110</b>



create mock OSCE sessions for their trainees. At the SEN's meetings in 2018 and 2019, participants were surveyed to assess OSCE preparation readiness and identify the challenges they faced incorporating mock OSCEs into their residency curriculum.

Responses were received in a live onsite survey from 69 participants in 2018 and 60 participants in 2019. Survey results are in the graphs on page 31 (and full results can be found at [www.asahq.org/oscesurvey](http://www.asahq.org/oscesurvey)).

Similar to the survey done by Isaak, et al., there are differences in the existing structure and format being offered. Mock sessions are used for either assessment for ACGME milestones or to identify gaps in clinical practice or ABA preparedness. Overwhelmingly, while there is an increase in the number of faculty involved in OSCE preparation sessions, there is variation in the availability of resources.

**SEN workshop update:** An afternoon workshop conducted at the SEN meeting allowed candidates to delve into the nuts and bolts of designing an OSCE session. The focus was on creating sessions that could be used as an educational tool, as well as an assessment tool, in preparing the residents for their examination. Experienced faculty led the discussion for better understanding of the challenges involved in carrying out an OSCE course with a focus on logistics. Discussions centered on demographics, personal experiences with OSCE, use of standardized patients, as well as evaluations, debriefing tools and methods.

### Goals of the SEN OSCE workgroup

The OSCE workgroup has created resources that will be available for simulation and residency programs to use in preparation for their residents for the ABA examination. Resources will be available to participants to assist with all aspects of OSCE preparation. Our goal is to create a repository with access to the following items.

1. **Logistics:**
  - a. *Space:* dedicated simulation center with the ability to run seven to nine stations, or one to three conference rooms, at the same time
  - b. *Standardized patients (SPs):* trained SPs, medical students, administrative staff or faculty
    - Preparation
    - Training
  - c. *Format*
    - Mimic the real OSCE with seven timed stations, eight minutes apiece
    - Mini sessions with two to three stations
    - Technical skills sessions

2. **Scenarios:** Create an assorted bank of vetted clinical scenarios for professionalism and communication skill sets.
3. **Debriefing:** Guide to different models and tools for debriefing for the session.

Faculty training for these sessions is an integral component of a successful course. In our survey, different styles of debrief are being practiced, primarily dependent on faculty availability:

  - a. Individual debrief after each session;
  - b. Videotaped scenario with debrief after the event; and
  - c. Group debrief at the end of the entire mock session.
4. **Evaluation:** Describe creation of evaluation tools or scoring rubrics in accordance with ABA standards, development of checklists for scenarios, tools for availability for departmental research.
5. **Faculty Development:** While 22 to 44 percent of respondents reported receiving somewhat strong institutional support to run their courses, 57 percent have never attended any course on writing or developing an OSCE.

While most programs are creating their own courses from scratch, resources are available as publication reports.<sup>7,9</sup> The goal of the SEN committee is to provide a thoroughly vetted bank of case scenarios that can be shared and used by multiple programs. Attending sessions at conferences (IMSH and SEA) or faculty development courses at institutes would be an ideal offering.

The addition of OSCEs to the examination process aims to guide residents and faculty in improving their communication skills and providing excellent patient care. While most programs are creating OSCE events for their senior residents in preparation for the APPLIED examination, it behooves us to look into incorporating OSCE type scenarios throughout residency training, with the aim of assessing skill growth and progression for learners. Will OSCE be utilized in assisting the clinical competence committees in the progress of residents by assessing milestones?<sup>10</sup> While all residency programs may not have the resources to simulate the exact mock session, there are ways each residency program can incorporate the skills into their curriculum that will assist residents to achieve their ACGME milestones and excel in their examination performance.

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