



## CAME Voice/Voix

### Teaching OSCE: An illuminating tool to improve learning through formative assessment

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Formative assessment is a concrete, effective, and efficient way to help medical students address and even master the complex clinical, social, and logistical challenges of practicing medicine. Prior to the institution of a teaching OSCE, a major challenge facing the Patient Centred Clinical Methods (PCCM) course at Western was the apparent lack of a mechanism to provide students with formative feedback. This was corroborated by data from course evaluations. As a result, students felt underprepared for the high stakes end-of-year summative OSCE. Teaching OSCEs (TOSCEs) were implemented to address these repeated and genuine concerns. Note, for clarification, that in our model a TOSCE is an OSCE focused on teaching students through formative feedback.

We wanted create formative assessments that a) were conducted separate from grades or ratings b) occurred frequently throughout the academic year, c) involved lower stakes activities (such as feedback on subtasks of a discipline or skill set), and d) were tailored to individual learner needs.

To that end, we implemented the following four-step model of formative assessment for 2<sup>nd</sup> year medical students in the PCCM course at our institution:

- 1) We divided the academic year into three sections and developed TOSCEs to assess clinical skills taught in each of these segments. The clinical task involved taking a relevant history, performing a focussed physical exam or a combination of both based on a clinical vignette.
- 2) At the end of the encounter, we included a coaching/feedback session that allowed students to receive one-on-one, direct, and immediate feedback from the examiner. The purpose of this session was to review student performance, discuss salient performance gaps related to predetermined objectives (highlighted on the check-list), provide constructive feedback in a respectful but direct manner, investigate the basis for the gap by exploring the issues that contributed to the current performance level, and help close the performance gap by discussing principles and skills relevant to successful performance of the case.
- 3) A debriefing session led by the course-chair is then held with an in-depth discussion of each TOSCE scenario. A video recording was shown of a staff physician re-enacting each TOSCE encounter.
- 4) Students who do not perform satisfactorily at the TOSCE are invited to meet individually with the course-chair to discuss steps to enhance future performance.

Our students completed an anonymous post-program feedback form consisting of open and Likert-scaled questions that identified that:

- Students were able to better address their areas of weakness throughout the year.
- Immediate feedback, and the debriefing sessions were the most helpful aspects.
- Students felt less anxious and better prepared for the end-of-year OSCE.

Scores have improved from TOSCE-1 (fall) to TOSCE-3 (spring) each year, indicating that students learn how to better prepare and consolidate their skills throughout the year. We also found a significant reduction in the number of failures on the end-of-year OSCE. Previously, unsuccessful students would have to undertake a repeat OSCE (after a period of remediation) to progress to the next level of training. For the last two years, no such make up OSCEs have had to be run as there have been no failures on the initial examination.

This pilot demonstrates the successful implementation of a targeted formative feedback program for medical students. Next steps will involve further programmatic improvements and using harder end-points to assess this system of formative evaluation in each course and clerkship. Please get in touch with me at [Hariharan.iyer@lhsc.on.ca](mailto:Hariharan.iyer@lhsc.on.ca) if you'd like to know more about our work.

Dr. Iyer was a recipient of a 2017 CAME Certificate of Merit.