Assessing patient safety competencies using Objective Structured Clinical Exams: a new twist on an old tool

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Despite the widespread attention to patient safety over the past 15 years, the subject continues to receive relatively little attention in undergraduate training for health professionals (eg, in medical and nursing schools). Recent advances such as the WHO curriculum guide[1] and the Canadian Patient Safety Institute competency framework[1 2] help to guide our teaching and learning. Furthermore, some schools have implemented patient safety curricula.[3 4] However, evaluating the degree to which students attain these competencies remains in its infancy ('On a scale of 1–5, rate how well you did X'), with all the limitations of self-assessment.[5]

In an effort to progress the field further, Ginsburg et al[6] describe the findings of a pilot that used the Objective Structured Clinical Exam (OSCE) to assess patient safety competence. The OSCE provides a mechanism to move beyond assessing a learner's knowledge to its application by allowing the learner to *show how* they approach a scenario in a simulated setting. As such, it has largely become the cornerstone for the assessment of skills such as history taking, physical examination and even hand hygiene. Ginsburg et al used the OSCE to assess sociocultural patient safety competencies, which is a novel application of this traditional tool.

The authors created scenarios true to inpatient ward settings for the simulation, which they used to provide and report summative learner assessments. Although they note, and we agree, that a high stakes summative assessment in patient safety competencies may drive what is taught and learned, evidence suggests that students perceive summative OSCEs as ineffective for learning.[7] They also do not successfully apply the feedback provided in these settings.[8] With this knowledge, and leveraging the real-world aspect of the OSCE scenarios, the experience Ginsburg et al created is ripe for formative assessment and learning. By making this OSCE a formative exercise, it opens the door to interactions between faculty and learner with immediate feedback. This feature not only facilitates development of the OSCE tool, but also makes possible real-time learning and may even contribute to behaviour change. Thus, in addition to providing summative feedback, the assessment may itself enhance patient safety education overall.

Ginsburg *et al* also analysed their assessments by profession and found that medical students performed better than nursing students. Should we be surprised that they performed differently? Individuals from different health professions enact various functions, receive diverse training, and are acculturated into their professional roles. Consequently, such differences in performance are expected. A patient safety OSCE involving clinical scenarios more often encountered in nursing would likely elicit superior performance from nursing students. Thus, this aspect of the study's findings should not receive much attention. The pilot study was designed to assess the suitability of the assessment tool for different health professionals, not to compare the relative performance of these different professions.

In its novelty, this study also raises an interesting paradox as it assesses individual performance with respect to competencies demonstrated through interactions with others. Socio-cultural competencies, such as communication and teamwork, are heavily entrenched in the interactions

between individuals, and others, such as culture and situational awareness, are influenced by the complex contexts that surround them. Therefore these competencies may fundamentally relate to collective performance and challenge the assumption that the competency resides at the individual level. For example, one of the simulated stations described in this study included discharging a frail elderly patient. Achieving this goal safely requires the collaborative efforts of nurses, physicians, pharmacists, allied health personnel and social workers. None of these individuals acting alone could competently ensure the safe discharge of this patient; the team must work together to secure this outcome.

This concept has been labelled 'collective competence'.[9] Collective competence explains why individually competent people can sometimes unite to form an incompetent team, and why other teams can perform well despite the presence of one incompetent person. This concept underscores the importance of teams, which have an inherent competence beyond that of the individuals on the team, as meaningful and relevant especially in the realm of sociocultural aspects of patient safety.

What would it look like to build on the current work of Ginsburg and colleagues by bringing team competencies with formative assessment into the OSCE to assesses patient safety competencies? Trained faculty would debrief teams, thus permitting learners to reflect and perform 'group assessment' rather than self-assessment. This consideration of self (or group) perception is essential as it is the lens through which feedback is seen and will influence learning goals.[10] Clearly this would require well trained inter-professional faculty. Ginsburg et al's finding of high inter-rater reliability between assessors hints that faculty may be able to reach beyond their own profession's mind-set to teach, learn and assess inter-professional learners effectively. An emerging assessment methodology that might inform this is the McMaster/Ottawa TOSCE (Team Observed Structured Clinical Encounter)—a tool for teaching and assessing inter-professional competencies.[11] Bringing diverse but balanced (equal numbers of medical, nursing and other health professional students) teams together in a learning environment is challenging.[12] But, we believe, this is a challenge worth taking on.

This study also found poor performance across the board in both medical and nursing students. This is unlikely to surprise anyone working in this field. It begs us, though, to dig deeper to into the issue. We have outlined some of the challenges of the OSCE methodology in assessing patient safety competencies, but is there something else lurking in these findings? Might this also reveal the influences of the clinical culture? The clinical culture is set in part by students' supervisors values and beliefs, which in many organisations may emphasise individualism over teamwork,

and hierarchical over collective communication. This culture is transmitted to the learners through the pervasive hidden curriculum.[13] Ginsburg's pilot constitutes an important advance in the assessment of patient safety education. But, even if we take the next steps and assess inter-professional groups collectively with OSCEs, using the OCSE as a teaching and learning tool, we still may not be able to sufficiently improve individual or team competence in patient safety without attending to the critical influence of the clinical culture.

Although structures and supervisors contribute significantly to clinical culture, culture change happens bottom up, as well as top down.[14] If we can find ways to accomplish collective learning through formative assessment of teams in high fidelity OSCE scenarios, this would maintain the integrity of the OSCE (allowing for control over the variances of factors that contribute to performance) while arming participants with new competencies and potentially confidence to contribute to foster the required changes in clinical culture.

Let us take this one step further, though, and consider removing patient safety competence assessment from the controlled and simulated setting and moving it into the uncontrolled but authentic clinical one. Observing what teams actually *do* in trying to reach common goals would afford insights into the cultural influences of the clinical environment as well as an opportunity to formatively assess the collective skills of learners. If done well, this could reinforce the importance of these competencies while providing strong messaging through the hidden curriculum. This new and burgeoning method of assessment may bring us closer to a 'gold standard' measure of sociocultural patient safety competencies.

The current work by Ginsburg et al represents a new twist on an old tool. Importantly, it also pushes us to think about how we might further refine tools to optimally teach, learn and assess patient safety competencies. Ultimately, this will allow us to provide safe care to our patients today and into the future.

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