

# How virtual OSCE smoothed residency transition after COVID-19

DEC 3, 2021

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Making the jump from medical school to residency can have huge psychological effects on interns if they feel unprepared, and the COVID-19 pandemic stood to amplify the impact by shutting down the few projects dedicated to easing the transition.

During a panel discussion at [ChangeMedEd® 2021](#), Kinga Eliaz, PhD, outlined how her team adapted a four-hour in-person simulation to a virtual format to preserve a crucial learning activity for graduating medical students to support and prepare the transition from medical student to doctor.

ChangeMedEd is the [AMA Accelerating Change in Medical Education](#) initiative's national conference, which brings together innovative leaders from institutions across the medical education continuum to reimagine the way future physicians are trained.

## Working with what you have

“July 1, the first day of internship, is a scary day for all—for all interns, patients and hospitals,” said Eliaz, a cognitive and behavioral research scientist at New York University Grossman School of Medicine. “Transitioning during a pandemic is even scarier.”

The pandemic in 2020 could have stymied learners making this transition by abruptly halting their in-person simulation-based activities, such as objective structured clinical examinations (OSCEs). But NYU and four other U.S. medical schools—Texas Tech University Health Sciences Center and the three campuses of the Medical College of Wisconsin—partnered to adapt one of those in-person activities, dubbed Night-onCall, to a purely virtual experience.

The in-person version of Night-onCall is a four-hour, immersive simulation experience for near-graduating medical students that uses a multistation OSCE framework in which learners take on the role of interns and rotate through a series of clinically-authentic night-on-call activities. They encounter standardized patient (SP) scenarios demonstrating varying degrees of workplace complexity, including postoperative low urine output, contrast-induced low urine output and informed consent.

The schools had to make several adjustments for Night-onCall to work in a virtual environment. These included having the SPs turn their cameras off and on to simulate entering the exam room, instructing students to verbalize and describe their physical exam findings (for example, “I’m pushing down on the artery in your leg”). Other changes included training the SPs to respond accordingly with the exam findings (for example, “my pulses are strong”), and having students say “ring ring” when paging the nurse.

Several additional changes helped optimize the learning experience, maximize fidelity and reduce potential screen fatigue, Eliasz noted.

“We spaced the learning for students by assigning the e-learning module as pre-work in order to prime the virtual simulation learning,” she said. “We also eliminated one of the patient counters ... and we oriented students to the experience via voiceover presentation outlining expectations,” making it possible to reduce the Night-onCall experience from four hours to three.

## Four key insights

Eliasz said she and her colleagues learned several lessons about transitioning an in-person simulation to a virtual one.

“The first was the importance of preparing both the students and the team for virtual simulation,” Eliasz said, noting that this was accomplished in part by assigning students pre-work and conducting full practice runs to resolve logistical issues.

The second was that there were simple, low-tech, low-cost strategies that made the virtual environment feel authentic.

“While having students verbalize and describe their physical exam assessments and the standardized patients’ responding with the exam findings might have seemed very odd, educationally the trade-off was very valuable,” Eliasz said. “Students expressed appreciation for the need to be explicit about requesting and providing a rationale for each of the key physical exam maneuvers.”

Assessments were entirely preserved in the transformation from in-person to virtual Night-onCall because of these pragmatic adjustments.

The third was that students' readiness, strengths and challenges were the same across the virtual and in-person platforms. One of the assessments showed that graduating students consistently demonstrated strong communication and relationship building skills but struggled to know how to engage the standardized nurse.

And the last was how important it is to include time and space for feedback—for both students and teams.

“Debriefing with students in small groups via virtual classroom, or even a discussion board like Canvas, helped them consolidate their learning and created a safe space and a safe forum for students to ask questions and voice concerns, while debriefing after each institution's event was critical to the development and evolution of virtual Night-onCall and helping each medical school make evidence-based curricular changes to smooth the transition,” Eliasz said.

“Creating a virtual framework is a valuable and judicious investment to standardize and scale-up learning experiences, extend educational opportunities to lower-resource sites and serve as a contingency plan during unpredictable times,” she concluded.