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“Megaflip” is a novel form of open-access national didactics. These sessions are multicenter educational experiences using materials from The Organization of Neonatal-Perinatal Medicine Training Program Directors National Neonatology Curriculum, a standardized, peer-reviewed curriculum utilizing flipped classrooms.² In the National Neonatology Curriculum flipped classrooms model, learners are assigned prework, consisting of short videos and reading materials in preparation for the “classroom” session. The classroom session focuses on case-based knowledge application rather than knowledge acquisition.

“Megaflip” sessions are delivered via the Zoom (San Jose, Calif) platform. A small group of facilitators (2–3) hosts the Megaflip and interested programs request a link to participate. The participating programs provide a local facilitator to lead their own fellows in large group and breakout discussions. This facet of “Megaflip” allows the faculty team to highlight important interinstitutional practice differences and expands the peer-learning opportunity across programs. The Zoom platform overcomes many of the challenges of a large group interactive session by allowing learners to virtually raise their hand, answer yes/no questions with the click of a button, utilize the chat feature, and participate in smaller group discussions via the breakout room feature.

OUTCOMES TO DATE

There have been 2 pilot sessions with 131 fellows from 16 neonatology and pulmonary fellowship programs

across the United States. We have thus far received 22 survey responses regarding the utility of Megaflips and the impact of COVID-19 on fellow education.

Prior to their Megaflip experience, only 4.5% of respondents had previously participated in didactics with fellows from other programs. Seventy-three percent felt the amount of active discussion was better than a typical educational session and 91% of respondents felt this model had good or great effectiveness for learning. No fellows reported technical difficulties with the online platform.

NEXT STEPS

As expertise and comfort with the online format grows, we anticipate that more programs will host and facilitate Megaflip sessions. Expanding the use of Megaflips on a national level will allow increased education across medical disciplines and content areas. We plan to continue this model beyond the pandemic given the opportunity for multicenter collaboration, reduced burden on faculty facilitators, and expanding fellow exposure to center-specific innovations and practice patterns.

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Primary Care Mock Codes During a Pandemic: Interprofessional Team-Based Emergency Education While Maintaining Social Distance



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PROBLEM

PREPARING PRIMARY CARE offices to manage common medical emergencies requires routine training of staff.¹ The American Academy of Pediatrics² recommends simulated exercises, or mock codes, for staff to practice the steps of an emergency. Our large urban pediatric primary care office sees >300 patients daily and provides care to the largest number of medically complex patients in our network of 31 practices. With our large patient volumes

and high acuity, our office averages 2 patients per week that require emergent stabilization or additional evaluation in an emergency room. We typically hold in-person mock codes semiannually. However, during the COVID-19 pandemic, approximately half our staff was in the office each day, and the other half had alternative work arrangements. By late March 2020, we realized we needed to revamp our mock code plan to educate staff about medical emergencies while practicing social distancing.

APPROACH

In April 2020, we launched virtual interprofessional small group mock codes. Using a video conferencing platform, we brought together ~5 staff and 1 facilitator. Roles included: medical assistants, registered nurses, physicians, nurse practitioners, and phlebotomists. Materials were emailed to staff to review prior to the session. The facilitator hosted the online meeting from the office. During each 35-minute session, the team collaborated via video conference to manage a common pediatric emergency: a seizure. The staff virtually “assessed” the child, reviewed emergency protocols, and assigned team roles. The facilitator coached the group to describe locations of supplies in the code cart and office. When directed by team members, the facilitator demonstrated how to use appropriate equipment and treatments. Each session concluded with a short debrief to reflect on strengths as well as learning gaps.

OUTCOMES TO DATE

In 2 weeks, 90% of our clinical staff (72 people) participated in 1 of 13 virtual mock codes. Fifty-four percent of participants completed a postsession survey. Total 96.4% of respondents agreed the session met the learning objectives; 97.3% liked the virtual learning opportunity during a pandemic; 97.3% named 2 key points retained during the session. Positive comments included: appreciated reviewing office emergency supplies; enjoyed the creative interactive education option from home; easier to learn in small groups. Feedback included: prefer a longer session; prefer hands-on learning; add a video clip of the “patient”; identify a video conference platform with fewer technological issues.

NEXT STEPS/PLANNED CURRICULAR ADAPTATIONS

The reinvention of our mock code to a virtual format was feasible to implement on short notice and successfully met the intended learning objectives. The critical thinking and clear communication that is both necessary and challenging in a medical emergency was demonstrated during these small group video conference sessions.³ Our outcomes met Level 2 of Kirkpatrick’s framework. Lessons learned from this experience can easily be applied to future mock code trainings—both now, while social distancing is necessary, and when COVID-19 is a distant memory. In particular, it is clear that smaller group trainings improve participation by all team members.¹ Therefore, after COVID-19, we will adapt our mock codes by using small group online sessions to supplement our annual in-person trainings. We also plan to strengthen these virtual learning experiences by incorporating tools that augment simulated reality, such as pairing the case with a “patient” video or using a simulation manikin.

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Remote Assessment of Clinical Skills During COVID-19: A Virtual, High-Stakes, Summative Pediatric Objective Structured Clinical Examination



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PROBLEM

DUE TO REQUIREMENTS for social distancing to protect the health of students, faculty, and standardized patients

(SP) during the coronavirus pandemic, the pediatric clerkship Objective Structured Clinical Examination (OSCE) could not safely take place within our simulation center.