Aim: The aim of the study was to adapt the SHINE course for virtual delivery.
Method: We replaced live simulations for pre-recorded scenarios. We filmed these on the labour ward and our simulation room with members of our Neonatal Unit, instructing 'candidates' to act in specific ways which would bring out learning objectives. The videos were edited to optimize quality. We delivered the course via Zoom, playing the videos followed by a live debrief. The workshops remained the same. We increased participants to 12, split them into two break-out rooms. We ran the course twice during the peak of the pandemic. We evaluated self-rated confidence pre-attending and post-attending the course.
Results: We ran the course with four members of faculty instead of eight required face-to-face. We encountered minor technical difficulties which were easily resolved. Twenty-four paediatric trainees of various grades attended. Candidates rated their confidence managing scenarios from 1 (very low) to 5 (very high). The average score before the course was 2.8 and improved to 3.9 after the course. 81% (22) candidates agreed/strongly agreed that the workshops were well structured and educational, 96% (23) agreed/strongly agreed that they had enough opportunities to interact and 81% (22) agreed/strongly agreed that the virtual environment worked well. All candidates agreed/strongly agreed that the video debrief sessions were well structured and educational and that the virtual learning environment was safe and supportive. All trainees would recommend the course to colleagues.
Implications for practice: SHINE is a well-established sought-after course. We were able to continue this training virtually during the COVID-19 pandemic Whist we recognize that there is no replacement for hands-on experiential learning, we have demonstrated that virtual simulation is possible, effective, highly valued by trainees and has the advantage of being less resources intense and accessible to more candidates. We propose that virtual simulation training should be offered where face-to-face teaching is not possible.

REFERENCE

1. Gaba DM. The future vision of simulation in health care. Qual Safety Healthcare 2004;13:i2–i10.

10 INTRODUCING A VIRTUAL WARD ROUND IN TIMES OF COVID-19

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10.54531/PWAC7112

Background: Many medical students feel unprepared for starting as FY1 doctors, and often report low confidence in taking responsibility for patients and working independently, and lack self-assurance in common FY1 skills, including assessing unwell patients and initiating management, task prioritization, referrals, documentation, ordering imaging and on-call shifts. These skills are developed during clinical placements; however, access to these opportunities during placements has diminished due to COVID-19 and concerns around patient safety. Simulation-based teaching allows students to take responsibility and work within complex clinical environments without posing a risk to patients [1]. Previous studies have shown that simulated ward rounds improve students' clinical skills [2]. This study aimed to evaluate whether a new simulated mock ward round with tasks would improve final-year students' general preparedness for FY1 and confidence across common FY1 tasks.
Aim: The aim of the study was to evaluate whether simulated mock ward rounds increase final-year medical students' overall confidence and feeling of preparedness for starting as FY1 doctors.
Method: In total, 20 final-year medical students took part in the programme in two whole-day sessions. This was comprised of a simulated ward round of 10 patients. Students acted as FY1 doctors on the ward and carried out jobs, reviewed patients who deteriorated and had a number of tasks such as updating families, ordering radiology, initiating management and discharge summaries. Students' confidence and preparedness was measured using pre- and post-course questionnaires. The questionnaires consisted of a 10-point Likert scale for students to rate their confidence in key skills and overall preparedness for FY1 (1 = not at all confident, 10 = completely confident). These scores were matched and analysed using the Wilcoxon signed-rank test. Additionally, there was blank spaces for feedback on the course which were analysed thematically.
Results: Pre- and post-course questionnaires demonstrated that students felt significantly more prepared for FY1 after the course ($p < 0.001$). There was also a significant improvement in nine other domains deemed important for FY1 that students had reported low confidence in (see Figure 1). Qualitative data revealed that students appreciated the programme. They stated its superiority to other educational methods such as shadowing or didactic teaching sessions.

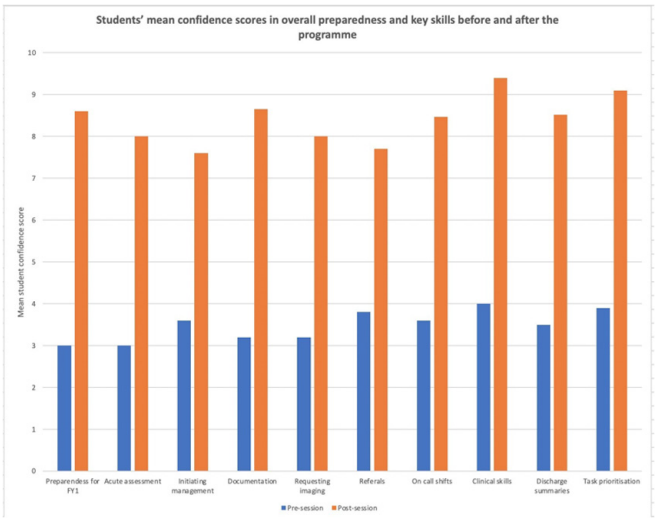

Figure 1: Students mean confidence score in overall preparedness and key skills before and after the programme. $P < 0.001$ for all domains.

Implications for practice: Simulated mock ward rounds can be used as an adjunct to clinical placements to increase medical students' confidence about starting work, and to teach them valuable skills regularly utilized by FY1 doctors.

REFERENCES

1. Kellett J, Papageorgiou A, Cavenagh P, Salter C, Miles S, Leinster SJ. The preparedness of newly qualified doctors – views of foundation doctors and supervisors. Med Teach. 2015;37(10):949–954.
2. Behrens C, Dolmans DHJM, Leppink J, Gormley GJ, Driessen EW. Ward round simulation in final year medical students: does it promote students learning? Med Teach. 2017;40(2):1–6.

53 REMOTE AND BACK AGAIN: AN EDUCATOR'S TALE OF SIMULATION

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10.54531/BOXZ8545

Background: Between November 2020 and May 2021, 61 simulation sessions were run either face-to-face or remotely for foundation-level doctors and pre-registration pharmacists. A total of 346 participants attended. Thirty-three sessions were face-to-face (185 participants) and 28 were remotely via Microsoft Teams (161 participants). The content was the same for both modalities.
Aim: The aim of the study was to discern whether there was a difference in learning points and confidence scores between face-to-face and remote participants.
Methods: Participants were asked to rate their confidence (see Table 1) before and after the course. They were asked to provide their main learning points and what they gained from the course. Confidence scores were compared and assessed for change. Responses were compared between face-to-face and remote.

Table 1: Confidence score change on Likert scale 1–5.

Q. no.	How confident do you feel...	Change	
		F2F	REM
1	...that your clinical knowledge is appropriate for your role	+0.67	+0.89
2	... to manage a patient who is peri-arrest	+1.03	+1.27
3	...to manage a patient with a NEWS2 >7 and/or is deteriorating	+0.93	+1.23
4	...that you possess the skills required to communicate information to the rest of the MPT	+0.81	+0.83
5	... that you possess sufficient strategies to raise concerns when necessary	+0.51	+0.64

Results: All participants reported increased confidence. Table 1 shows that the changes were comparable, with the changes in the remote participants all being marginally higher than in face-to-face. The distribution of learning points for remote and face-to-face participants was identical. For both modalities, the top two points were communication and escalation. The dominant theme in remote was escalation and communication in face-to-face. Remote participants were positive about the course, in their free-text responses, 'most innovative use of technology I have seen during COVID' and 'My hands are sweating, I can't believe how real that felt' a common theme in the comments was that they would rather do the course face-to-face.
Implications for practice: While not preferred, remote simulation appears to deliver equivalent learning and is a suitable alternative when face-to-face is impossible. The main difference seen was in communication skills, which is concurrent with Cheng et al. [1] related to the difficulties of communication in a virtual debriefing.

REFERENCE

1. Cheng A, Kolbe M, Grant V, et al. A practical guide to virtual debriefings: communities of inquiry perspective. Adv Simul. 2020.

55 INTRODUCTION OF A CARDIAC ARREST PROFORMA THROUGH *IN SITU* SIMULATION TRAINING

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10.54531/CTWH8920

Background: The use of *in situ* simulation (ISS) within the Emergency Department (ED) has been widely accepted and has shown to be a valuable teaching tool [1]. At Mid-Yorkshire NHS Trust, we have been running weekly ISS since October 2020. Within the ED, systems and protocols are frequently audited, guidelines often change, and it can be challenging to disseminate this information. After identifying a clinical need for a cardiac arrest proforma, we considered how best to introduce it. We decided to utilize our weekly ISS to provide a valuable learning opportunity.
Aim: The aim of the study was to evaluate the effectiveness of using ISS as a learning opportunity to disseminate and trial the introduction of a new cardiac arrest proforma.
Method: We ran the scenario on two separate occasions involving 11 participants. The simulation involved a low-fidelity manikin and a simulated monitor app. Real equipment is used and the simulation is run in real-time – learners were encouraged to manage the patient as they would in real life. Learners include doctors, nurses, healthcare assistants and student nurses/doctors. Learners are briefed prior to the simulation; in this particular case, the learners were informed that we would be utilizing a cardiac arrest proforma and encouraged to use this. The learners are then debriefed using a promoting excellence and reflective learning (PEARLs) framework and discussion amongst themselves is central to the debrief framework [2]. The purpose of this simulation was multi-faceted; firstly, to discuss the team's management of cardiac arrest and learning around this and, secondly, to discuss the use of the proforma to improve teamwork and patient care. Learners were asked to complete a feedback form.
Results: Feedback obtained from this simulation concluded that it was a valuable learning opportunity. Figure 1 shows the results of learner responses (n = 11). The scale included was 5 (strongly agree) to 1 (strongly disagree) – an average of responses is included within the graph.
Implications for practice: Using ISS to trial our proforma allowed us to implement it within the ED. Collating feedback allowed us to make amendments to our proforma based on multi-disciplinary opinions. As well as recognizing that ISS can be used to achieve this purpose, it also provided a valuable learning opportunity. ISS can be used in future to introduce new guidelines, distribute vital information and provide learning.

REFERENCES

1. Patterson M, Blike G, Nadkarni V. In situ simulation: challenges and results. In: Henriksen K, Battles J, Keyes M et al. (eds). Advances in Patient Safety: New Directions and Alternative Approaches, 3rd edn. Rockville: Agency for Healthcare Research; 2008.
2. Eppich W, Cheng A. Promoting excellence and reflective learning in simulation (PEARLs): development and rationale for a blended approach to health care simulation debriefing. Simul Healthcare. 2015;10(2):106–12.

6 ASSESSMENT OF THE CREATION OF A NEW COURSE

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10.54531/EQFR8807

Background: Although commonly used in the clinical environment, insertion of peripherally inserted central catheters (PICC) is not routinely taught to clinical staff. As the procedure requires knowledge in relevant anatomy, sonography skills, and understanding of complications management, it requires dedicated time for teaching. In 2018 no PICC line insertion courses were found in London County.