

**Aim:** The aims of the study were to establish the efficacy of translation of a large-scale inter-professional malpractice Mock Trial simulation to the virtual platform and to determine whether this will be a useful modality once social distancing restrictions ease.

**Method:** The virtual simulation was structured using the brief-simulation-debrief model. Students participated as jury members via Zoom. A simulated courtroom held 11 participants of the trial (one judge, four law students [two defence, two prosecutions], five witnesses and one administrator) and was broadcast in real time to students. The learners first heard the case (opening statements, Plaintiff's case, Defendant's case, closing statements and jury instructions) before moving to IP jury break-out rooms with facilitator supervision to deliberate a verdict. Verdicts were delivered in the main room, followed by a debriefing. All students completed a pre-/post-questionnaire, including the Interprofessional Collaborative Competency Attainment Survey (ICCAS) and evaluation of simulation methodology, Mock Trial structure/content and overall impression. To assess efficacy, we compared student evaluations from 2018 and 2019 (in-person events) to those from 2021 (virtual).

**Results:** A total of 179 learners participated in three in-person Mock Trials; 143 attended the virtual offering. The virtual event included learners from 19 professions from 4 institutions and 12 facilitators. Evaluations assessed IPEC competencies. For the virtual Mock Trial, learners (96%) strongly agreed/agreed that 'this activity demonstrated the value of IP collaborative practice to prevent malpractice lawsuits' and 97% felt that this was a valuable educational activity. Representative qualitative data include: 'as a law student it was interesting to see what laypeople take away from evidence...'; 'watching the process provided insight into the litigation process'; 'the most valuable experience is hearing other people's perspective'.

**Implications for practice:** Large-scale virtual simulation events such as a Mock Trial are feasible and provide a valuable inter-professional learning experience. Student feedback demonstrates that gaining insight from different perspectives is a meaningful part of the experience. Incorporation of large-scale simulation events post-pandemic can increase accessibility to foster IP learning on a wider scale.

## REFERENCE

1. Interprofessional Education Collaborative. Core competencies for interprofessional collaborative practice: 2016 update. Washington, DC: Interprofessional Education Collaborative.

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### IMPROVING TECHNICAL AND HUMAN FACTORS SKILLS ON THE OLDER PERSON UNIT: AN *IN SITU* FRAILTY SIMULATION PROGRAMME

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**Background:** Awareness of symptoms associated with frailty is uneven across acute hospital staff <sup>[1]</sup>. Frail patients are more likely to suffer adverse outcomes; managing frailty requires an inter-professional, multi-disciplinary approach – for which simulation has been identified as beneficial in delivering education <sup>[2]</sup>. Given this, in addition to multiple incidents on wards highlighting a deficiency in both technical

and human factors skills, an *in situ* frailty simulation project was undertaken at a London teaching hospital.

**Aim:** The aim of the study was to evaluate the efficacy of *in situ* frailty simulation in improving both technical and human factors skills for ward staff.

**Method:** *In situ* simulation was selected to increase accessibility for staff and promote ward team learning. Sessions started in October 2020 on one ward, before moving across other wards. These 1-hour sessions have been delivered weekly with a hiatus due to the second wave of the COVID-19 pandemic. A bank of frailty-based scenarios has been created, ranging from acutely unwell patients to communication with families. Participants have been from across the multi-disciplinary team. Data were collected using pre- and post-session questionnaires – containing the Human Factors Skills for Healthcare Instrument (HuFSHI) and frailty-based knowledge questions with Likert scales. Learning has been disseminated through the department via newsletters.

**Results:** Thirteen sessions have been delivered with 59 participants (23 nurses, 20 doctors, 9 physiotherapists, 6 nursing assistants, 1 occupational therapist). Forty-nine surveys were completed – 100% of participants found the sessions useful. Post-training, staff demonstrated improvement of self-efficacy in 11/12 HuFSHI questions and all frailty questions (Table 1). The most common learning themes were communication (51%), teamwork (43%) and escalation (24%), as well as management of frail patients (35%). Working with the team (47%), the scenarios (18%) and debriefing (12%) were aspects learners most liked about the sessions.

**Implications for practice:** An *in situ* frailty simulation programme has been successfully implemented, leading to improved learner self-efficacy in both technical and human factors skills when managing frail patients. This has been well received amongst staff. In particular, the sessions have promoted interaction and teamwork within the multi-disciplinary team, which was liked by participants. The *in situ* delivery has allowed learning to occur without the need for staff release, widening access. Latent threats – such as missing airway equipment – have been identified during sessions and addressed. Moving forwards, funding has been secured for a departmental manikin alongside expanding our multi-disciplinary faculty.

## REFERENCES

1. National Institute for Health Research. Comprehensive care older people living with frailty in hospitals. England: National Health Service. 2017.
2. Palaganas J, Epps C, Raemer D. A history of simulation-enhanced interprofessional education. *J Interprofessional Care*. 2014;28(2):110–115.

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### ESTABLISHING AN INTER-PROFESSIONAL *IN SITU* SIMULATION (ISS) PROGRAMME IN DISTRICT GENERAL HOSPITAL EMERGENCY DEPARTMENTS (EDS)

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**Background:** *In situ* simulation (ISS) is an effective educational tool that improves patient safety outcomes <sup>[1]</sup>. It has been trialled previously in this trust but not regularly and many staff members had never participated. Anticipated challenges included freeing staff from clinical duties, scepticism about simulation training and technical issues.

**Aim:** The aim of the study was to establish a regular programme of inter-professional ISS delivered by a dedicated team in the emergency department (ED).

**Method:** An ED simulation team was created, including consultants, a senior registrar and two newly appointed simulation junior clinical fellows. Sessions run monthly in both EDs in the trust, taking place in the 'green' resus area, in the morning when clinical demand is usually lowest. Participants include doctors and nursing staff of all grades, with cross-speciality involvement. Increasing participation required was influenced by senior management and clinical staff agreeing this was a necessary and valuable tool. Faculty include the ED simulation team and a simulation technician. Scenarios are developed by the team with specific intended learning outcomes, e.g. ALS in COVID-19, assessment of the acutely unwell pregnant patient. Intended learning outcomes are influenced by new guidelines, specific emergency cases or skills and suggestions by staff. The patient has been trialled as an actor and/or SimMan3G, depending on the scenario. Clinical equipment is mostly donated and expired. A structured debrief is led by a senior simulation team member. Key learning from each session is summarized in a 'Sim News' poster which is tweeted, disseminated via email to all staff and published on the departmental 'EMBEDS' website. Participants fill in an anonymous feedback form online and receive a certificate of participation.

**Results:** Fifty-nine participants from December 2020 to April 2021 gave feedback (see Table 1). Comments included '...helped me learn my anaphylaxis protocol', 'Teamwork and communication are vital'.

**Implications for practice:** The *in situ* programme has successfully educated staff; led to changes in guidelines published on 'EMBEDS'; and identified and corrected problems relating to the clinical environment. Staff have found it an enjoyable and valuable experience. The next steps are to increase the frequency of sessions, expand faculty to include a paid senior staff member and include further clinical teams such as blood bank, trauma team and other specialities.

**Table 1:** Feedback form results

This simulation session...	Average score (10 – strongly agree, 1 – strongly disagree)
...improved my clinical knowledge	9.63
...made me more familiar with my working environment	9.58
...taught me about current guidelines	9.68
...helped me improve my team working	9.84
...helped me improve my leadership skills	9.21
...helped me improve my communication skills	9.53
I enjoyed this simulation session	9.74
I would feel more confident managing a similar situation in the future	9.58
Simulation is a valuable tool in my training	9.74

## REFERENCE

1. Goldshtein D, Krensky C, Doshi S, Perelman V. In situ simulation and its effects on patient outcomes: a systematic review. *BMJ Simul Technol Enhanc Learn*. 2020;6:3–9. Available from: <https://stel.bmj.com/content/6/1/3> (accessed 16 June 2021).

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## LATENT ENVIRONMENTAL ERRORS REVEALED: USING *IN SITU* SIMULATION TO CHECK THE SAFETY OF RETURNING THEATRES TO OPERATING AFTER BEING REPURPOSED AS A VENTILATOR INPATIENT UNIT

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**Background:** During the second wave of the coronavirus pandemic, Day Surgery had been stopped for 6 months at Aintree University Hospital to respond to an influx of COVID patients. Day Surgery theatre staff had been redeployed to other areas of the hospital, including A&E and Intensive Care. The Day Surgery recovery had been repurposed as a ventilatory inpatient unit for coronavirus patients. We felt that this potentially jeopardized the confidence and competence of returning elective care staff. We hypothesized that the theatres themselves had become unsafe to accept patients for elective procedures having been used for a different purpose for such a long time. We used *in situ* simulation to re-skill the staff and test the safety of the clinical area <sup>[1]</sup>.

**Aim:** We aimed to improve the confidence and capability of theatre staff returning to work in elective theatres and to perform a systems test of the Day Surgery Unit to identify and rectify any latent errors.

**Methods:** The refresher day was split into morning and afternoon sessions. The morning session comprised of two simulation sessions: cardiac arrest in recovery and a difficult airway in theatre. The afternoon comprised of sessions focussing on five anaesthetic emergencies: malignant hyperthermia, local anaesthetic toxicity, massive haemorrhage, anaphylaxis and sepsis. These sessions included locating and studying standard operating procedure (SOP) folders and locating vital equipment in the treatment of these emergencies. Participants then evaluated their confidence in managing emergencies before and after the refresher day using pre- and post-questionnaires. We also encouraged participants to raise concerns and make suggestions in a free-text section.

**Results:** Forty participants took part in the refresher day. Pre- and post-questionnaires indicated that participants had much-improved confidence in dealing with anaesthetic emergencies post-session. We identified several latent errors within the unit including missing and out-of-date SOP folders, missing anaphylaxis bag, no fibrescope available for the difficult airway, no key available for the malignant hyperthermia cupboard and a poorly stocked and unsealed difficult airway trolley.

**Implication for practice:** The results show that participants felt more confident to restart work in the Day Surgery Unit, hopefully improving their performance in critical incidents. By running *in situ* emergency simulations, we identified several latent errors in the elective care centre which allowed us to rectify these in preparation for its re-opening, improving the safety of our unit. Participants expressed a desire to engage in more simulation sessions. Latent environmental errors revealed: using *in situ* simulation to check the safety of returning theatres to operating after being repurposed as a ventilator inpatient unit.

## REFERENCE

1. Goldshtein D, Krensky C, Doshi S, et al. In situ simulation and its effects on patient outcomes: a systematic review. *BMJ Simul Technol Enhanc Learn*. 2020;6:3–9.