

**Methods:** The Resuscitation and Simulation Team, led by the associate Clinical Lead for Simulation, modelled the theatre list for the first day using simulated patients and in line with the ASPIH standards [1]. This gave the theatre staff the opportunity to run through cases in real time and gauge when patients needed to be sent for, how long was needed for setting up, and at what time they could safely call for the next patient without causing unnecessary delays or having patients waiting in corridors. Each step in the process was followed by a debriefing so that the actions could be discussed and any changes made.

**Results:** The feedback was positive and team members found it extremely useful to simulate their upcoming lists. As expected, there were several patient flow related issues raised, mainly around timings and logistics (Table 1). The day also allowed teams to anticipate other minor issues such as kit storage, stocking and availability to ensure the theatre lists ran smoothly on the day.

**Table 1:** Issues identified following simulation of a theatre list

Problem	Effect	Solution
Lack of anaesthetic room meaning that patients needed to be anaesthetised in the theatre.	The theatre must be set up and ready to go prior to the patient arriving as the noise during induction must be minimal.	Times were mapped out from sending for the patient, pre-op checklist, to arrival in theatre so that staff could plan set-up accordingly.
During joint replacement operations the doors cannot be opened due to infection risk.	All equipment must be inside the theatre prior to the patient arriving.	A simulated 'walk through' of the theatre list allowed staff to collate a list of all possible equipment that may be needed so it could be inside the theatre.

**Conclusion:** Simulation of normal business can be successfully used to improve patient safety and the confidence of clinical staff when developing new clinical areas.

#### REFERENCE

1. Association for Simulated Practice in Healthcare. Simulation-Based Education in Healthcare. 2016. Standards Framework and Guidance. Association for simulated practice in healthcare (ASPIH) standards for simulation-based education. <https://aspih.org.uk/standards-framework-for-sbe/> [Accessed on 26/06/2022]

#### DEVELOPING A NEW SIMULATION-BASED DECISION-MAKING AND TEAM-WORKING COURSE FOR ADVANCED CLINICAL PRACTITIONERS

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**Background:** The development of the Advanced Clinical Practitioner (ACP) framework at Lancashire Teaching Hospitals began in 2017. There are now 13 non-medical consultants, 73 Qualified Advanced and Specialist Clinical Practitioners, and 25 trainee ACP's across the organisation. Part of the competency framework included the ability to manage common medical emergencies that are not necessarily a routine part of that ACP's case load, for example managing a patient with chest pain on a surgical ward or assessing a ward patient following a fall.

**Methods:** A one-day simulation-based course was developed to allow ACP's to manage patients with these conditions in a safe and supportive environment. The day includes a

lecture introducing human factors and decision-making theories, followed by six scenarios with debriefing facilitated by senior faculty to discuss learning points with the group. Scenarios were designed in line with ASPIH standards [1] to include clinical competencies which are not commonplace in the trainee's current working environments, giving them a chance to undertake the management of these rarer occurrences in a safe and controlled environment.

**Results:** Feedback was collected using anonymous self-scoring feedback forms and was overwhelmingly positive, with candidates feeling more confident in managing these clinical scenarios in practice. All candidates felt the scenarios were pitched to the correct level. Written feedback also highlighted how beneficial it was to get together as a group for shared learning across different directorates.

**Conclusion:** Simulation-based learning can improve the confidence of ACP's in managing unfamiliar clinical emergencies. In future courses will be advertised and opened to ACP's from other Trust's to allow further discussion.

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1. Association for Simulated Practice in Healthcare. Simulation-Based Education in Healthcare. 2016. Standards Framework and Guidance. Association for simulated practice in healthcare (ASPIH) standards for simulation-based education. <https://aspih.org.uk/standards-framework-for-sbe/> [Accessed on 26/06/2022]

#### BRIDGING THE REALISM GAP: USING 'LOW-FIDELITY' SIMULATION FOR HIGH QUALITY TRAINING

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**Background:** The Royal College of Anaesthetists recommends use of simulation-based-education (SBE) during the initial 12-week novice placement for new anaesthetic trainees [1]. For many UK anaesthetic departments, the complexity and cost of patient simulators [2] may reduce opportunities for SBE during novice training. However, avoiding the physical fidelity trap [3] and utilising both conceptual and psychological fidelity to good effect might mitigate this issue. As novice trainees are already familiar with the theatre environment from day-to-day clinical practice, the learning outcomes from SBE generally cover rarer emergencies which can still be covered during SBE outside of the theatre environment. We aimed to assess the feasibility of running weekly low physical fidelity SBE across the entire 12-week novice period instead of the smaller number of ad-hoc sessions delivered previously.

**Methods:** Our new SBE programme consisted of 30-minute sessions held in the anaesthetic department conference room to minimise impact on stretched theatre capacity and educator availability. To further maximise efficiency, we created a portable simulation set-up using a basic resuscitation manikin on a patient trolley, a disused anaesthetic machine, and a tablet device with a simulated monitor application. This could all be set-up and stored away in under 5 minutes. Our focus on conceptual and psychological fidelity led to the creation of a new scenario bank which identified common issues encountered by new anaesthetic trainees, rather than emergencies rarely encountered by even an experienced anaesthetist. Scenarios needed to be highly plausible and solvable by the novice trainee. Learners were then asked to complete a feedback survey after each session.

**Findings:** Feedback from this new simulation programme was very positive and comparable to previous feedback. Across all sessions (n=12) and trainees (n=5), the median Likert scores for perceived relevance, realism, and appropriate challenge were 6/7, 5/7, and 6/7 respectively. All trainees across all sessions indicated they found it useful, enjoyable, and would attend again. In particular, free text responses praised the ability to focus on a single simulated issue without the cognitive overload of the wider theatre environment experienced by new trainees, and the psychological safety benefits of simulation and debriefing in a more relaxed non-theatre setting.

**Conclusion:** This appears to be a feasible and well accepted alternative to our traditional approach, with additional benefits for trainees and reduced impact on service delivery. We now intend to explore use of this approach to deliver increased SBE to the wider anaesthetic and multidisciplinary team.

## REFERENCES

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## STRESS INOCULATION: A PILOT STUDY TRACKING THE EFFECT OF REGULAR SIMULATION ON PRE-SESSION ANXIETY AMONGST NOVICE ANAESTHETISTS

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**Background:** Effective simulation-based-education (SBE) relies on the use of psychological safety to encourage participants to adopt learning-orientated behaviours [1]. Excessive levels of anxiety or stress can present a challenge for establishing this psychologically safe container [2]. The idea of stress inoculation describes graded exposure to potentially anxiety inducing stimuli with the aim of enhancing performance by encouraging a state of ‘flow’ versus ‘freeze’ [3]. Potentially this could also improve the efficacy of SBE by reducing anxiety and improving psychological safety. We aimed to create a new SBE programme for novice anaesthetists in their first 3 months before starting on-call work. This was designed to create stress inoculation with frequent and regular SBE sessions, and we aimed to assess the impact of this change on pre-session anxiety levels.

**Methods:** This new SBE programme was delivered to the 5 novice anaesthetists at our institution over a 12-week period from February to May 2022 and consisted of weekly 30-minute SBE sessions. These were designed to fit with clinical commitments and minimise disruption to training in theatres, whilst following the ASPiH Standards Framework. Alongside weekly post-session evaluation (7-point Likert and free text), learners were asked to retrospectively rate their perceived pre-session anxiety levels from 1–10.

**Results:** Overall feedback from the new programme has been consistently positive, particularly mentioning the benefits of a safe space for discussion, the open and supportive environment, and the benefits of learning from

others’ experiences. One learner specifically credited the frequent nature of the sessions with an improvement in their confidence. Self-reported anxiety levels fell across subsequent early sessions (median anxiety score: week 1=4/10, week 3=2/10). Anxiety scores then peaked again at week 8 (median=5/10) before falling again. There was also significant inter-learner variability with one learner recording persistently higher anxiety scores.

**Conclusion:** This new format with regular short sessions appears to be very popular with excellent feedback. There is a reduction in self-reported pre-session anxiety with repeated frequent sessions. However, this is variable between individuals and across the placement, with an increase towards the end potentially reflecting anxiety about starting on the anaesthetic on-call rota. This demonstrates the importance of adapting SBE to both individual learners and the timing of a specific session within a wider SBE programme. Potentially routine evaluation of learner anxiety could allow a more tailored approach and further optimise individual learning.

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## ODP STUDENTS PEER TO PEER SIMULATION-BASED EDUCATION

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**Background:** Second-year Operating Department Practitioner (ODP) students in an English University need to undertake a teaching activity lasting 10 minutes on any topic not necessarily health related as part of their undergraduate curriculum as a formative assessment. ODPs practise in high acuity settings including theatre and intensive care, and are usually key members of a hospital’s resuscitation team. Teaching strategies for resilience is required when working in changing environments. To combine these two elements, an alternative approach was offered to replace the teaching activity. Student ODPs were offered how to create and lead a simulation activity based on ODP practice in lieu of the 10-minute activity as part of a pilot project. The TALK [2] tool was chosen as the mode of debriefing and focuses on improving interprofessional communication and the recognition of behaviours and strategies that are successful and should be adopted.

**Methods:** Twenty-eight students volunteered to undertake the pilot. The students supported by a simulation and ODP lecturer over a day were introduced to experiential learning, and simulation education approaches including design, facilitation [1], and debriefing. In pairs, the students created designs and were taught to use the Talk Framework [2].

**Results:** The students completed an online evaluation tool in relation to their experience as educators. The students reported that they felt more confident with the difference between teaching and facilitating. The students felt they understood the stages of writing for education and enjoyed the session on