

**Methods:** Junior doctors from FY1s to Medical Registrars delivered the programme's content. In the morning, three interprofessional simulation scenarios were delivered to the medical students and included nursing students for added realism. Each scenario reflected common ward-based and acute-setting situations that had minimal coverage in their undergraduate curricula. Afternoon stations were created to attenuate the medical students' anxieties about the aspects of foundation training they perceived as difficult. Using a simulated ward, a mock handover was conducted. Students were then expected to complete the tasks of death verification, complex prescribing and female catheterization. The other stations simulated interpreting blood results, discussions with a microbiologist and requesting and discussing radiological imaging. During completion of all stations, the medical students carried and answered a bleep mimicking realistic distractions. Morning and afternoon debriefing occurred in small groups.

**Results:** Following programme completion, all the medical students ( $n = 21$ ) felt more confident in assessing deteriorating patients, escalating to a senior and felt better prepared to commence foundation training. Though not statistically significant ( $p = 0.2$ ), confidence to commence foundation training and preparedness to perform the clinical and practical responsibilities of an FY1 quadrupled. In addition, over 50% of the medical students felt better able to independently prioritize clinical tasks and undertake complex prescribing on completion of this programme. Qualitative data suggested the medical students found the morning of interprofessional learning (IPL) invaluable and sought future IPL opportunities as they felt this made the programme even more realistic of working life. Furthermore, students felt the programme created a safe learning environment and was relevant in their preparation for foundation training as they felt more confident and better prepared to troubleshoot and apply their knowledge in unknown clinical situations.

**Conclusion:** 'FY1 for a day' is an effective and sustainable educational programme to potentially prepare final year medical students for their foundation training whilst safeguarding psychological safety and fortifying multidisciplinary relationships.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

## REFERENCES

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## CONTENT

A107

### MENTAL HEALTH SIMULATION FOR FOUNDATION DOCTORS: BRIDGING THE GAP OF PLACEMENT VARIATION

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**Background and aim:** There is significant variation of foundation programme tracks across the United Kingdom, giving a range of clinical exposure to newly qualified doctors

[1]. Common themes in tracks can be identified to include acute/emergency, community, general medicine, surgery and psychiatry components. In the deanery, many Foundation Trainees (FTs) on psychiatry will have up to 3 additional simulation days devoted to psychiatry themes and this is felt to be an especially effective way to supplement education on psychiatry consultation skills [2]. FTs who do not have psychiatry posts will not have the opportunity to attend this training. Typically, mandatory foundation simulation training focuses on human factors related to acute medical and surgical problems [3]. Our education department has developed a pilot programme to support simulation training on key mental health consultations to support well rounded training of FTs.

**Activity:** Half day sessions have been delivered to small groups of FTs who do not have psychiatry posts. Faculty has included experienced simulation faculty and psychiatry doctors and the scenarios conducted in a small group format with professional actors playing patients for increased realism of scenarios. The participants rotated between 3 key scenarios covering essential themes of mental state examination, psychiatry team liaison, patient risk assessment and explaining mental health presentations.

**Findings:** 2 sessions have been delivered for a total of 18 FTs. FTs showed insight to a number of challenges related to mental health presentations they had experienced outside of psychiatric settings and this formed the outline of the learning objectives for the session. The participants further reflected on discussions in their feedback from the session and portfolio. The sessions were well received, with improvement in confidence in managing these consultations demonstrated in pre and post course survey comparison from the majority of participants. Given the initial success of the session, the team is building a database of local faculty for continuity of the course and looking to secure relevant funding from HEE to provide further sessions for the FTs in the next academic year.

**Conclusion:** This simulation pilot has shown promise to be a useful addition to supplement the education of FTs for mental health consultations applicable in all areas of their clinical practice.

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2. Piot MA, Attoe C, Billon G, Cross S, Rethans JJ, Falissard B. Simulation Training in Psychiatry for Medical Education: A Review. *Front Psychiatry*. 2021 May 21;12:658967.
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## TECHNOLOGY

A108

### USING A HIGH-FIDELITY PART-TASK MODEL AS A REPLACEMENT FOR ANIMAL MODELS TO ENHANCE EMERGENCY MEDICINE THORACOTOMY TRAINING

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**Background and aim:** A local course has been delivered since 2018 to provide training in rare, time-critical, life-saving procedures that emergency medicine trainees may need to perform, including emergency lateral thoracotomy. Previously pig thoraxes have been used to provide thoracotomy training in this course. In 2022 a part-task model was purchased for thoracotomy training to replace this. We compare the use of this to animal models in our provision of simulation teaching of this skill.

**Activity:** Animal models are useful due to availability, low cost, and provision of hands-on experience for learners. However, there are associated ethical, religious, psychological limitations with using animals for educational purposes. They may less accurately represent human anatomy and pathology. Their timely acquisition can pose a challenge with defrosting requirements and variable condition which can impact on the quality of training. There are infection risks due to fluid leakage, associated unpleasant odour and animal products require incineration for disposal.

The high-fidelity part-task mannequin can anatomically and physiologically replicate the thoracotomy experience to provide realistic simulation training. The mannequin is equipped with realistic external human features and internal organ anatomy, including a beating heart and blood, to provide an immersive training experience. It is reusable with repair, which could be cost-effective long term and more environmentally-friendly. This model enables thoracotomy skill practice in a safe, controlled environment without infection risk. Another advantage is the ability to provide standardized training, better allowing for objective evaluation of performance which can be challenging with animal models.

**Findings:** This model (Figure 1-A108) has been a source of highly stimulating learning for both faculty and participants taking part in the course. The accurate anatomy has given an enhanced learning of real time simulated emergency requiring lateral thoracotomy and this has been reflected in participant feedback. There was a significant upfront cost which will depend on the continuation of the course, committed faculty and upkeep of the model to prove it cost-effective in the long run. The education team attended a course on the repair and maintenance of the model and it takes approximately 4-6 hours to clean and repair the model after each use. The model requires a large heavy box for safe storage posing a relative burden given its infrequent use.

**Conclusion:** There are disadvantages to use of this model for the department, but the overall learning experience and sustainability is felt to be superior to animal models for training in emergency thoracotomy.

**Ethics statement:** Authors confirm that all relevant ethical standards for research conduct and dissemination have been met. The submitting author confirms that relevant ethical approval was granted, if applicable.

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**Figure 1-A108:** The immersive lateral thoracotomy model we are using, which is fully repairable to be used multiple times for authentic learner experience

## DESIGN

A109

### A SIMULATION ESCAPE ROOM: DOES GAMEFUL TRAINING PROMOTE ACTIVE LEARNING AND STUDENT ENGAGEMENT

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**Background and aim:** Gamification of learning is becoming increasingly popular within higher education [1]. Student activities described as 'gameful training', including Escape Rooms, have reported additional learner benefits including improved teamwork, creative thinking and communication skills compared to traditional session designs [2]. There is a small number of existing case studies demonstrating their utilization within healthcare professional education and the reported additional benefits included pertinent skills such as task delegation and leadership, as well as being an engaging teaching strategy that promotes active learning [3].

**Activity:** A trial simulation escape room was created and implemented for level 5 adult and mental health branch nursing students within a Higher Education Institution. 12 different teams of students entered the escape room and worked together to 'treat Arthur', a patient presenting with acute anxiety and chest pain. Students were required to assess, escalate and manage Arthur effectively and would 'escape the ward', once he had received all of the required treatment.

The learning outcomes for the scenario and subsequent puzzles and tasks were created based on recent curriculum teaching allowing students to apply prior learning within the escape room environment. Puzzles included coded locked boxes and students were required to apply relevant knowledge, such as answering pharmacology questions, to generate codes and progress throughout the scenario. Simulation equipment was utilized and students unlocked clinical treatments and medical devices which in turn had to be delivered to Arthur. The facilitator maintained an active role within the scenario and allowed students to practise communication skills such as escalating their concerns about Arthur via the telephone.

It must be noted that the design time was significant for one scenario and required several pilots to ensure that all