

along with a 'seal broken' table. The process, procedures and innovation were discussed and approved by the Drugs and Therapeutics group.

**Implementation outline:** Each emergency scenario was tested *in situ* on the AMU using the simulation doll and trainer (see Table 1 for results). To test each drawer a corresponding scenario was created and each intervention timed. The scenario was run twice, firstly without the trolley and then again with the trolley using two sets of nursing staff. The time was recorded from when the ward team responded to the patient to when the last step of emergency drug treatment was administered.

**Table 1:** Results from testing the enhanced care drug trolley

Emergency	Time taken ( <i>without</i> trolley) (min)	Time taken ( <i>with</i> trolley) (min)	Total time saving (min)
Anaphylaxis	16:00	07:20	08:40
Hypoglycaemia (severe)	07:40	03:45	03:55
Diabetic Ketoacidosis (DKA)	26:02	08:05	17:57
Hyperkalaemia	31:10	13:06	18:04
Status Epilepticus	18:56	13:08	05:48

Simulation testing led to modifications of the contents of the trolley after feedback from the users. To embed practice, education of the nursing staff and clinicians was commenced to ensure familiarity and confidence to use the trolley, and to ensure governance adhered to.

## REFERENCE

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161

## ABSENT IN BODY BUT PRESENT IN SPIRIT: BATTLING ON WHEN BOTH LEARNERS AND FACULTY ARE REMOTE FROM THE SIMULATION CENTRE

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**Background:** Over the last year, COVID-19 has constrained the capacity of education centres to deliver face-to-face simulation-based education (SBE). Restrictions on travel between NHS trusts necessitated development of remote simulation to allow learners to participate in training safely. The challenge to maintain training provision was increased due to the imposition of shielding requirements on a member of the education faculty requiring them to isolate at home over a 2-month period (February–April 2021).

**Aim:** The aim of the study was to allow educators isolating at home to continue to support SBE, despite their physical absence from the training centre, by:

1. Simulating the patient role remotely.
2. Facilitating debrief from home. Observing SBE within the simulation suite and supporting subsequent discussions using video conferencing platforms.
3. Supporting delivery of human factors teaching sessions to Trust staff remotely.

**Method/design:** To deliver SBE remotely for learners with remote faculty rested on three key requirements:

1. Collaborative and iterative development of scenarios that could be delivered effectively for learners remotely utilizing expertise from the simulation centres education and technical teams. The creation of scenarios optimized for remote delivery.
2. Effective communication and observation between remote faculty, centre-based staff and remote participants over Microsoft Teams (MST) to allow remote facilitation of debrief
3. Controlling and voicing the patient simulator from isolation at home via a desktop PC linked with simulation centre systems via a virtual private network (VPN) and utilizing the Zoom platform.

**Implementation outline:** Faculty member shielding requirements lasted for approximately 8 weeks and during that period they were able to support a range of SBE courses;

1. Foundation years doctors (supported 14 courses)
2. Final-year medical students (supported 6 courses)
3. Surgical nurses (supported 1 course)
4. Burns speciality (supported 1 course)
5. Acute care skills: Nurse OSCE provision (supported 4 courses)
6. Human Factors teaching to trust staff (delivered 5 lectures)

**Key equipment:**

1. PC with dual screens to allow MST and Zoom software to be managed simultaneously to allow response to participant communication and interactions in real time.
2. Headset-Microphone to support effective fidelity within audio exchanges.

The facility to contribute to educational provision was mutually advantageous to all members of the educational faculty:

1. Off-loading some of the burden of training from those within the centre.
2. A positive influence on the mental health for the isolated.

Making remote simulation work possible was through whole team collaborative working.

30

## SHIFTING AN IN-PERSON SIMULATION FACILITATION TRAINING PROGRAM FOR NEW NURSE EDUCATORS TO A VIRTUAL CONTEXT

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10.54531/XNUG8598

**Background:** Best practices indicate simulation sessions should be facilitated by a trained instructor to maintain a safe environment for learners. We developed and implemented a successful simulation facilitation training curriculum for nurse educators at our organization in 2018 <sup>[1]</sup>, but as the COVID-19 pandemic was declared worldwide in March 2020 the program was put on hold. This pandemic has led to many innovations in health professions' education, including nursing, to meet the ongoing need for prelicensure training

to onboarding programmes at healthcare organizations. The nursing education department at our organization went through this same experience, based on what we have learned during the pandemic it is now time to revisit our simulation facilitation training program for new nurse educators.

**Aim:** The aim of the study was to revise our current simulation facilitation curriculum 'Introduction to Simulation' with greater emphasis on delivery of the program through virtual processes.

**Method/design:** Pulling from the educational methodology of the flipped classroom that has many advantages for the practicing professional such as improved learning performance, increased motivation and flexible learning<sup>[2]</sup> and our experiences with other nursing education programmes that required adaptation to a virtual context at our organization we will revise the current program. The program will change from a 1/3 virtual, 2/3 in-person model to a 2/3 virtual and 1/3 in-person model. We will redesign the current virtual content to be more engaging while shifting the in-class lecture to a webinar format delivered via our online meeting platform while still incorporating active learning strategies to meet the simulation facilitation learning needs of our new nurse educators. Following the 'Introduction to Simulation' webinar, the new nurse educators will attend an in-person session to practice facilitating simulation scenarios and debriefing and will be meta-debriefed by the workshop instructors to provide real-time constructive feedback.

**Implementation outline:** This curriculum has yet to be implemented. We anticipate implementation in September 2021 with a cohort of 5 to 6 new nurse educators. The revised curriculum is anticipated to incorporate 2 hours of independent learning, 4 hours of an interactive webinar and 4 hours of simulation facilitation practice that will allow for the application of knowledge learned and feedback from simulation facilitation experts. After the workshop, we will seek feedback from workshop participants asking if this methodology met their learnings needs. We will use the outcomes of this first cohort to evaluate if this educational strategy is viable for ongoing program delivery.

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45

## SIMULATION XR: AN EXTENDED REALITY LEARNING EXPERIENCE

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10.54531/BQWV4810

**Background:** Simulation has always been employed to cover a wide-ranging aspect of the learning objectives in the Emergency Department (ED) curriculum at post-graduate and undergraduate level<sup>[1]</sup>. In a busy environment like our Emergency Department where bedside teaching is not always possible, the learning objectives can be met through the Simulation Extended Reality (XR). XR is particularly useful during the COVID-19 pandemic when real patients, standardized patients and relatives could not be reached due

to the risk of contracting a deadly disease. However, Inter-professional education<sup>[2]</sup> must continue. We can now have our nurses, trainees, health support workers in a large room all connected to one device in a virtual world and be able to deliver teaching to them.

**Aim:** The aim of the study was to introduce new healthcare students to the clinical environment through the use of mixed reality devices to ensure familiarity before contact with the real environment and to provide alternative simulation education and 'bedside' teaching during disruptive periods like the COVID-19 pandemic.

**Method/design:** XR is a term that covers augmented reality (AR)/mixed reality (MR), which refers to a set of mobile digital technologies that allow a three-dimensional computer-generated model in the form of a hologram to be overlaid on a real environment<sup>[1]</sup>. This technology can be used to 'create' simulated patients for the purpose of learning in an immersive learning environment (ILE). Our learners can have the opportunity to interact with the Holo-patient in proximity thereby bypassing the restrictions of the real clinical environment with all the risk involved, particularly during the COVID-19 outbreak.

**Implementation outline:** With the use of a headset such as Google Glasses or the Microsoft HoloLens that projects a hologram into the users' physical environment, our learners can interact with the mixed reality (XR) world and have clinical encounters with simulated/standard Holo-patients (SHP). With the headset on, the learner can see the patient, hear real sounds from the patient and see objective data/vital signs that can aid clinical reasoning and make the simulated scenario more immersive. A new healthcare worker (student nurse, clinical support worker, doctor on first rotation) will have an immersive experience that bridges virtual and real-world, supplements reality, and has the potential to build confidence and aid learning prior to encountering the real world.

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168

## A NOVEL APPROACH TO INTERACTIVE, ONLINE HISTORY-TAKING IN MEDICAL EDUCATION DURING THE COVID-19 PANDEMIC

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**Background:** The COVID-19 pandemic resulted in an unprecedented shift from face-to-face to online teaching with a subsequent deleterious impact on the quality of teaching delivery within medical education<sup>[1]</sup>. Human interactions such as history-taking are challenging to recreate without the nuances of face-to-face teaching. We present the first instance of a gamified online interactive history-taking simulation, in this case specifically designed for secondary school students interested in a career in medicine. Effective history-taking is a fundamental determinant of patient care and by developing this simulation we are focussing on the proximal determinants of patient care. We believe that this unique approach is translatable to undergraduate and post-graduate medical education, resulting in wider and