

hospital, who were able to share real-life experiences and offer peer support. This helped influence the development of this course to shape it into an innovative multi-disciplinary training. The training course was developed reactively to meet the developing need of students to prepare for redeployment by April of 2020 and since then has grown and developed into the half-day simulation training that is outlined above. It has now been incorporated into the in-hospital clinical skills curriculum for third-year medical students passing through the trust on the understanding that, this course has helped medical students to better understand the role of other professionals and will enable closer multi-disciplinary working in future. Anecdotally, it is obvious from interacting with students that there is a need to incorporate training in basic care into the medical curriculum to prepare students for task-sharing in the future as well as to better understand the caring professions and improve multi-disciplinary working. However, there is not enough post-course data to establish a true effect from this course at present. We continue to run this training course as part of the year 3 undergraduate clinical skills programme and aim to collect more survey data to evaluate and adapt it.

REFERENCE

1. Nursing & Midwifery Council. The Code: Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing Associates. 2018. London: Nursing & Midwifery Council.

143

THE USE OF AN AUDIO-VISUAL STREAMING SOLUTION TO DELIVER PORTABLE COVID COMPLIANT *IN SITU* SIMULATION TRAINING

Elizabeth Thompson¹, Ross Thompson¹, David Bartle¹; ¹Royal Devon and Exeter NHS Foundation Trust, UK

10.54531/OTTO2012

Background: Safe training in the current clinical workplace requires careful participant proximity management. Delivering simulation in a confined clinical environment can impact scenario fidelity and affect psychological safety^[1]. A portable audio-visual (AV) streaming system enables audiences to observe and contribute to debriefing without compromising simulation fidelity.

Aim: The aim of the study was to assess the practical efficacy of a portable AV streaming solution to enable real-time *in situ* simulation, including to a dispersed audience.

Methods/design: The Scotia Medical Observation and Training System (smots™) offers a portable AV solution with flexibility, through the addition of cameras and microphones as required, to create bespoke simulation viewing. Smots™ was incorporated into the *in situ* simulation educational programme within an acute trust at least weekly over a 10-month period. It was concurrently deployed at our partner Nightingale facility to run simulation as part of an induction programme for new staff. Feedback from delivery users and scenario participants was collated and analysed.

Implementation outline: Smots™ was an effective platform to meet our aims. Delivery users reported smots™ to be reliable in streaming the AV footage to a target audience in a remote debriefing room. The system was compact, easily transportable and had a low burden of training to achieve user competence. Participant feedback was positive, in that the system provided good AV clarity and narration, thereby enabling a successful training evolution. Smots™ offers a reliable capability to stream simulation scenarios to an

alternative viewing area with the ability to be relocated as needed. Local wireless broadcasting range is finite and may limit users' ability to stream information to discrete departments within a larger trust. Mitigation is possible using a secondary streaming platform or integrating it into a secure internal Wi-Fi or ethernet network. Assistance from trust information technology departments is recommended and this capability is something our team will consider as a future option. Expanding connectivity is an effect multiplier, offering distanced, streamed training across trusts and regions, as well as the inclusion of participants working from home. The portable nature of this smots™ solution offers flexibility for rapid deployment to areas of novel clinical capability and community partnerships. This system has proved exceptionally useful during a prolonged period of social distancing, enabling ongoing high-efficacy *in situ* simulation training to a larger target audience within a robust, safe educational environment.

REFERENCE

1. Rudolph J, Raemer D, Simon R. Establishing a safe container for learning in simulation. *Simul Healthcare* 2014;9(6):339-349. doi: [10.1097/SIH.0000000000000047](https://doi.org/10.1097/SIH.0000000000000047)

38

USING SIMULATION TO IMPROVE AND TEST A NOVEL ENHANCED CARE DRUG TROLLEY

Jodie Williamson¹, Sarah Grundy¹, Mark Rowson¹; ¹St Helens and Knowsley Teaching Hospitals NHS Trust, Prescot, UK

10.54531/DKOT5640

Background: The Royal College of Physicians Acute Medicine Taskforce^[1] recommended the establishment of Enhanced Care areas as distinct from Critical Care. We designed a novel purpose orientated Enhanced Care Drug trolley for our Trust's Acute Medical Unit (AMU), where we have designated Enhanced Care beds. The Enhanced Care Drug trolley was designed to improve the time-critical management of patients experiencing hypoglycaemia, status epilepticus, hyperkalaemia, diabetic ketoacidosis (DKA) and anaphylaxis. Human factors relating to equipment can impact clinical performance in different clinical settings and minimizing this proportionally improves clinical safety.

Aim: The aim of the study was to optimize the management of life-threatening medical conditions, requiring enhanced care, whilst minimizing the time taken for commencement of drug interventions and staff using a novel Enhanced Care drug trolley.

Method/design: A drawer on a sealable procedure trolley was designated for each emergency and the following items were included:

- Treatment algorithm
- Prescription charts
- Monitoring charts (where applicable)
- Medications and their diluents
- Sundries (needles, flushes, sanicloths etc.)
- Blood forms, bottles and blood gas kits (where applicable)
- Cannulation kits
- Airways (where applicable)
- Oxygen mask (where applicable)

A Standard Operating Procedure (SOP) was produced detailing the responsibilities of the ward manager, pharmacy team and nursing staff. Weekly and daily checklists were produced,

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

1. Royal College of Physicians. Acute Medical Care: the Right Person, in the Right Setting – First Time. Report of the Acute Medicine Taskforce. London: RCP, 2007.

161

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

Paul Bailey¹, Laura Evans¹, Amelia Thorpe¹, Chris McDonald¹, Mike Johnson¹, Paul Knight¹, Katie Howick¹; ¹Trent Simulation and Clinical Skills Centre, Nuh NHS Trust, Nottingham, UK

10.54531/LBGD6694

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

Jennifer Dale-Tam¹, Prudy Menard¹, Natalie Ladouceur¹; ¹The Ottawa Hospital, Ottawa, Canada

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 ^[1], 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