

during the debriefing [2] and the VR scenario gives a unique opportunity for self-debriefing or peer-peer debriefing in small groups [3]. However, in the current VR scenarios available to trainees, there is no provision of any link at the end of the scenario to access current best practice guidelines on the topic/scenario which the learner could use as part of their self-debriefing. The project aims to create wraparound learning module around the Virtual Reality clinical scenario to include a patient journey through the hospital, current guidelines, and teaching videos so that learners could conceptualize and consolidate their learning from the VR experience

Methods: VR scenarios available to Foundation doctors were chosen and a review of the topic and related standard best practice guidelines were reviewed on NICE, BTS, and similar resources. We also searched for real patient stories and easy to access procedural videos related to the topic and incorporated them on the module. Wraparound learning modules were created using a blended learning approach on Bridge online platform on topics like pneumothorax and infective exacerbation of Chronic Obstructive Pulmonary Disease. More modules are being created for the benefit of the Foundation doctors across East of England. Throughout the module reflection is encouraged and the topic is aligned to the Foundation curriculum and reviewed for quality assurance. A Likert scale survey would be sent out to the trainees who have completed the modules to assess the increase in their confidence in managing a clinical case after finishing the wraparound module.

Results: The results of the pre-course and post-course levels of knowledge, skills and confidence are being analysed.

Conclusion: Wraparound learning modules could potentially improve learners' experience of the VR scenario and improve learning and confidence in the clinical setting.

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SIM-STEPS: A STRUCTURED TRAINEE EDUCATOR PROGRAMME IN SIMULATION – AN INNOVATIVE, BLENDED LEARNING APPROACH FOR SIMULATION FACULTY DEVELOPMENT

Lekha Agarwal¹, Georgia Winnett¹; ¹Addenbrookes Hospital, Cambridge, United Kingdom

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Background: At present there are limited resources for simulation faculty development and educators are unable to access face-to-face courses uniformly across the region. Currently available online resources lack interactive reflective activity and recorded faculty videos which leads to a less engaging and effective learner experience. We aimed to create a structured and accredited simulation faculty development course on the Bridge online platform for educators who are novice in simulation-based education using a blended learning approach by incorporating recorded faculty videos and current available resources on eLearning For Healthcare (eLFH), Scottish Simulation framework and provide a platform with links to online resources.

Methods: A scoping review was conducted to review current available online resources and face to face courses across the East of England region. Faculty across the region were contacted to understand the learning objectives, outcomes, and content of their courses. A survey was sent out to Bridge users across the region to determine how best to deliver the simulation faculty development course and whether they would find a Bridge course useful. We received 158 responses of which 94% respondents were keen to develop their simulation education skills, 74% had not received any formal training, and nearly 90% wanted a blended learning course.

SIMSTEPS has been developed following a detailed gap analysis and scoping review. The course has been designed incorporating the eLFH learning modules, the Scottish framework for Simulation Faculty development. It does not replace face to face teaching but gives a starting point to develop the learners' knowledge and skills about simulation-based education which can be enhanced further in face-to-face courses or workshops. Modules have been developed on key topics relevant to simulation-based education [1] with links to videos, recorded Faculty sessions, and online educational resources. Learners are encouraged for continuing reflective practice [2] and prompted to reflect after modules. The course would be accessible to all Bridge users (Interprofessional educators) in the East of England at no cost and can be completed by them at their own pace and time. We planned meticulously to ensure the course content meets learning objectives and ensured quality assurance by independent review of the course by established and experienced faculty.

Results: Post-course evaluation by learners will be done on course completion.

Conclusion: A blended learning course like SIM-STEPS can potentially provide an effective resource on Simulation faculty development and improve learner experience and engagement.



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VIRTUAL SAFETY: USING ONLINE SIMULATION TO PREPARE TRAINEES FOR THEIR COMMUNITY SAFEGUARDING ROLES

Nkiru Asiegbunam¹, Colette Laws-Chapman¹, Stacy John-Legere¹; ¹Guys and St. Thomas Foundation Trust, London, United Kingdom

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Background: Conducting child protection medical assessments (CPMA) where there are concerns of non-accidental injury (NAI) is a key clinical skill for paediatricians and part of the Royal College of Paediatrics and Child Health

(RCPCH) curriculum [1]. Child Protection (CP) simulation training was commissioned following trainee feedback around unpreparedness when carrying out CPMA. The COVID-19 pandemic forced delivery of online CP simulation. Initial learners were paediatric trainees; with newly qualified school nursing and health visiting colleagues in subsequent delivery; allowing for multi-professional learning in the simulated environment. The session aims were to:

- increase familiarity with professional conversations in the CP context
- formulate an evidence-based opinion in cases of suspected NAI
- rehearse discussing outcomes of CPMA with parents/carers and social workers

Methods: We rehearsed, modified, and then, using Zoom as a synchronous platform, with a trained simulated patient (SP) and faculty as role players created three 10-minute community-based CP scenarios for a twice-yearly programme. Pre-course information and a pre-briefing explained the online limitations and opportunities, including how we co-create psychological safety, the option of a wellbeing 'wobble' room, also outlining the Diamond debriefing model [2]. Pre- and post-course surveys were sent to the 18 participants. Likert scale ratings on confidence and anxiety levels when approaching a CP medical; familiarity with and likelihood of using the HEADSSS tool [3] was analysed using paired T-test probability.

Results: 94% (17/18) had no previous CP simulation experience. Confidence in carrying out CPMA increased post-simulation ($p=0.00418$) Anxiety going into the CPMA decreased post-simulation ($p=0.00624$). 44% were familiar with HEADSSS tool pre-course and 94% were more likely to use it post-course (Likert rating 4or5). Confidence in expressing concerns to parent/carer rose from 11% to 82.3% post-course (Likert rating 4or5). Free text learning points included 'Use what you can agree on (parent and doctor) as a foundation for developing rapport.' '... very useful in preparation for community.' '... very helpful in giving me more confidence in carrying out medicals.' 'Never undertaken a simulation with an actor, it felt real (I was surprised)', 'interesting to share learning... as practitioners have different perspectives.'

Conclusion: Despite sensitivity of the subject and the emotive realism brought by the SP's, psychological safety was achieved in this online interprofessional CP simulation training through detailed preparation in course design and faculty preparedness. The pilot was successful in preparing participants to fulfil their safeguarding role. Online training continues to be a synchronous induction for 2022.

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AN ALL-WALES VIRTUAL REALITY PROJECT-INNOVATION, DESIGN AND COLLABORATION TO ENHANCE HEALTHCARE EDUCATION

Joanne Davies¹, Paul Twose², Sara Cook², Craig Dyer³, Marc Holmes¹; ¹Swansea University UK, *Swansea University Main Campus, Wales*, ²Cardiff and Vale University Health Board, *Cardiff, Wales*, ³University Hospital of Wales, *Cardiff, Wales*

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Introduction: The potential for immersive technologies to augment healthcare training is gaining significant interest. However, its applicability and effectiveness are yet to be fully understood. This project was a response from a bid released by the Cardiff Capital Region to undertake a rapid innovation project, consisting of 3 main phases: 1) feasibility; 2) development; and 3) testing, across Welsh Health Boards.

Background: Project governance was provided via the Small Business Research Initiative (SBRI) in Clinical Excellence, a project board, and a project team with clinical and educational expertise, alongside Virtual Reality (VR) industry and academic partners. We aim to explore the formation of a virtual reality training package with a multi-centred collaborative project to overcome the current challenges of respiratory education, with a particular focus on tracheostomy care, to meet the challenges of the COVID-19 pandemic and beyond [1].

Methods: Phase 1 focused on the development of minimally viable solutions with a key focus on clinical content accuracy and education standards for single user learners. Phase 2 progressed to further develop the VR-based solutions including a multi-player system and virtual debriefing room, allowing the team to focus on key simulation-based learning best practice standards within the design and build [2]. Phase 3 is when system testing occurred over an 8-week period, across 6 Health Boards in NHS Wales involving over 100 multi-professional clinicians commencing in February 2022.

Results: On site hospital clinical education session feedback regarding use of the system and perceived opportunities were highly favourable in terms of ease of use, potential for VR in practice, and providing flexibility for mass training needs. Multi-user training was particularly well received. The limitations were lack of resource and time to combine a formal research project regarding the educational impact within busy health boards. This is planned for the next phase.

Conclusion: Empirical evidence from other industries demonstrates VR technology is an effective and efficient way of improving training [3]. Developing VR solutions to support healthcare training needs involves a collaborative approach with Health Boards, industry, and academic partners. The design, build, and implementation approach can embed simulation best practice standards to form innovative educational solutions to the challenges seen in the delivery of mass healthcare education. Formal research is required to begin to measure such factors as education transference, patient care impact, and return on investment questions.

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A UNIFIED APPROACH TO FACULTY DEVELOPMENT

Lyz Howie¹, Catie Paton²; ¹University of the West of Scotland, *Glasgow, United Kingdom*, ²Medical Education Training Centre, *Kirklands Hospital, Bothwell, United Kingdom*

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