

potential. Students reported enhancement of in person and remote communication as well as clinical capabilities in high acuity environments.

Conclusion: Students reported the SPP week as an acceptable means of replacing one week of PBL, enhancing the preparedness for clinical environments and sustainably increasing placement capacity by providing 4440 hours of simulated PBL.

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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CONTENT, SYSTEM

A45

DEVELOPING LOW CARBON CARE – USING SIMULATION TO CALCULATE AND REDUCE CARBON EMISSIONS

Hannah Ames¹; ¹*Plymouth Marjon University, Plymouth, United Kingdom*

Correspondence: hames@marjon.ac.uk

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Background and aim: Climate change is considered one of the most pressing global concerns for the future and the single biggest health threat [1]. Healthcare delivery is a major contributor to the climate crisis, producing 4.4% of net carbon global emissions today [2]. One of the largest contributors to NHS carbon emissions is the use of equipment, consumables and clinical care itself [2]. Therefore, clinical staff have a significant part to play in reducing carbon emissions and achieving national carbon reduction targets. However, they must be carbon literate and understand the impact of personal practice on global carbon emissions and be able to identify ways to deliver low carbon models of care [3]. Simulation could play a significant role in educating and developing sustainable practice in healthcare students through a system thinking approach. Allowing students to examine the environmental impact of healthcare delivery and support innovative solutions to reduce carbon emissions without compromising care.

The aim was to firstly increase nursing students' awareness of the carbon emissions from the delivery of patient care. Secondly to improve clinical decision-making in the selection and implementation of interventions to enable the delivery of low carbon care.

Activity: Undergraduate nursing students took part in a specifically designed simulation scenario. Students completed the scenario of a patient presenting to the Emergency Department with exacerbation of Chronic Obstructive Pulmonary Disease (COPD), implementing care and interventions as clinically indicated. After completion of the simulation students then calculated the carbon emissions from the clinical resources they used, using the Centre for Sustainable Healthcare carbon emissions calculation.

Findings: Debriefing identified that students did not consider sustainability and carbon emissions in their current

clinical decision-making. Students were shocked by the amount of carbon emissions generated from interventions. Students identified areas where they could reduce carbon emissions without compromising care such as inappropriate use of gloves, using dry powdered inhalers, and reducing unnecessary cannulation.

Conclusion: Simulation could play a pivotal role in developing sustainable clinical decision-making skills in healthcare students and staff. Actively calculating carbon emissions allows students to directly see the environmental impact of their practice, increasing carbon literacy and stimulating low carbon care practice. This use of simulation should be explored further by educators across professions to support both national and global climate change policies.

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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DESIGN

A46

SPEED: AN EMERGENCY DEPARTMENT SIMULATION TRAINING MODEL WHICH DOES NOT AFFECT PATIENT WAITING TIMES

Sebastian Chong¹, Michael Phillips¹, Salwa Malik¹; ¹*University Hospitals Sussex, Brighton, United Kingdom*

Correspondence: s.chong1@nhs.net

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Background and aim: There is a well-recognized tension between clinical service provision and participation in learning events for junior doctors (JDs) in the UK [1]. JDs frequently report that they are unable to attend regular teaching due to departmental clinical pressures, representing lost opportunities for their training and development. Therefore, there is need for development of training methods which minimize impact on clinical service delivery.

Aims: To develop a simulation training model for Emergency Department (ED) JDs which would a) deliver tailored learning objectives according to the participants' level of training and b) have minimal impact upon ED service provision.

Methods: The 'Simulation and Personalised Education in the Emergency Department' (SPEED) model was developed. On SPEED days, JDs and advanced clinical practitioners (ACPs) who were undertaking clinical duties in ED on that day were invited on an individual basis to participate in a twenty-minute clinical simulation. Upon completion, the participant underwent a ten-minute debrief to reinforce predetermined learning objectives and supply feedback to simulation tutors

before returning to their clinical duties in ED. Pre- and post-session questionnaires were conducted to assess acquisition of learning objectives. Training days were conducted in EDs of a UK Major Trauma Centre (MTC) and an associated small teaching hospital (TH). Departmental data on time to be seen by an ED clinician were collected retrospectively for SPEED days and comparable non-SPEED days, with differentiation between the majors and urgent care (UC) MTC sub-departments.

Results: A total of 7 SPEED days were conducted over 6 months between September 2022 and March 2023 – 5 in the MTC ED and 2 in the TH ED. 65 JDs and ACPs participated across the seven days. On asking about the usefulness of the SPEED session for day-to-day practice, 41 participants responded ‘strongly agree’ and 18 participants responded ‘agree’. 6 of the 7 SPEED days demonstrated a positive mean difference in post-session questionnaire score when compared to pre-test questionnaire. There was no statistically significant difference in time to see clinician between SPEED days and comparable non-SPEED days in MTC majors (1h11m vs. 48m), MTC UC (2h41m vs. 2h25m), or TH (1h15m vs. 1h8m) (Kruskal-Wallis test, $p > 0.05$).

Conclusion: The SPEED model demonstrates acquisition of learning objectives which are relevant to day-to-day practice. There is no evidence that delivery of this model significantly affects waiting times in either a small or large ED. Adoption of this training strategy may improve training opportunities for other ED clinicians.

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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DESIGN

A47

SUPPORTING INTERNATIONALLY EDUCATED NURSES REACH THEIR FULL CAREER POTENTIAL AND DELIVER SAFE AND EFFECTIVE PATIENT CARE THROUGH SIMULATION-BASED COMMUNICATION SKILLS TRAINING

Jess Spencer¹, Mike Evison¹, **Carrie Hamilton**¹, Sophie Macadie², Frances Haig²; ¹*SimComm Academy, Romsey, United Kingdom*, ²*Solent NHS Trust, Southampton, UK*

Correspondence: carrie.hamilton@simcommacademy.com
10.54531/WCIM6042

Background and aim: Between April and September 2022, 11,496 internationally educated nurses (IENs) registered with the NMC for the first time, which is 606 less than those domestically educated within the same timeframe [1]. To register, IENs must pass OSCEs and although globally assessed, there is no specific communication skills assessment [2]. A literature review identified challenges associated with integration into culturally different healthcare systems, most notably communication barriers; however, it found that with good support it is possible for IENs to achieve their full career potential [3].

Methods: To support local healthcare trusts and IENs, our organization designed a simulation-based educational programme to address the aforementioned barriers. To

ensure a non-paternalistic approach, IENs lived experiences allowed the development of authentic, co-produced simulated scenarios. Actors were trained for the roles, and learning outcomes and debriefing processes were shared in advance. To assist participants with their skills, a model of communication was introduced, enabling them reference to a framework whilst participating and observing. Eight groups of six IENs have participated over eight months.

Results: Thematic analysis identified themes in which IENs wanted to be upskilled, these were integrated into multi-faceted simulated scenarios:

- Distressed relatives – IENs reported struggling setting appropriate boundaries and dealing with conflict with emotive relatives.
- Difficult conversations with patients – IENs felt ill equipped to communicate with challenging patients due to anxiety through language and cultural barriers leading to avoidance of engagement, further exacerbating the issues.
- Differing patient agenda – IENs struggled to manage patients who were not engaging with recommended multi-disciplinary interventions, due to a poor understanding of the MDT agenda.
- Hierarchical adjustment – IENs typically came from countries with a more established hierarchy and did not feel confident clarifying doctor's decisions even if concerned.

Evaluation linked to the learning outcomes; a rating scale from 1 (no ability/confidence) to 5 (excellent ability/confidence). 48 IENs have undertaken this training and all report progression in ability and confidence, with ongoing applicability of their learning within the workplace.

Conclusion: The number of IENs is increasing within the NHS with recent records indicating NMC registrations being equal between domestic and internationally educated nursing staff. A repeatable simulation-based communication skills workshop has been developed based upon the lived experiences reported by IENs. Further deliveries are planned with subsequent quantitative and qualitative analysis.

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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DESIGN

A48

LARGE-SCALE SIMULATED PLACEMENTS FOR BSC AND MSC PHYSIOTHERAPY STUDENTS: CONSIDERATION OF SUSTAINABILITY

Jess Spencer¹, **Carrie Hamilton**¹, Tiffany Blackburn², Sarah-Jane Ryan², Cindy Gaimster², Channine Clarke²; ¹*SimComm Academy, Romsey, United Kingdom*, ²*University of Brighton, Brighton, UKs*