Safe delivery of care is central to our life in Emergency Medicine in the Royal Victoria Hospital (RVH ED), Belfast. ‘SIM-PLE’ (SIMulation & Patient-Led-Education) was founded aiming to deliver safer care to patients via multi-disciplinary simulation. Complications can occur with patient care resulting in Serious Adverse Incidents (SAIs). A questionnaire for ED registrars, revealed 80% had been involved in SAIs in their career, however only 10% knew how to access SAI learning messages. A discussion with the ED lead nurse revealed several SAIs concerning RVH ED were reflected in the RCEM Top 10 Significant Incident Reports so we used this document as a framework for SIM-PLE.

Our aim was to identify weak links in patient care, run multi-disciplinary simulations based on real-life cases and disseminate learning messages to reach more staff than via previous methods.

Simulation scenarios closely reflected reality, all patient personal information remained confidential. Prior to simulations, participants completed a pre-scenario questionnaire evaluating confidence levels with managing similar cases. Once the scenario was completed, the team relocated to a non-clinical area for debriefing. This provided valuable information for producing learning messages for dissemination. Finally, the team completed post-scenario questionnaires assessing confidence levels now they had completed the simulation.

We knew 10% of ED registrars had been accessing learning messages via emails, meaning many reports remained unread in inboxes. We transformed the take-home learning messages from simulations into aide-memoire posters using mnemonics to help recall salient learning points, which we believed were more user-friendly than previous emails. We employed social media as a mode of disseminating learning posters, joining the RVH Acute Care Safety and Learning Facebook secure group, which includes 124 staff members. After each simulation we uploaded posters and scenario descriptions, allowing staff inboxes. We transformed the take-home learning messages for dissemination. Finally, the team completed post-scenario questionnaires assessing confidence levels now they had completed the simulation.

In addition to SAI cases, we simulated cases with interesting learning points encountered in the ED during 2017/18. We invited other teams to take part in our sessions, including paediatrics, anaesthetics, CAU staff and obstetrics. Inter-specialty relationships have been affected positively, with teams from three hospitals in BHSCT attending the ED for inter-specialty simulation. To date, we have had in excess of 100 staff and students attending SIM-PLE simulations.

Statistically, SIM-PLE has improved staff confidence levels from 45% to 90% when dealing with these cases. SIM-PLE has directly impacted patient care occurred recently in the ED.

### Short Communications

**Tuesday 5th November, 11.15–12.35**

#### SC1 PAEDIATRIC IN-SITU SIMULATION: A METHOD OF BUILDING MULTIPROFESSIONAL EXPERIENCE AND TEAMWORK

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**Background**

Alarmingly, nearly 30% of paediatric inpatients can be harmed during their hospital stay.

Recently, the demand for paediatric services has increased. Combine this with reduced training hours for trainees, less exposure to patients and rotating hospitals every 6 months, it can be challenging to develop relationships within teams before emergency situations arise.

Simulation-based education provides a useful tool to support learning within paediatrics. In-situ simulation teaching is a low cost, using the regular team in their own environment with their normal set up and equipment.

By establishing an in-situ paediatric simulation programme, we aimed to promote team learning but also enable these multidisciplinary relationships to form early.

**Summary of programme**

We delivered a low fidelity fortnightly ward-based simulation within our department replicating common scenarios that the team may face in real life. Scenarios are based on the Royal College of Paediatric and Child Health (RCPCH) Progress curriculum. Beforehand the team receives a brief, with debrief following the scenario to facilitate learning.

All staff acted as their current role and includes any members of the paediatric ward team including doctors, nurses, healthcare assistants, medical/nursing students, and consultants. Feedback is obtained using a combination of free text questions and Likert scales.

**Summary of results**

The feedback has been extremely positive with the whole team finding the in-situ training worthwhile for their learning. We have delivered 16 in-situ simulations so far to 153 participants. 85% of candidates have reported an improvement in their confidence following the scenario with average confidence increasing from 2.57 to 3.68/5 post teaching. 54% of candidates comment never seeing the scenario in real life before the session.

Feedback comments have shown an improvement in the team’s knowledge and management of paediatric problems. It has facilitated quicker integration of trainees into our department, with better communication and working relationships with the ward staff as well as an understanding of each other’s roles. Organisational and equipment have also been highlighted and acted upon.

**Discussion, conclusions, recommendations**

In-situ simulation has been a hugely beneficial training method for our staff to gain confidence in a wide variety of acute paediatric situations. Interprofessional working and education is also promoted. Latent safety threats may be elicited and changed, improving patient safety.