

paediatric ward. By regularly simulating clinical practice in their daily working environment, all candidates have demonstrated improved clinical confidence and better familiarity with the ward environment. Additionally, the fortnightly in-situ simulation has improved working relationships through recognition of the roles of the ward multidisciplinary team, communication skills and team and leaderships skills.

**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.

## REFERENCES

1. Patel, A; Holt, AD; Copeman, A; (2019) Paediatric In-situ simulation: a method of building multiprofessional experience and teamwork. *BMJ Simulation and Technology Enhanced Learning* 5(Suppl 2:A21.2-A22).

## CONTENT

A50

### THE SEIPS GAME: AN INTERPROFESSIONAL TEACHING AID TO PROMOTE UNDERSTANDING OF HUMAN FACTORS IN HEALTHCARE

**Ruth Millett**<sup>1</sup>, Eloise van Vuren<sup>1</sup>, Jessica Wadsworth<sup>1</sup>, Jennifer Blair<sup>1</sup>;  
<sup>1</sup>*Epsom & St Helier University Hospitals NHS Trust, Epsom, United Kingdom*

**Correspondence:** [r.millett@nhs.net](mailto:r.millett@nhs.net)

[10.54531/WYRV9282](https://doi.org/10.54531/WYRV9282)

**Background and aim:** As a human-factors focused simulation centre, we begin all our simulation courses with a human factors workshop introducing participants to the SEIPS model of human factors [1]. This enables them to explore systems-based impacts on clinical practice during post-scenario debriefs. However, we have noticed that some participants struggle to identify and discuss human factor themes which impact on them in their workplace. We aimed to develop an innovative teaching aid which would promote participant understanding and engagement.

**Activity:** Previous experience has provided evidence that participants enjoy simulation games. Therefore, we chose to develop a table-top game to play with participants based on the SEIPS work system. We worked with interprofessional colleagues to identify factors that help and hinder processes in the work system and categorized them under SEIPS headings. We made a series of cards based on these factors which participants collect. The winner was the person who collected a helpful card for each SEIPS heading first.

**Findings:** We have piloted our SEIPS game with interprofessional faculty, including those with specialist expertise in human factors in healthcare. We surveyed participants to obtain feedback. Survey results so far include data contained in [Table 1-A50](#), and the following participant comments:

- ‘Play’ is a kinaesthetic way of learning and helps embed ideas and thinking. It also can create opportunities for discussion on different headings for human factors and systems thinking.
- The examples are fun but are also realistic so helps you see how HF is relevant. With the examples of human factors in the game it could be useful for staff with little clinical experience.
- Liked the competitive element and the examples helped expand on what SEIPS was and how it could be relevant to lots of areas.

### Table 1-A50: SEIPS game participant survey results

100% of participants enjoyed playing the SEIPS game.

100% of participants felt the SEIPS game could increase participants understanding of human factors in healthcare.

100% of participants felt the SEIPS game could help participants identify human factors impacts on their own work system.

**Conclusion:** We have developed a SEIPS game to facilitate discussion of human factors in healthcare. This novel approach has received positive initial feedback following our pilot. We are confident we can now move forward to integrate our SEIPS game into our Foundation Doctor’s simulation programme from August 2023. Following this, we intend to continue the process of data collection and analysis, with the intention of incorporating our SEIPS game more widely across simulation courses within various clinical specialties in future.

**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.

## REFERENCES

1. Carayon P, Schoofs Hundt A, Karsh B-T, Gurses A, Alvarado C, Smith M, Flatley Brennan P. Work system design for patient safety: The SEIPS model. *Quality & Safety in Healthcare* 2006; 15(Suppl 1): i50-i58.

## TECHNOLOGY

A51

### EDUCATIONAL EFFECTIVENESS OF A HIGH-CONSEQUENCE INFECTIOUS DISEASE TRAINING COURSE USING ULTRAVIOLET SIMULATION

**Luke Hunt**<sup>1</sup>, Samantha Farrow<sup>1</sup>, Cariad Evans<sup>1</sup>, Anne Tunbridge<sup>1</sup>, Joby Cole<sup>1</sup>, Brian Crook<sup>2</sup>, Paul Johnson<sup>2</sup>; <sup>1</sup>*Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom*, <sup>2</sup>*Health & Safety Executive, Buxton, UK*

**Correspondence:** [luke.hunt2@nhs.net](mailto:luke.hunt2@nhs.net)

[10.54531/XVSB4567](https://doi.org/10.54531/XVSB4567)

**Background and aim:** High-consequence infectious diseases (HCID) are pathogens which spread easily between people, have high mortality rates, and lack effective treatment [1]. Examples include Ebola and Lassa fever. Most emerging pandemics, including COVID-19, are initially classified as HCID. Assessment of patients with suspected HCID infection is an advanced procedural skill requiring application of enhanced infection control measures including patient isolation, personal protective equipment, and decontamination. There is a risk of healthcare worker infection if procedures are not followed [2]. HCID often present in non-specialist centres; there is a need for an accessible, educationally effective HCID course for NHS staff.

**Activity:** We developed a course for clinicians in infectious disease and emergency medicine, in collaboration with the Health & Safety Executive and clinicians in the UK-HCID network. The course uses a blended approach; theoretical components are taught with online learning. Practical components are taught with high-fidelity, multidisciplinary simulation using VIOLET, a mannequin which coughs, vomits and sweats ultraviolet markers ([Figure 1-A51](#)) [3]. This simulates airborne, contact and fomite transmission, allowing visualization and debrief of contamination before and after PPE removal. Training