

**Table 1-A70:** Pooled two-paired T-Test analysis of participant self-rated confidence, in managing clinical scenarios and core topics, before and after participation in 4 high-fidelity simulated scenarios, at the 95% confidence interval (\*Significance  $\alpha = \leq 0.05$ ). *df* = difference

		N = No of participants	Mean	Variance	df	t Stat	T critical two-paired	Significance P (T<=t) two-tail
<b>Simulation 1: Sepsis and Anaphylaxis</b>	Pre-simulation	14	8.29	2.219	13	-2.687	2.160	0.002
	Post-simulation	14	9.00	1.538				
<b>Simulation 2: Post-operative anastomotic leak</b>	Pre-simulation	8	8.25	1.642	7	-2.376	2.365	0.024
	Post-simulation	8	8.88	1.267				
<b>Simulation 3: Acute Abdomen</b>	Pre-simulation	19	16.84	2.760	18	-3.693	1.734	0.002
	Post-simulation	19	18.26	2.760				
<b>Simulation 4: Post-operative PE and Cardiac arrest</b>	Pre-simulation	14	15.79	5.566	13	-4.387	2.160	0.000*
	Post-simulation	14	18.00	1.231				

across the PNMH care pathway, on a number of domains set by HEE PNMH competency framework. Participants were overwhelmingly in support of SUC involvement in the provision of valuable training which resembled real-life clinical encounters via scenarios.

## REFERENCES

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## EDUCATION

A72

### USING SIMULATION AS A METHOD OF ASSESSMENT IN FURTHER EDUCATION

Ann Sunderland<sup>1</sup>, **Rebecca Weeks<sup>2</sup>**; <sup>1</sup>Wynnefield Consulting, Oxenhope, United Kingdom, <sup>2</sup>Calderdale College, Halifax, United Kingdom

**Correspondence:** [annsunderland@outlook.com](mailto:annsunderland@outlook.com)

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**Background and aim:** While the use of simulation-based education (SBE) is embedded within clinical courses delivered in higher education, its use within further education is extremely limited, leading to a perception that students may be at a disadvantage, particularly those from a neurodiverse background, where kinesthetic learning is their preferred style [1]. The same principles also apply to assessment. Supported through funding from the NCFE (originally known as the Northern Council for Further Education), a pilot project was developed with the following objectives:

- To transform the assessment methodology within further education (FE) via the use of immersive technologies
- To facilitate collaborative development of bespoke virtual reality (VR) scenarios incorporating course learning outcomes (T level and Care Certificate)
- For digital technology students to work jointly with industry in VR development
- To gain feedback from students, employers and other key stakeholders with regards to using immersive technology as a method of assessment.

## Activity:

*Scenario development*

Three prototype scenarios were developed in the iRIS platform to aid adherence to ASPIH and INACSL standards as well as collaboration across the development and project teams. The VR development was undertaken in Unity by digital students led by industry experts.

## Evaluation

The University of Huddersfield led on the evaluation of the project using a qualitative approach encompassing the three degrees of validity [2], using student and employer/stakeholder focus groups and 1:1 interviews both pre and post scenario testing. Discussions were transcribed and template analysis [3] applied.

**Findings:** While final evaluation is still ongoing, initial findings are as follows:

- iRIS proved to be an invaluable platform for scenario development across organizations greatly aiding communication and decision-making
- Both students and faculty need have reached a minimum competency with the VR equipment and environment prior to assessment
- Course learning outcomes can be readily incorporated into bespoke VR scenarios
- VR would be a suitable mode for assessment for some learning outcomes but not all
- The prototype scenarios provided adequate realism, face and construct validity for assessing the identified learning outcomes

**Conclusion:** VR simulation has the potential to be suitable and acceptable mode of delivery for assessment in health and social care. Funding applications have been submitted for phase two of the project which would include an impact study.

**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

A73

### USING SIMULATED GENERAL PRACTICE CONSULTATION CIRCUITS TO DEVELOP MEDICAL STUDENTS' SKILLS IN MANAGING UNCERTAINTY

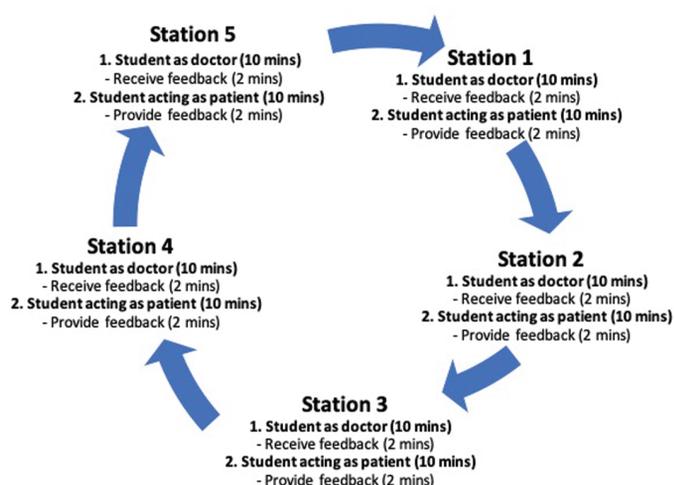
Lucy Porter<sup>1</sup>, James Speed<sup>2</sup>; <sup>1</sup>Surrey and Sussex Healthcare NHS Trust, Redhill, United Kingdom, <sup>2</sup>East Sussex Healthcare NHS Trust, St. Leonards-on-Sea, United Kingdom

Correspondence: [lucy.porter18@nhs.net](mailto:lucy.porter18@nhs.net)

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**Background and aim:** Uncertainty is a prevalent concept within medicine, intrinsic to clinical decision-making. Managing uncertainty can be challenging, especially in specialties (i.e. General Practice) where unclear diagnoses are common. This has resulted in curriculums for such specialties introducing teaching on managing uncertainty [1]. With poor tolerance of uncertainty associated with negative outcomes in medical students [2], there is a strong argument that medical schools need to prepare students to manage uncertainty. Uncertainty simulation cases have been utilized to achieve immersive teaching on uncertainty [3], however this is limited by the resources made available by simulation departments, restricting the potential reach of this transformative learning. **Aim:** To deliver an immersive teaching programme for medical students that develops skills in managing uncertainty within a minimal resource environment.

**Activity:** 8 teaching sessions with 46 students were facilitated, which involved students rotating through a circuit of 5 simulated General Practice consultation stations. Students firstly performed the station and then acted as the patient for the next candidate in a continuous cycle (Figure 1-A73). Feedback was provided after each station. The station cases introduced elements of uncertainty ranging from diagnostic, management or closing/safety-netting. Feedback was collected after each session assessing confidence in managing uncertainty and GP scenarios.



**Figure 1-A73:** Circuit Rotation Design – Students started the circuit acting as either the doctor or patient for stations 1-5. After each 10-minute station, there were two minutes for feedback. Students then rotated in a clockwise direction becoming the patient for the station they had previously performed or performing a new station. The students continued to rotate according to this carousel circuit design until they had performed and examined all five stations

**Findings:** Students responded positively to the teaching programme, rating its provision of confidence in managing uncertainty and managing GP scenarios (real and OSCE) as >95%. Enjoyment of the sessions was rated at 97% with main aspects being: variety of stations and interactivity. Usefulness of the sessions was rated at 98% with main aspects being: chance to practice, range of cases, receiving feedback. Simulations of GP consultations were rated as highly representative; this was achieved with minimal resources.

**Conclusion:** This teaching programme developed medical students' confidence and skills in managing uncertainty. They also felt better prepared for managing patients in a GP setting. Critical to the success of this programme was the enjoyment and perceived usefulness of the teaching, as this improved engagement with the learning outcomes. With the cohort being final year students that were integrating knowledge from previous clinical years, we hypothesize that the usefulness was due to students wanting to focus more on revision and opportunities to develop skills in managing less commonly taught but clinically important abstract concepts, such as managing uncertainty. Further programmes should expand on the simulated environments (ED, medical/surgical on-calls) and managing other clinically important abstract concepts (confrontations, prioritization, errors).

**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

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### THE USE OF SIMULATION TO SUPPORT THE UPSKILLING OF INTERPROFESSIONAL TEAMS PROVIDING AN URGENT COMMUNITY RESPONSE SERVICE (UCR)

Belinda Twissell<sup>1</sup>, Kate Olsen<sup>1</sup>, Deryn Creasy<sup>1</sup>; <sup>1</sup>Buckinghamshire Healthcare NHS Trust, Aylesbury, United Kingdom

Correspondence: [belinda.twissell@nhs.net](mailto:belinda.twissell@nhs.net)

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**Background and aim:** An NHS provider had no established simulation education opportunities for community based allied health professionals (AHP). Urgent Community Response (UCR) teams are interdisciplinary teams, comprised of nurses, paramedics, physiotherapists and occupational therapists, who provide care to adults in their home to avoid hospital admission [1]. Older people experience effective high-quality care when a multi-skilled clinician, working across the usual professional boundaries, can effectively address their needs rather than requiring numerous other professionals to visit them at home. In this NHS Trust, intermediate care teams were required to include UCR referrals as part of their usual work. The