of e-noting, including a NEWS, prescription and the relevant paperwork. 'Patients' who had progressed through ED, for example, had a completed CAS card, and their NEWS chart reflected the several sets of observations already taken. The NEWS chart template was also adapted for patients with COPD, and PEWS charts for each paediatric age group were also created, alongside separate e-prescribing to mirror the paediatric version of the drug charts throughout the trust.

Findings: Learners who participated in the scenarios using e-noting provided positive feedback, highlighting the realism and relevance to practice. 43 learners were asked to complete a short survey after taking part in 1 or more scenarios using the new e-noting system. 79% of learners reported that they found the system easy to use, 90% reported the relevance to clinical practice, 81% reported that it was realistic and 95% were happy that this is a feasible and sustainable way to utilize prescribing, observations measurement and note writing/history taking throughout the simulation sessions. 4% reported not using the e-noting system during their scenario.

Conclusion: Although the creation of the e-noting system required additional time and resources at the start, they quickly became easy to implement and adapt to each new patient or scenario. The use of this system leads to much less paperwork being destroyed and increased the realism for the participants who use e-noting throughout the trust.

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

A100 SIMULATING TO MANAGE POST THYROIDECTOMY HAEMATOMA SAFELY: IMPROVING FIDELITY WHILST REDUCING COST

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10.54531/KJCH7399

Background and aim: Simulation training sessions were designed at the University Hospital of Wales in order to implement the new national guidelines for the management of suspected haematoma following thyroid surgery [1].

Opportunities included on site portable training with a part task trainer and high-fidelity scenarios simulating patient deterioration following thyroid surgery in an immersive environment.

Our initial design for the high-fidelity set-up included a simulated neck haematoma achieved by using a second generation supraglottic airway device (SAD) with an inflatable cuff placed in the manikin's neck with the laryngeal opening outwards and tubing inside the chest. The opening was filled with red jelly, covered by simulated strap muscles (made from simulated small bowel with interrupted sutures) and simulated neck skin (which presented a sutured incision complete with steri-strips). Ongoing bleeding was simulated by injecting liquid jelly through the SAD's gastric port via a long connecting tube in the manikin's thorax.

This simulation training increased confidence and familiarity with the steps required to manage post thyroid surgery haematomas in 100% (15/15) of candidates, with 73% grading the mannikin ≥4/5 for realism. However, it was costly to provide and time-consuming to set up.

It was decided to try to make the set-up cheaper and easier to reproduce without impairing quality.

Activity: Equipment costs were reviewed and alternative options identified. Expensive components included the SAD and bowel material, which were replaced with a cheaper SAD and a disposable tourniquet fashioned as shown in Figure 1-A100. Participants used both devices and were asked for feedback.

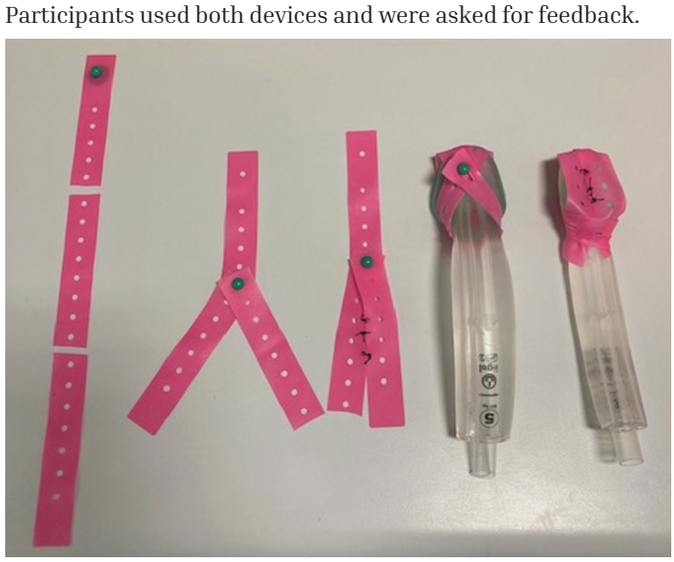

Figure 1-A100: Making the simulation larynx and strap muscles. A step by step guide

Findings: The cost of disposable props used in each session was reduced from £133.04 to £8.52 with the new equipment. The designers also felt it was significantly more robust and easier to reproduce. This approach could also be easily adapted for mobile part-task training, improving multi-disciplinary access to training.

Feedback showed 47% of candidates felt the new set-up to be better, and 47% reported non-inferiority.

Conclusion: Changing to new equipment resulted in a design that was significantly cheaper, easier to source and set-up, while being at least as realistic and offering training opportunities outside the high-fidelity environment.

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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TECHNOLOGY

A101 ADULT CRITICAL TRANSFER SIMULATION: TECHNOLOGY IN MOTION

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10.54531/YHRX6923

Background and aim: Transfer medicine is evolving into a more visible, necessary sub-specialty, particularly since the COVID-19 pandemic, during which the need for proficiency in critical care transfers became apparent. As such, there exists a requirement for the provision of good training in this domain, especially for effective simulation-based learning given the dynamic nature of critical transfers, in tandem with the relative scarcity of experience of the average non-specialist practitioner.

The creation of meaningful simulation training is already well recognized as posing numerous challenges [1], often in balancing fidelity with practicality, for achieving engagement of learners and transfer of learning to practice [2]. When adding the dynamism involved in a transfer - such that simulation requires movement of a critically monitored patient from one point to another - this task becomes more complex. Importantly, the integrity of the exercise is lost when provided in a stationary environment, as with much simulation traditionally. This was the focus when designing the Adult Critical Transfer Simulation (ACTS) course - a multi-disciplinary team-based day with pre-course e-learning, focused around assorted simulated scenarios performed in motion across an education suite. Additionally, it incorporates reflexive debriefing, interactive workshops and group discussion sessions to support learning.

Activity: The greatest technical challenge of ACTS - modified repeatedly now over two years - was the delivery of mobile, multi-environment scenarios that provide an equivocal experience to that of traditional, stationary lab-based simulation. This was addressed utilizing wireless, remotely controlled patient models and monitoring alongside a network of strategically placed cameras and microphones to provide immersive simulation for both active and observing participants. In addition, considerable attention was given to audio-visual cues at all points of transition for creating the ambience of a moving transfer, the efficacy of which is reflected in positive course feedback.

Results: Feedback on ACTS was collated from all participants, with significantly favourable responses in every domain and 100% overall score of 5/5 for both enjoyment and recommendation, and 93.8% score of 5/5 for relevance to professional needs (Figure 1-A101). Positive comments were most numerous regarding realism and engagement of the experience, and faculty expertise, with additional

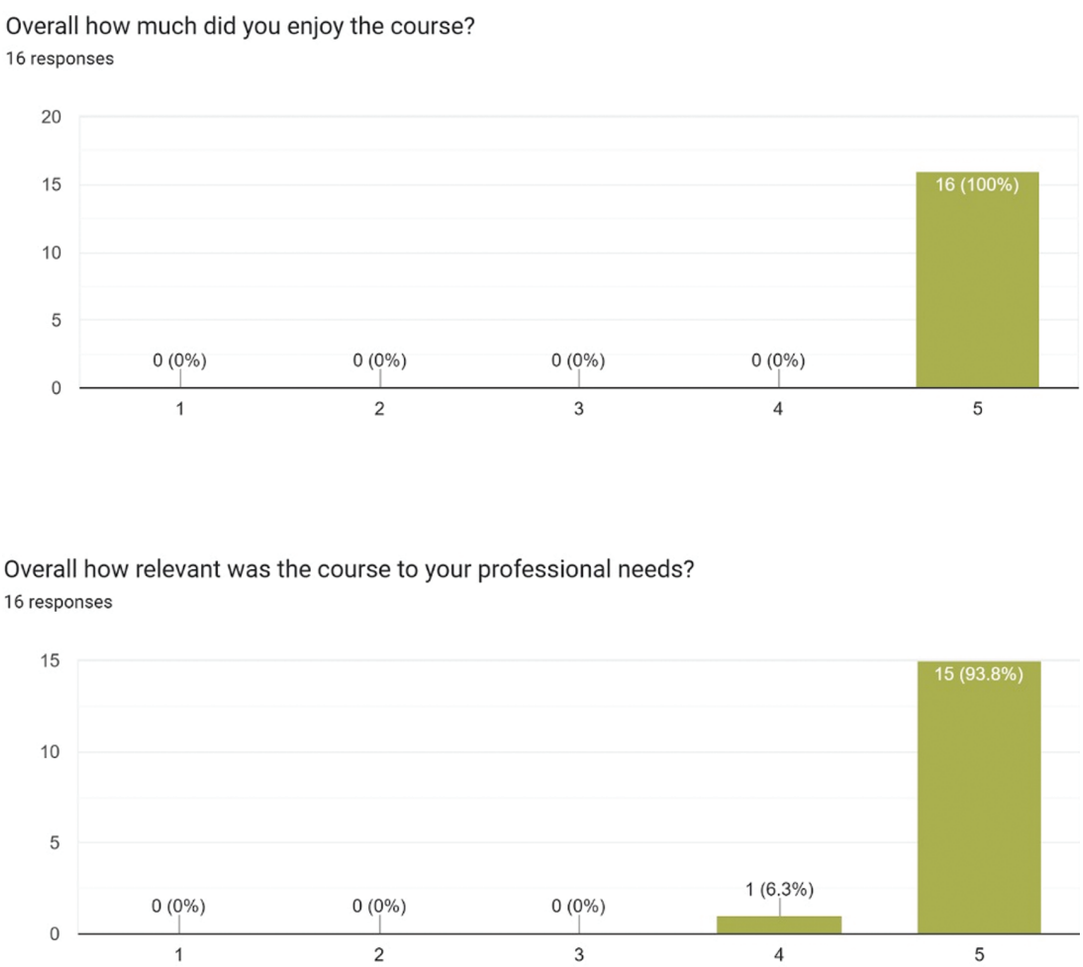

Figure 1-A101: Feedback from participants of the 2023 Winter run