scores pre- versus post-course improved by approximately 20% (74.3% to 94.4%) (Figure 2).



Figure 2: Results of pre- and post-course knowledge assessments

Implications for practice: We developed an effective and well-received remote simulation transfer course to deliver training to a wide-reaching audience. Participants were enthusiastic about the innovative and interactive approach, finding the online course enjoyable and relevant to their clinical practice. Results suggest the course effectively increased learning. The flexible nature of online remote provision allows for delivery at scale, to meet a rising demand. Further evaluation will establish the extent at which this training translates to performance, such as a reduction in adverse events in transfer practice.

REFERENCE

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IMPROVING KNOWLEDGE AND HUMAN FACTORS SKILLS DURING A PANDEMIC: A MULTIMODAL COVID-19 EDUCATIONAL PROJECT

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Background: Following a rise in COVID-19 cases and hospitalizations in autumn 2020, the resultant pressures on general medical wards galvanized the simulation education team at a London teaching hospital to create a multi-disciplinary educational programme aimed at ward staff caring for the surge in COVID-19 patients. This was especially important in the context of rapidly evolving clinical guidance and recognition of the importance of human factors in re-deployment of staff, thus a multimodal educational project was initiated to develop ward staff knowledge and human factors skills.

Aim: The aim of the study was to ascertain the effectiveness of the multimodal COVID-19 educational project in improving ward staff knowledge and human factors skills.

Method: In October 2020, the team began creating the project – comprising e-learning to improve staff knowledge, *in situ* simulation training and an in-centre human factor course, all based around the care of patients with COVID-19. With rising COVID-19 cases and subsequent suspension of face-to-face teaching, an online format for the human factors training was created incorporating scenarios from the *in situ* simulation. Data were collected via SurveyMonkey with pre-and post-surveys for each facet – six key learning outcomes for e-learning and the Human Factors Skills for Healthcare Instrument (HuFSHI) for the other elements – with free-text boxes for qualitative feedback.

Results: e-Learning surveys were completed by 108 learners with a significant difference (p < 0.01) in self-reported preand post-survey scores across the six domains. Learners demonstrated mean improvements across all areas of the

HuFSHI for the $in \, situ \, (N = 9)$, human factors course (N = 15) and online format (N=46). Results were comparable between faceto-face and online formats. Learners found all formats useful (e-learning 99%, in situ 100%, human factors 100%, online 98%). Implications for practice: In a limited time frame, the simulation education team implemented a multimodal educational project that improved both ward staff knowledge and human factors skills amidst the second wave of the COVID-19 pandemic. Moreover, following restriction of face-to-face delivery, the project was successfully converted into a purely online format. This ability to be flexible and adapt accordingly is one that needs to be widely adopted going forwards, especially during these unpredictable times. Further challenges included staff release for training, time pressures, managing emotive discussions using the online modality and COVID-19 safety measures. A 6-month follow-up survey is planned to evaluate the benefit to staff's clinical work and will be included at the presentation.

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UPDATES TO THE HEALTHCARE SIMULATION DESIGN STANDARD OF BEST PRACTICE

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Background: Offering high-quality and purposeful simulation-based educational (SBE) activities to learners requires careful planning $^{[1]}$. To improve SBE practice across all healthcare professions and for learners at all levels of experience, the International Nursing Association for Clinical Simulation and Learning (INACSL) has outlined a set of standards recently rebranded as the Healthcare Simulation Standard of Best Practice Practice $^{\text{TM}}$ (HSSOBPTM) that were initially published in 2013 and recently revised in 2021. Involving individuals with a range of relevant expertise, revisions to these standards have occurred every few years, including expanding the topics covered as developments in this domain have occurred and the use of simulation has expanded.

Aim: The aim of this abstract was to present the changes made to the Simulation Design Standard in comparison to its previously published version [2].

Method: From 2019 to 2021, a group of simulation educators and researchers representing multiple specialities, simulation societies and geographic areas (the authors of this abstract) met regularly via a videoconferencing platform to review and revise the Simulation Design Standard based on their review of the latest literature and their individual experiences. The team identified several aspects that would benefit from being updated to make this key standard more explicit and applicable to all types of simulation modalities. Drafts of the standard were reviewed on multiple occasions by peer reviewers and the society's leadership until the latest version was approved for publication.

Results: An updated version of the Simulation Design HSSOBPTM will soon be published by INACSL in the