nursing students (n = 217), using low-cost virtual reality headsets, demonstrated that learning via immersive approaches aided understanding of the complex concepts, provided immediate feedback about clinical decisions, and could be completed multiple times. It provided additional opportunities for safe practice and complimented their ward and clinical skills experiences. Simulation technicians and lecturing staff recognized these benefits but identified time and cost constraints as challenges. Building on this research, we designed and evaluated a small-scale pilot to improve processes.

Aim: To use 360 videos accessed via low-cost VR headsets to scale the clinical simulation experience for paediatric nursing students.

Method/design: Working with our local hospital and our second-year paediatric nursing students, we used agile design methods and co-creation to develop two ABCDE assessment clinical simulations (sepsis and acute respiratory illness), using a 360 camera. These videos were accessed using low-cost virtual reality headsets, Oculus Quest™, mobile devices and Microsoft HoloLens™. Qualitative evaluation sought views of students, nursing staff/academics and simulation technicians through focus groups (n = 10). Thematic analysis revealed emergent themes of flexibility of access, repetition of learning opportunity and strengthening or the practice-theory link. Challenges included user familiarity with the technology and time investment. The main impact of this project was wider and longer-lasting learning compared with traditional methods.

Implementation outline: Bite size learning chunks embedded strategically into our new nursing curriculum, for 300 student nurses studying at level 5. Harnessing the full potential of the clinical simulated experience permits students and staff to learn at a time and place of their own choosing. The ABCDE assessment will be expertly demonstrated through 360 videos, which will better prepare students for in-person simulations, saving face-to-face time explaining how to carry out the simulation. Learning from this project will feedforward to a faculty-wide multi-disciplinary clinical simulation event, informing guidelines.

REFERENCES
1. Health Education England. Developing people for health and healthcare enhancing education, clinical practice and staff well-being. A national vision for the role of simulation and immersive learning technologies in health and care. London: Health Education England; 2020: 8(1).
2. Singleton H, James J, Penfold S, et al. Deteriorating patient training using non-immersive virtual reality: a descriptive qualitative study. CIN: Computers, Informatics, Nursing. 2021.

90	**COVID-19 SIMULATION PROGRAMME: RAPID TESTS OF CHANGE**

Angus Cooper[1,2], Jeremy Morse[2], Craig Brown[1,2]; *1NHS Grampian, Foresterhill, UK2University of Aberdeen, Aberdeen, UK*

Background: The 'first wave' of COVID-19 created many challenges. Our hospital was fortunate to have slightly longer than many others to prepare. One of our Emergency Department (ED) challenges was that, as part of a redesigned process, patients with respiratory failure (presumed COVID-19) were to be assessed in a very different clinical area (single rooms instead of 'open plan' resuscitation room), managed by a much larger team of clinicians, using Level 3 (airborne) PPE and a modified approach to Rapid Sequence Intubation (RSI) induction of anaesthesia. Rapid cycle simulation and debrief has subsequently been described as part of a system-based learning approach during the COVID-19 pandemic [1].

Aim: The aim of this programme was to rapidly familiarize a large team with the new clinical environment and RSI process, using the learning conversation after each simulation to make an immediate change, as required, to the clinical area and/or process.

Method/design: Each simulation was an identical clinical scenario, i.e. a patient with respiratory distress for whom the need for COVID-19 modified RSI had been identified. The simulation was delivered in the rooms that were subsequently to be used for direct clinical care of confirmed or suspected COVID-19 patients.

Implementation: A process testing approach was taken. During the simulation brief, the process was talked through in detail (all expected actions and sequence), the team then performed the simulation, followed by a learning conversation that was very focussed on the challenges in delivering this process. Using mobile cameras and large screen TV, all simulations were live streamed to an immediately adjacent area, such that a large number of other clinicians could observe the brief, the simulated clinical scenario and participate in the learning conversation. Agreed changes in equipment, ergonomics and process were immediately incorporated into the next simulation. Once this area was required for direct patient care, an identical room was set up in an adjacent (non-COVID-19 clinical area) to allow daily simulated training to continue. On one occasion, where there was advance notice of the arrival of a patient requiring RSI, the team who were to be involved in the RSI 'drilled' this scenario ('just in time' simulation) whilst awaiting the arrival of the patient. It was observed that participants who had previously been less comfortable with simulation were happier with this process testing approach (knowing what is expected and with no surprises).

REFERENCE
1. Dubé M. COVID-19 pandemic preparation: using simulation for systems-based learning to prepare the largest healthcare workforce and system in Canada. Adv Simul. 2020;5:22.

105	**A SIMULATION-BASED DEPARTMENTAL INDUCTION USING VIRTUAL REALITY 360**

Sarah Powell[1], Eirini Kasfiki[1,2], Andrew Blackmore[1,2], David Wright[1,2]; *1Hull University Teaching Hospitals NHS Trust, Hull, UK2Hull Institute of Learning and Simulation, Hull, UK*

Background: One of the challenges faced during the COVID-19 pandemic was the need for quick departmental inductions to allow rotating and redeployed junior doctors to familiarize themselves with rapidly changing departmental environments. We were unable to continue traditional inductions due to various challenges including lack of senior staff to provide the induction due to increased workload; lack of administrative staff to support inductions due to sickness and self-isolation; and lack of physical space under the constraints of social distancing. Thus, an alternative was needed incorporating all aspects of a traditional induction. Video Reality 360 (VR360) technology and video simulation