

'real' feel of talking to the patient, informing next of kin....it surprised me how real my patient feels'. 'They are incredibly useful. ... I much prefer doing them on a computer screen than in 3D. It does make for a different way of revising'.

Use of simulations over time

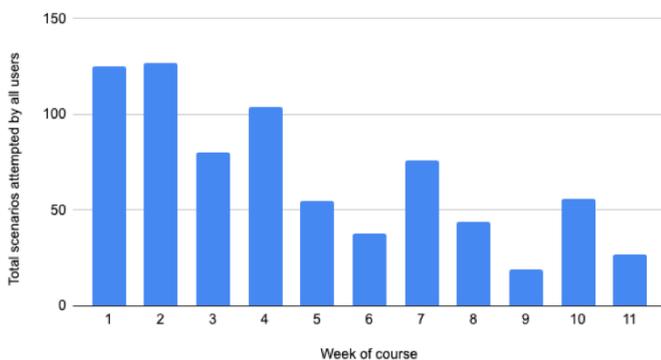


Figure 1:

The high initial response rate suggested student interest and engagement. The low (21%) conversion rate to accessing the VRS platform may be explained by initial technical issues and the voluntary nature of the project. The quantitative data show the importance of repetition in improving learning. Participation over time may improve with incorporation into the medical school curriculum. Lower usage among the final-year medical students may be explained by volunteering and early commencement of clinical duties. This innovation reveals some strengths of VRS: basic equipment; learner-directed; improved performance and student interest. Overall, the VRS platform allowed the delivery of a rapid response to fill a gap in clinical education. The next phase of this project will be to provide live tutor-supported debrief.

REFERENCES

1. Stone MJ. The wisdom of Sir William Osler. *Am J Cardiol.* 1995;75(4):269–276.
2. Jensen L, Konradsen F. A review of the use of virtual reality head-mounted displays in education and training. *Educ Inf Technol.* 2018;23(4):1515–1529.

99

A FRESH MODEL IN THE VEHICLES FOR LEARNING: REDESIGNING AN ESTABLISHED, TRADITIONAL AIRWAY COURSE TO BE DELIVERED IN A MULTI-SITE HYBRID FORMAT IN THE COVID-19 ERA

Manvi Singhal¹, Mitchell Kee², Jonathan Eady², Claire Martin², Michael McBrien²; ¹Northern Ireland Medical and Dental Training Agency, Belfast, UK²Belfast Health and Social Care Trust, Belfast, UK

10.54531/GDRA5954

Background: The Royal College of Anaesthetists (RCOA) stipulates that anaesthetists should be able to use advanced/novel airway management techniques. The RCOA-accredited annual Challenging Airway Course in Northern Ireland is a staple of the calendar, providing an opportunity for all those involved in airway management to gain, refresh and replenish skills. Having already been cancelled in 2020 due to the pandemic, there was a strong appetite, particularly within the trainee body, that it should be staged in some form this year.

Aim: The aim of the study was to deliver a high-quality course that outlined the theory behind airway management, without loss of the hands-on aspects of equipment/techniques, to a large candidate group in a COVID-19 safe environment.

Method/design: Alteration of the face-to-face course to run in a hybrid multi-site format with both online components and practical workstations.

Implementation outline: The course was delivered simultaneously in real time across the multiple deanery teaching hospitals. There was a central hub from which the course lead could synchronize timings/broadcast recorded material. As part of contingency plans for any unanticipated technical difficulties, lectures were pre-recorded and played for candidates on the day. These were punctuated with four practical workstations that mandated two delegates per station. Additionally, some content was recorded for viewing online as pre-course material and new simulation videos of a failed intubation drill and the subsequent debrief were also created. For some unable to attend site locations, a fully virtual experience was also an option. These modifications allowed us to: maximize attendance without breaching social distancing guidelines; retain the hands-on aspect of using equipment/techniques and also maintain an excellent faculty to candidate ratio to allow ample time for practising/asking questions. The pre-course material also empowered the candidates to feel better prepared for the day. Post-course anonymous feedback was completed by the vast majority of delegates and was overwhelmingly positive. Pre-course material, facilities, content, lectures, simulations and workshops were rated highly. The use of airway exchange catheters was mentioned as the introduction of a new skill for many delegates. Apart from one candidate, no one had attended any RCOA-accredited airway events in the preceding year but 100% of the candidates would recommend this course to their peers. Amidst challenging times, we successfully restyled an established and respected course. The novel hybrid multi-site format allowed a larger number of candidates to network face-to-face and gain knowledge/practical skills within a COVID-safe environment. Until such times as 'normality' and perhaps beyond, this may be a new formula for learning.

127

CAUTION AND CONTEXT: COVID-19 AS THE EDUCATIONAL FOCUS FOR INTER-PROFESSIONAL LEARNING

Kathryn Neill¹, Wendy L. Ward¹, Karen Dickinson¹; ¹University of Arkansas for Medical Sciences, USA

10.54531/EHBK4388

Background: Traditionally our university-affiliated Office of IPE delivers a 3-phase (exposure, immersion, competence) inter-professional education (IPE) curriculum which is a graduation requirement for students. On 13 March 2020, on-site classes were suspended due to the first confirmed case of COVID-19 in the state. Faculty rapidly implemented alternative methods of instruction to complete coursework for the spring semester utilizing COVID-19 as the educational focus and hosting these learning events on the virtual platform.

Aim: The aim of the study was to lean into the educational opportunities provided by the global pandemic to continue to provide high-quality IP education including simulation, crafting these educational events to meet the pandemic needs of our community.

Method/design: During the COVID-19 pandemic, healthcare students and faculty stepped forward with a desire to serve during this health crisis. Several public health support

programmes were provided by the academic health centre and IP educational activities were crafted around these. Such programmes included: a 1-800 COVID-19 hotline providing rapid access to health screening to assist the community in understanding when and where they should access the healthcare system for testing or care; a Contact Tracing Call Center to identify those with exposure and risk and counsel next steps; and provision of public health information regarding the virus and the vaccine. IP Faculty developed a series of IP simulations to provide students with the knowledge and skills necessary to serve in these public health support areas. These simulations were all structured utilizing an initial brief (detailing Interprofessional Education Collaborative (IPEC) domains and Patient- and Family-Centered Care principles), followed by scenario-specific education such as IP team review of screening algorithm and decision tree for hotline and call centre work, with subsequent standardized patient (SP) interaction, and finally IP debriefing. Five simulations involving 190 students occurred. Evaluation metrics collected included pre-/post-Interprofessional Collaborative Competencies Attainment Survey (ICCAS), evaluation of learning objectives, SP interaction and simulation methodology via Likert scale, and identification of themes from qualitative response items. **Implementation outline:** Inter-professional simulation training activity via an online platform supported student learning for COVID-19 disease information, screening algorithm and decision tree tools and telemedicine delivery. The rapidly implemented virtual training prepares students to graduate whilst also supporting the state during this public health crisis. This work provides a template by which curricula can pivot to meet the needs of all key stakeholders during a time of global crisis.

60 TALKING UNDER COVER: A VIRTUAL WORKSHOP TO IMPROVE COMMUNICATION IN PPE

Sini John¹; ¹Homerton University Hospital, NHS Trust, Hackney, UK

[10.54531/WCZD9238](https://doi.org/10.54531/WCZD9238)

Background: Since 15 June 2020, all hospital staff were mandated by the government to wear a facemask in hospital and it looks like they will remain a permanent feature in healthcare for the foreseeable future. There is a significant body of research about the plethora of adverse effects that wearing masks can have on verbal communication ^[1] and we have evidence that effective communication is a common root cause of clinical error that affects patient safety ^[2]. However, despite the mounting evidence about the detrimental effects, there is little out there in the way of solutions to these problems. **Aim:** The aim of the study was to develop an interactive virtual workshop aims to improve the verbal communication of healthcare staff whilst wearing Personal Protective Equipment (PPE). **Method/design:** We delivered 14 workshops from March 2021 to May 2021 to 80 participants. First, we discussed the barriers that healthcare workers are up against when they are working in Personal Protective Equipment (PPE) and then speak about vocal anatomy and how speech is created. The workshop then focusses on how to make speech clearer whilst also advising healthcare staff on how to look after their voice. To ensure the workshop is interactive, there are a number of

exercises that the participants perform and videos of COVID cardiac arrest simulations are used to discuss the potential speech and communication errors in PPE which could affect patient safety in an emergency. Finally, we also incorporated a patient's perspective in designing this course. They offered very helpful suggestions regarding verbal and non-verbal communication when communicating with patients in PPE, which are often overlooked by healthcare professionals but immensely valuable to improve patients' and staff experience. **Implementation outline:** We invited hospital departments to book on to the virtual training and collected electronic feedback from participants. As a result of this feedback, we hope to be able to provide face-to-face training in the future and incorporate simulation in the workshops so that participants can practice what they have learnt with higher fidelity and we are better able to understand how the added burden of cognitive bandwidth will influence people's communication.

REFERENCES

1. Mheidly N, Fares MY, Zalzale H, et al. Effect of face masks on interpersonal communication during the COVID-19 pandemic. *Front Public Health.* 2020;8:582191.
2. Clapper TC, Ching K. Debunking the myth that the majority of medical errors are attributed to communication. *Med Educ.* 2020;54:74-81.

82 SURGEONS DON'T JUST OPERATE: IMPROVING JUNIOR SURGICAL PRACTITIONERS' NON-TECHNICAL SKILLS OUTSIDE OF THE OPERATING THEATRE USING HIGH-FIDELITY SIMULATION

Laura Ellerton¹, Ryan Kelly¹, Fatemeh Keshtkar¹, Simon Mercer¹, Tim Parr¹; ¹Liverpool Hospitals NHS Foundation Trust, Crewe, UK

[10.54531/KEYW7406](https://doi.org/10.54531/KEYW7406)

Background: The non-technical skills of surgeons play a significant role in patient confidence, experience and safety ^[1]. Courses, such as NOTSS, have been successful in advancing senior surgeons' abilities in situational awareness, decision-making, communication and teamwork, and leadership. These courses focus on non-technical skills intraoperatively ^[1]; however, the work of a surgeon is far from limited to the operating theatre. Often, critical events take place in A&E or the ward environment involving junior surgical practitioners potentially unsupervised. Still, there remains no required human factors training at the junior stage or surrounding surgical care outside of the operating theatre at any stage of practice. We are establishing a course for junior surgical practitioners encompassing two areas where non-technical skills are frequently tested outside of the theatre environment; DNACPR and consent. **Aims:** The aim of the study was to improve non-technical skills and confidence of junior surgical practitioners regarding DNACPR conversations and obtaining operative consent. **Method:** We have developed a speciality-specific course to address the educational deficit surrounding non-technical skills outside of the operating theatre, focussing on DNACPR and consent, for junior surgical practitioners. It was piloted at Aintree University Hospital with their Orthopaedic Department. We combined lectures and workshops delivered by subject matter specialists with simulated scenarios. The simulated scenarios were debriefed by human factors specialists using the gold standard validated NOTSS tool ^[2]. Anonymized candidate data were collected using electronic forms.