Introduction

Healthcare simulation is widely utilised for education at all stages of clinical training and practice, across cognitive, procedural, communication and teamwork domains. Therefore, in anticipation of the uncharted and impending COVID-19 pandemic, we embarked ad-lib on a mission to best prepare our clinical staff and systems.

By testing and honing how local and national policies were applied among various professionals in a range of scenarios, we aimed for a proactive and constructive approach to help manage risk, improve patient safety and foster staff morale, at a time of great uncertainty.

Methods

The initial plan was to simulate, video and disseminate a scenario of a COVID-19 patient that required anaesthesia and intubation for severe hypoxaemic respiratory failure.

This soon progressed to planning, running and debriefing a wide range of COVID-oriented scenarios, including:

- Management of cardiac and respiratory arrests
- Intra-hospital transfers of critically-ill patients
- Donning and doffing of PPE
- Inserting surgical tracheostomies
- Ventilator training
- Proning patients

Plus: obstetric and paediatric specialty-focused scenarios.

Results

Over a two month period during the COVID-19 ‘first wave’, 62 simulation sessions were conducted, incorporating 501 participants in total. The extensive consequential learning helped create three instructional videos, improve six clinical guidelines, engineer six clinical action cards/algorithm and nine educational resources (such as checklists and crib sheets).

Discussion and Conclusions

What started off as an idea for one simulated scenario, soon amplified into a huge undertaking of a broad range of simulations and educational resources. Observed project strengths included: overall scale achieved, problem-based in-situ sim scenarios (rather than task-oriented), multidisciplinary and inter-department approach, reactive faculty focused on debriefing/learning, easily accessible resources and the implementation of a daily simulation for the on-call COVID-19 intubation/arrest team.

Feedback: “extremely proactive in the build up to our pandemic response. Took leadership to facilitate various educational videos, algorithms and lots of simulation scenarios which really contributed to the whole department’s preparedness.”

Project limitations comprised: ad-lib approach, lack of quantitative participant feedback, and finite sim faculty and resources.

Conclusions: Simulation proved pivotal in preparing and testing a multitude of staff and clinical systems, facilitating ongoing evaluation and improvements in advance of being needed for real. In contributing significantly to the Trust’s COVID-19 preparedness, simulation helped bridge the gap between policy and practice, empowering staff with safety and assurance when both were hard to come by.