Simulation leads the way: Clinical simulation staff lead preparation of interprofessional teams during a global pandemic

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Background

Providing resuscitation for cardiac arrest patients in the setting of a global pandemic is challenging. The aim of this collaborative was to identify best practices given the information available at the time and test the process using immersive simulation. The University of Alabama at Birmingham Clinical Simulation team assumed primary responsibility for this project to reduce cognitive burden on the clinical teams.

Description/Methods

• In March 2020, forty remote and in-person learners from pulmonary and critical care medicine, critical care nursing, and respiratory therapy participated in the initial cardiac arrest immersive simulation.

• Post simulation debriefings identified the need for a COVID-19 specific response plan that included current Centers for Disease Control and Prevention (CDC) recommendations and biosafety best practices.

• CDC, American Heart Association, Society of Critical Care Medicine, Resuscitation Council (UK), and the American College of Emergency Physicians are a few of the organizations used as reference.

• UAB Clinical Simulation team members updated existing organizational cardiac arrest response documents and procedures.

• Content experts from pulmonary and critical care medicine, emergency medicine, infection prevention and control, pharmacy, respiratory therapy, and critical care nursing reviewed all recommendations prior to final publication.

• Immersive simulations were repeated to test the processes for unintended consequences/latent safety threats.

Evaluation/Results

Qualitative data from post-simulation evaluations with a 5-point Likert scale indicated participants felt the experience was beneficial and would recommend to others. Participants expressed reduced anxiety/increased confidence in post-evaluation comments. Institution specific cardiac arrest response recommendations for suspected or COVID-19 positive patients were developed and made available via the health system intranet to all staff in April of 2020.

Conclusions

Coordinated response to in-hospital cardiac arrest by interprofessional teams was challenging pre-pandemic and more so during. Immersive simulation is an established tool for testing and improving processes in a safe manner. The use of simulation staff with clinical backgrounds to lead interprofessional healthcare teams and develop clinical documents/recommendations is a novel approach.