



Total Revamping of Critical Care Education in the Face of COVID-19

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Postgraduate Institute
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Learning Objectives

- Describe how critical care education was delivered before COVID-19
- Discuss the process of how critical care education transitioned from in-person to virtual education
- Describe the challenges faced when critical care nurse educators educate themselves on virtual interactive devices and delivery platforms
- Describe how critical care education is currently received by all nurses new to intermediate care (IMC) and the intensive care unit (ICU)





Thank You

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2 ABO/RH SPECIMEN REQUIREMENT
Starts October 1st

Improving patient safety by reducing transfusion errors

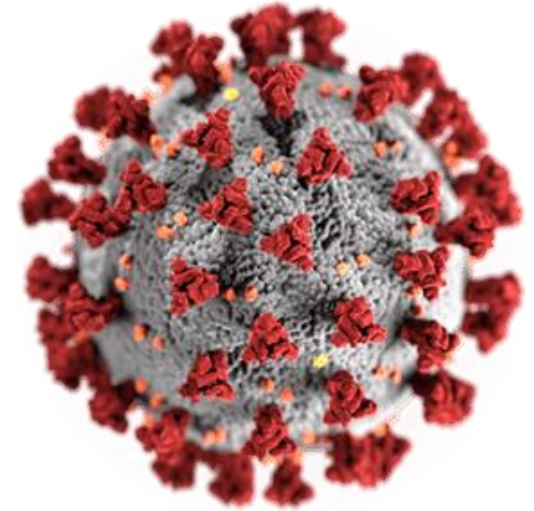
Patient with previous ABO/Rh result in EPIC
Needs only 1 blood draw for Type & Screen

Patient with NO previous ABO/Rh result in EPIC
Needs 2 separate blood draws:

- 1st draw for Type & screen
- 2nd draw 30 minutes apart

How Critical Care Education was Prior to COVID-19. A Little History

- Average 40-80 people per session
- All sessions were in person with subject matter experts instructing
- Each session includes four 8-hour class dates, and includes an 8 hour simulation day



How Critical Care Education was before COVID-19

Timeframe	Critical Care Day 1 Lecture	Critical Care Day 2 Lecture	Critical Care Day 3 Simulation	Critical Care Day 4 Lecture
AM	<p>Cardiac</p> <ul style="list-style-type: none"> • Basic Hemodynamics • Cardiac Emergencies • NSTEMI, STEMI MI • Cardiac Tamponade • Heart Failure • Hypertension 	<p>Respiratory</p> <ul style="list-style-type: none"> • Basics of respiratory system, ABGs, etc. • Non-invasive ventilation/SIM • Respiratory case scenarios 	<p>Stations:</p> <ul style="list-style-type: none"> • Basic Hemodynamics (Arterial Line) • SIM ACLS- Mega code (Fast/Slow) • Dysrhythmia Review 	<p>Neuro (8:00a-1200p)</p> <ul style="list-style-type: none"> • Stroke • Spinal Cord Injuries • Cranial Nerves • Neuro Assessment • Seizure
PM	<p>Shock</p> <ul style="list-style-type: none"> • Pathophysiology of Shock • Types of Shock (S&S, Diagnosis) • Treatment including fluid and medical management 	<p>Anesthesia and Sedation/Delirium Combo</p> <ul style="list-style-type: none"> • Course of Anesthesia-sedation recovery and delirium 	<p>Stations Breakdown of stations:</p> <ul style="list-style-type: none"> • Nurse Managed Protocols • Sedation Delivery • Vasopressor Titration • Mechanical Ventilation 	<p>Advanced Hemodynamics and SIM</p> <ul style="list-style-type: none"> • PA Catheter Insertion/Waveform Recognition • (CVP, PA, SVR, PVR, CO/CI – PCWP)





Transitioning Critical Care Education from In-Person Education to Virtual Education

- Had to happen in a very quick timeframe
- New and experienced nurses entering the IMC/ICU every month
- Required education to prep for assessments
- Education to assist with IMC/ICU entry

<https://rebelem.co/high-flow-nasal-cannula-hfnc-part-1-how-it-works/>





How the Critical Care Nurse Educators had to Educate Themselves on Virtual Interactive Devices and Delivery Platforms

- Zoom video conferencing
- Presentation needed to include the presenter, slides, and have the capability for participants to ask and answer questions
- Utilizing video cameras, a smart-video conferencing camera and a platform to store the videos- all new to us





What if we Didn't go Virtual?

- The burden of critical care education that would be placed on the individual IMC/ICU educators and preceptors would be tremendous
- Not all educators would be competent/comfortable teaching classes
- There would not be consistency on how and what education was delivered



Were there Challenges to Going Virtual?



Challenges

- Presenters who were open to participating in a virtual class and being recorded
- Responding to questions for large groups
- Limited interactive time
- Room availability
- Learning and setting up of equipment





What was the End Result?

- We uploaded 10 videos to the critical care website
- Videos available to all staff, not just those orienting to critical care.
- Developed a virtual simulation day delivered via Zoom with required videos to preview as preparation.
- Discussion sessions included in August orientation





Feedback

- Participants have reviewed the videos positively.
 - We have received feedback that they are too long
 - Participants want more hands on
- Participants have continued to do well on the Critical Care Assessments

Li et al. Eur Respir J 2020





Future

- Re-record all videos and break into sections with discussion points throughout
- Move all pre-work, Power Points, videos, and post-tests to Moodle (an online platform that simplifies tracking participants progress)
- Re-imagine live simulation with small groups and hands on to learn emergency management and hemodynamic line set up





To submit your own question, please email QA@dkbmed.com





What is the time frame to begin recording a video to the video being available online?





What was the biggest challenge when participants asked a question via video-conferencing?





What resources were available to you when beginning the transition from live to video?





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