

# Critical Care Simulation

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#### RATIONALE

Critical Care is a unique group of fellowships offered for multiple residents including internal medicine, surgery, anesthesia and emergency medicine. All of these residents are expected to manage critical patients and be competent in a wide array of procedures. This diversity of medical backgrounds means that when residents start fellowship they may be at different places in their education and procedure skill level. While clinical training and studying will provide them with most of this, there are certain events and procedures, like pericardiocentesis, that are not done frequently and achieving experience and appropriate competence can be difficult.

# NEED

Simulation labs have been shown to help fill these gaps by providing life-like scenarios and skills training. The importance of simulation has been proven and helps multiple disciplines including students, nurses and physicians. Due to its increased popularity, the simulation staffing model will need to be reevaluated to provide training. Emergency Medicine physicians are often tasked with the leadership and staffing in the simulation labs. Critical Care physicians can provide additional support and staffing.

#### INTERVENTION/METHODS

#### Structure:

Critical Care Fellow will be assigned to the simulation lab each rotation.

#### Schedule

9:00 – 12:00: Provide assistance to sim faculty with current projects
12:00 – 13:00: Noon conference
13:00 – 14:30: Assistance, participation, and development of scenarios
14:30 – 1600: Open lab simulation and skills development

#### Requirements:

#### 1. Develop a Simulation Scenario

Each fellow will be expected to create an intensive care scenario using the simulation mannequin and be able to run the scenario during a conference. The scenario should involve a particular subject and be run so that the participants are able to identify and manage the specific disease process.

# 2. Staff and Lead the Open Lab

The open lab is used to allow faculty from the hospital to come in and improve their competency in a particular skill. There will be a standardized time and schedule in place to allow this opportunity. The fellow will be expected to teach and become proficient in all procedures scheduled.

# 3. Quality improvement project

Fellows will be expected to propose a project that will help improve the intensive care unit, simulation lab or critical care program.

## **Goals & Objectives:**

- 1.Improve skill in procedures by performing simulation activities
- 2.Acquire, improve, or perfect procedural teaching skills
- 3. Learn how to create, supervise and run simulation scenarios
- 4.Learn how to develop and implement new procedure simulations
- 5. Improve ability to work as a member of an inter-professional team
- 6.Understand how to detect and analyze complications and errors in simulation and develop ways to prevent or implement techniques
- 7. Develop expertise in all procedures expected of an intensivist

## **IMPACT**

This elective will provide fellows with opportunities to improve acute care management decisions and procedural skills. It will provide objective data for competence in the procedures required to graduate the fellowship. It will also provide the simulation lab a physician capable of teaching emergency/critical care procedures and facilitating emergency/critical care scenarios. Critical care fellows will also provide a unique opportunity of adding additional inpatient knowledge and management that emergency medicine physicians may not provide.

# BENEFITS

This elective is a great opportunity to improve the Critical Care Program and help the Simulation Department. The information and data from the elective will be collected for future projects and possible critical carebased simulation fellowship.

# ACKNOWLEDGEMENTS

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