Mocks: Making a Difference

Author: Darleen A. Williams, DNP, APRN, CEN, CCNS, CNS-BC, EMT-P, Orlando, FL
Section Editors: Cindy D. Kumar, MSN, RN, AG-ACNP-BC, FNP-BC, ENP-C, and Darleen A. Williams, DNP, APRN, CEN, CCNS, CNS-BC, EMT-P

As practicing emergency nurses, we are all very aware of the horrific impact that trauma has on our patients, their families, and society. In the United States, trauma is the leading cause of death for persons ages 1 to 44 years.[1] According to 2015 statistics from the Centers for Disease Control and Prevention, the annual costs of health care and lost productivity were higher in trauma care than for any other major disease process: cancer cost the US economy $216 billion, diabetes $245 billion, heart disease $313 billion, and trauma $671 billion.[1]

Four years ago, my level I trauma center had a trauma program manager just starting in her new position. She evaluated our program and worked diligently to get to know our team across the entire facility. In collaboration with our trauma program medical director, she began holding mock trauma alerts every Monday morning. The first mock alerts were focused on the basics: the team members' locations at the patient's stretcher side and their assigned roles and responsibilities. How was the team leader identified? How did EMS hand off to our team? Although we had an organized process that was already clearly defined, concerns were expressed that our processes were not consistently followed. It is important to note that after every mock trauma alert a detailed debriefing and open discussion is held and all conversations, suggestions, and recommendations are encouraged.

As the ED clinical nurse specialist (CNS), I was asked to collaborate with the trauma program manager and medical director on our mock trauma alert program. Being an ED CNS, I am always looking for ways to contribute to improving care for all our patients while also working to make bedside practice and doing the right things easy for our staff. The trauma population is one focus of my practice, and I welcomed this opportunity. I was already working closely with one of our ED team members on our trauma alert chart auditing process, as well as performing both open- and closed-chart audits on our trauma alert documentation. We were encountering multiple challenges with charting compliance and the teams understating the rational for all the required documentation components. We began including in our mock alerts specific documentation requirements, the reasons for them, and our current compliance numbers. These activities and the input/feedback we received resulted in the revision of our 6-page trauma alert flow sheet. Since then our compliance numbers have improved, and we even have some months for which our numbers are perfect!

As our process has slowly and steadily evolved, we have moved from simple to complex scenarios involving multiple departments and agencies, including our local law enforcement agencies and fire departments. We vary our mechanisms of injury to include blunt, penetrating, burn, blast, and even some decontamination events. This year we are also moving forward to do mini mass causality events as well. All our cases have a specific point relating to something we want the team to be more aware of. They are either actual case-based scenarios that we look at or review for specific injury patterns and their associated assessment, diagnostics, and interventions, or they are scenarios we develop that require the use of specific pieces of equipment such as resuscitative endovascular balloon occlusion of the aorta, intraosseous insertion, open thoracotomy (including internal defibrillation), and precipitous delivery in the pregnant trauma patient.

Once a month we collaborate on a case with our local EMS or law enforcement agency (Figure 1). During these cases one of our team members is at the staged scene and live-streams the EMS approach, extrication assessment, and treatment and transport of the patient to our facility. During the prehospital portion of the mock alert, we have a 62-inch TV screen in our trauma bay where our team watches these events and sees the challenges faced by our prehospital setting colleagues. We also have conducted mock alerts in which the patient arrives at the emergency department via a private vehicle and requires our team to work in the ED driveway to get the patient onto a stretcher and safely into our trauma bay.

Darleen A. Williams, *Member, Florida State ENA,* is Clinical Nurse Specialist for Emergency Services, Orlando Regional Medical Center, Orlando, FL.

For correspondence, write: Darleen A. Williams, DNP, APRN, CEN, CCNS, CNS-BC, EMT-P; E-mail: darleenw.JENAP@gmail.com.

J Emerg Nurs 2019;45:309-11.
0099-1767

https://doi.org/10.1016/j.jen.2019.01.010

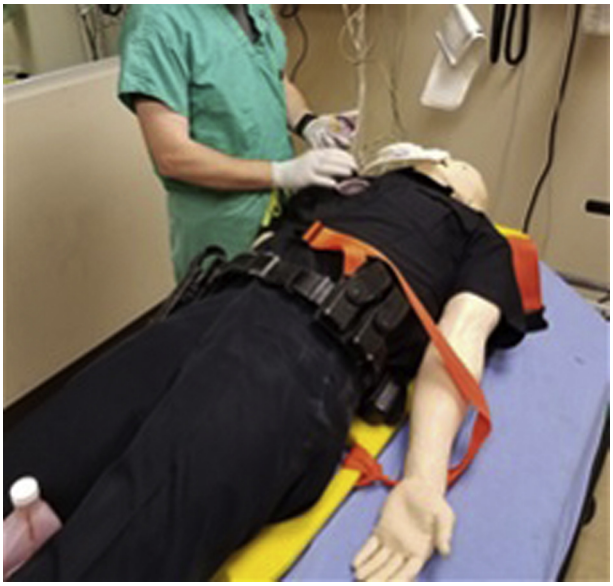

FIGURE 1

Simulation specialist preparing a mannequin as a law enforcement officer Trauma Alert. Notice the full uniform and associated gear.

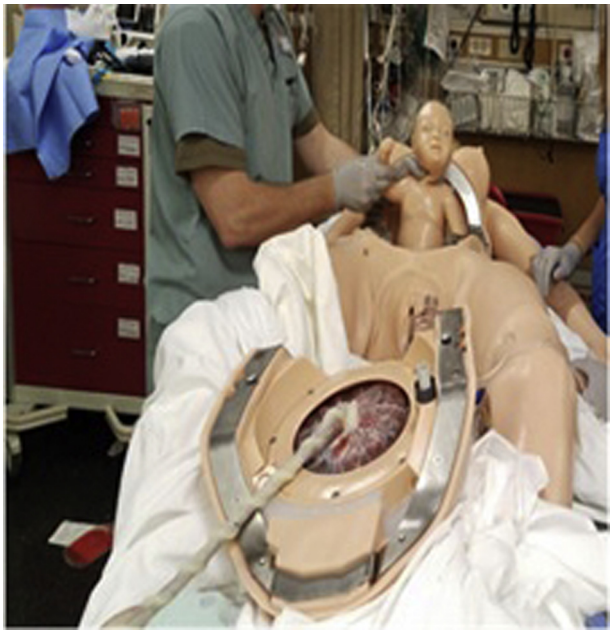

FIGURE 2

Preparing our mannequin for a delivery after a motor vehicle crash.

Our simulation department has 2 adult mannequins that are high-fidelity devices costing between $20,000 to $30,000 per device just for the basic model. One is made so the gender can be easily changed depending on the scenario; the other must stay female and can be used to perform simulated pregnancy and delivery (Figure 2). In addition, we have child and infant mannequins, but they are not capable of as much simulation as the adult mannequins. All the mannequins breathe, blink, and have pupils that react, but the adult mannequins can have surgical airway procedures performed and chest tubes inserted, and with the help of the simulation specialist, they actually speak, answer questions, and demand the team's attention (Figure 3). We have on occasion used a live team member for a case, with obvious limitations on the procedures we could perform.

As previously mentioned, collaboration is one very important component of a CNS practice. Influencing practice regardless of the discipline is an important part of our mock trauma alerts, not just in the emergency department but across our hospital system. Increased teamwork improves communication and patient outcomes. We carefully work to be succinct in resource utilization and ensure that the mock traumas include the entire continuum of care.

In this article 2 scenarios are presented that were prepared in close collaboration with my CNS colleagues Teresa Lance, MSN, APRN, CCNS, C-EFM, covering obstetrical services, and Suzanne Ashworth, MSN, APRN, CCRN, CCNS, for our neuroscience population. The following case-based scenarios were presented in response to actual cases that had occurred.

Mock Trauma Obstetrics Case

A 29-year-old restrained driver was involved in a multi-car crash. During the medical communications from the EMS agency, our team was informed that the patient was in an advanced stage of pregnancy. The actual gestational age was not known, and the patient was unable to speak. This information was quickly communicated to our obstetrics team as the emergency department asked them to respond to the trauma bay to assist in the assessment and care of both mother and baby. Upon arrival at the emergency department, the patient was critically injured and lost pulses, and a trauma code was initiated. As a part of this process an emergency caesarean was performed and the teams worked together diligently to save both patients. Many lessons were learned, including the need to update our equipment and the need for our ED and OB learning specialists to work together to have both the ED and OB teams more informed and aware of each other's contributions to the care of mom and baby. I am pleased to say that although we have had several more such cases, the anxiety of our crews

FIGURE 3
One scenario: stabbing (see the knife in the abdomen).

is greatly reduced and the coordinated teamwork absolutely makes a difference.

In discussing the possibility of working together on a mock trauma alert case, Suzanne suggested presenting a particular case because she believed it was an excellent example of the team's efforts resulting in a good patient outcome.

Mock Trauma Neurologic Case

A 21-year-old female, unrestrained driver in a rollover single car crash was thrown from the vehicle. The patient had a Glasgow coma score of 3 and was intubated prior to arrival at the emergency department. Assessment showed a depressed skull fracture and closed head injury. Initial assessment findings led the team to suspect that this patient might not have a good outcome. Following the mock trauma alert during our debriefing session, an in-depth discussion on closed head injury assessment components and interventions was included. Led by the neuroscience CNS, everyone participated in the discussion and reviewed our neuro intensive care unit protocol and this particular patient's course of stay and associated outcomes. Everyone was excited to learn that the patient had been discharged home after several weeks of inpatient brain injury rehabilitation. The positive outcomes for this patient were clearly based on the excellent initial and ongoing care the patient received.

The CNS, regardless of specialty area of practice, has the unique privilege of following patients across the continuum. For our neuro-trauma patients, this continuum starts upon hospital admission and continues through the rehabilitation phase and integration back to their home environment. This case has brought to light the unfortunate common practice of the ED team *not* knowing what eventually happens to patients they worked so hard to save. They rarely ever hear about their patients after they are admitted. CNSs in the acute care settings can play an important part in ensuring that the initial receiving team learns about the patient's course of stay. This feedback can contribute to an increased sense of satisfaction that the emergency department does make a difference and that the time spent role playing in our mock alert program pays off.

In conclusion, our goal is to continue to move forward, advance our scenarios, and increase the expectations of our team. Mocks have meaning; "How we practice is how we play." In addition, we are investigating the possibilities of conducting research related to measuring the impact of our efforts. Our technology team has agreed to collaborate with us and implement the capability of bidirectional live streaming of our mock alerts, which will allow us to share more easily. Trauma truly is an impact that lasts a lifetime, and we want to be the best part of someone's worst day.

REFERENCE

1. Centers for Disease Control and Prevention. Data and statistics: Web-based Injury Statistics Query and Reporting System. https://www.cdc.gov/injury/wisqars/index.html. Accessed February 5, 2019.

Submissions to this column are encouraged and may be sent to
Cindy D. Kumar, MSN, RN, AG-ACNP-BC, FNP-BC, ENP-C
cindyk.JENAP@gmail.com
or
Darleen A. Williams, DNP, APRN, CEN, CCNS, CNS-BC, EMT-P
darleenw.JENAP@gmail.com