UVA Health

UVa Health Simulation News

UVAHealth Life Support Learning Center

Volume 4, Issue 2

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Welcome!

Welcome to our Simulation Newsletter!

This month, we will focus on preparation simulations. These are simulations to help new providers or providers new to an area prepare to function.

We've done these in several areas, such as the Emergency Department, STICU, and PICU for nurses, as well as boot camps for Internal Medicine and Anesthesiology physicians. We'll be adding some simulations in 3West in the next couple of months, which we're excited about! We very much want to help!

Please send us your feedback! *Our contact information is in the top left corner of the second page.*

Preparation Simulations

We've said this many times in the past: simulation is more than just practicing codes. We can use simulation to help new providers practice many types of clinical responses, including deteriorating patients.

Simulation is used as part of initial medical and nursing education. It can also be used as part of orientation or early-in-career education. Some of those simulations can be for emergencies, which the Life Support Learning Center can help run.

One of the most important things for a new provider to do is determine sick versus non-sick — do I need more help for this patient, or are they all right and I can just handle things myself? Failure to rescue is a distressing thing for both the provider or providers involved as well as UVa as a whole.

Simulations can help with this. They give a chance for a provider, especially a new one, to practice three things: assessing for deterioration, taking the steps the provider can on their own, and making the call for more friends to come help. The simulation allows the actual practice with all of these.

In addition, the debriefing afterwards gives a safe space for a discussion of what actions are appropriate when. Emergencies move very fast, and it can be hard to optimally prioritize care in the moment. The debriefing can help providers understand the prioritization process.

For new providers, especially, this discussion helps them realize these decisions can be difficult for everyone, including experienced providers. It helps give them to confidence to call for help.

COVID Makes These Even More Important

We are seeing anecdotal evidence that COVID-19 has affected education across the board in health care. The current groups of new health care providers were in training during the COVID-19 pandemic and so have been prevented from having as much patient contact experience (actual patients as well as simulated patients) as prior groups had.

The reduction in their opportunities to care for patients has in some cases made it harder to have a strong start to their career.

Simulation can help ameliorate this by giving them focused practice with specific patient groups. See the next page for examples of how simulations can be built to help new providers.

Inside this issue:

Steps of a Simulation:

- Goals
- Creation
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- Running the Simulation
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- Reset
- Assessment

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We create simulation-based experiences for current staff and students to maintain and improve their clinical judgment and teamwork skills during medical emergencies.

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Our newsletter repository:
https://www.medicalcenter.virginia.edu/mesa/simulation-newsletters

Journal Article Spotlight

Our article this month describes simple tracheostomy emergency simulations for pediatric residents. It is Khan, EK et al. (2020). "When in Doubt, Change it Out": A Case-Based Simulation for Pediatric Residents Caring for Hospitalized Tracheostomy-Dependent Children. *MedEdPORTAL*. 2020 Oct 1.

The following link should work from any UVa Computer: https://pubmed-ncbi-nlm-nih-gov.proxy1.library.virginia.edu/33015360/

From a recent ED resuscitation bay simulation. The patient had a thoracic aortic aneurysm. Not long after, the ED had an actual patient with the same condition. Practice with us before they arrive! (We blurred provider faces.)

ED: Standardized Patients

Several years ago, the Emergency Department was moving from the old ED in the main hospital to the new one in the South Tower. A group of RN Clin 1s came in right before the move, and leadership did not want them to take care of patients in the old ED. So, when they came on the floor in the new ED, they needed to catch up on how to care for patients.

The ED and LSLC set up a round of Standardized Patient simulations, in which the patient was an actual person. Their job was twofold: practice how to come into a room and start the care of a new ED patient, and decide sick versus not-sick.

There were fifteen scenarios in a four-hour block. About half of the patients were sick and the rest were not-sick. The individual simulations only went for about five minutes — enough time to start care and make the sick versus not-sick decision. In the debriefing, we discussed tips and tricks to make the start of care go smoother, what helped them make their sick versus not-sick decision, and a little bit of pathophysiology to understand what might come next.

The nurses reported that the scenarios along with the discussions afterwards were very helpful in giving them the confidence to start care on their own without needing a preceptor in the room and in deciding when they did need their preceptor (and others) for a sick patient.

ED: Pediatric Patients

The ED is unusual in that it is one of the few areas that sees both adult and child patients. Pediatrics is covered to some degree in nursing school curricula, but it is not the largest focus of those programs. As a result, the care of pediatrics is commonly a concern for new nurses in the ED.

We've done a four-hour block of simulations with the new nurses. The simulations are partly clinical, in understanding what is normal for children of various ages and what isn't to help make the sick versus non-sick determination. They're also to help new nurses understand how to talk with a child in the ED: how to explain what's going on, how to prepare a child for a painful procedure such as an IV start, and how to explain to the child and the parents what's happening — and knowing TV show characters!

Again, the debriefing was a great time for a tips and tricks discussion as well as seeing what would come next. The participants reported a greater confidence with pediatric patients after the simulations.

ED: Critical Patients

The Critical Patients simulations happened right before the participants completed their orientations. The patients in these scenarios are sick. They are the edge of what a nurse in the ED would see.

We told the participants ahead of time that the patients would be sick. Even so, some of the participants were surprised by how sick a patient could be and how much could be done in a short amount of time.

Again, the participants told us they appreciated seeing these patients in simulations before seeing them in real life.

You Can Do This, Too!

We're coming up on new employee season in the summer. What would you like your new people to see? Help set them up to succeed!