

## Welcome!

Welcome to our Simulation Newsletter!

Our theme is month is the variety of patient acuities that simulations can emulate. “Not all manikins

code” is a phrase we use a lot. Simulated patients can range from fine to crashing or anywhere in between. Sometimes the best sequence of simulations has all different acuities.

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

## What Can We Simulate?

What would you like to simulate?

People who haven’t spent a lot of time around manikins sometimes assume that a simulation with a manikin will progress to a code. In some cases, that’s true. But manikins can simulate a

much wider range, just like actual patients.

We have had manikins represent patients for Anesthesiology residents who simply need to intubate their patient. We’ve also had manikins represent STICU patients who are

intubated on multiple drips.

The available spectrum is broad. What would you like to simulate?

## Why Simulate Codes?

Codes are the obvious low-frequency, high-acuity situation to practice. Most areas, even ICUs, don’t see codes very often, but need to be good at them when they occur. So let’s prac-

tice them on a plastic person.

Practicing also helps lock in the knowledge gained from BLS and ACLS/PALS classes, especially if the practice is done *in situ*.



CPR manikin at the Surgery clinic, ready to train!

## Why Simulate Non-Codes?

One of the most important things for any health care provider to do is to recognize deterioration. Failure to rescue is bad for the patient and also bad for the provider, as it causes psychological distress and self-doubt.

Simulations allow providers to practice assessment

and interventions with a wide variety of patients, which give the providers a better understanding of sick vs. not-sick and what a patient deterioration looks like.

As a result, simulation can improve provider confidence, prevent patient codes, and reduce failure to rescue. The associated in-

creased provider skill from simulation makes it easier to find patient deterioration early and turn patients around.

Newer providers can practice with deterioration at any level, but even experienced providers can benefit from seeing patients who are subtly declining.

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## Steps of a Simulation:

- Goals
- Creation
- Preparation
- Running the Simulation
  - Briefing
  - Run
  - Debriefing
- Reset
- Assessment

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The vented patient on multiple drips in a STICU simulation in 2017.

## A Month in the Year

Here's some of the range of possibilities for simulations that we ran just in this month:

Emergency Department Peds simulation of a newly born infant arriving in the ED. The infant simply needed warming and a little bit of positive pressure breathing support, but then was fine.

Cath Lab simulations of significantly deteriorating patients that are not obvious, but both simulations were inspired by actual cases.

Radiology Nursing skills practice with children, a population that is infrequent in their area and who they felt they needed more practice with.

Cardiac Transition Unit simulation of a cardiac tamponade, as part of an ongoing series, happening about once a month.

Surgery Clinic simulations of mock codes, which again is rare in their area but they want to be ready for.

ED procedural sedation simulations to satisfy some of their provider procedural sedation release requirements.

We can simulate a wide variety of situations.

Our wish list would include working with geriatric patients on the 3rd floor, heart patients on the 4th floor, surgical patients on the 5th floor, trach'ed patients on the 6th floor, and peds patients!

## How Sick Can a Manikin Be?

One of our most successful simulations was for several new nurses in the Emergency Department. They had not yet taken care of patients. So, we provide two Standardized Patients who portrayed fifteen patients in a row. None of the patients were wildly sick; the simulations were to help new nurses understand how to meet a patient and judge sick vs. not-sick.

Simulation can be used for a wide range of situations.

## Journal Article Spotlight

This month's article speaks to different types of simulations done throughout the United States. Look especially to Table 4 that lists the different purposes. We can simulate most things in most places. What is it you want to simulate?

The article is Harper, MG et al. (2018). Simulation Use in Acute Care Hospitals in the United States. *Journal for Nurses in Professional Development*, 34(5). The following link should work from a UVa computer:

<https://oce.ovid.com/article/01709760-201809000-00002/HTML>.

## How Sick Can a Manikin Be? Part 2

We're currently working on a prop that would allow ECMO to be attached to a manikin. There's several caveats: we won't be able to use real blood, the manikin won't be able to return deoxygenated blood to the machine, and so on. However, it would allow the

ECMO team to practice rapidly setting up for a crashing patient, including cannalization.

We have created central line access points to be able to practice central line placement during a simulation. We also have

rigged central lines for deteriorating patients who already have access.

See the picture above left for a patient in the STICU who was intubated, on a vent, with a central line and PIVs, on several drips — who then got worse. The

participants came into the room with the monitor quietly chirping, the vent breathing for the patient, and the pumps running, helping to bring them into the experience.

What is it you want your participants to experience?