Welcome!

Welcome to our simulation newsletter! We will continue this month with walking through the simulation process. We’ve already given an overview (January) and talked about Goals (February).

This month, we’ll begin talking about Creation on our front page, but we’ll discuss simulation during Covid-19 on the back page.

How do you create a scenario? What do your participants need? They have to know enough to come up with the “answer” you want, but also they need to be able to go down another pathway, to “fail”. It’s OK to “fail” in a simulation.

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

Preparing for Covid-19 training, early March 2020

Creation: Backstory and Plot Line

I have my Goals — now how do I create a scenario? For this section, we’re discussing the scenario (the background and what’s planned to happen), not the simulation (actually performing the scenario).

The scenario needs to have a background, or a backstory. Who is this patient and what’s happened prior to the start of the scenario? This helps the participants ground themselves at the start.

Not everything in the background needs to be told to the participants at the start. Some of it is for us, the simulationists, so we know how the manikin will respond and what the participants might discover during the simulation.

We also need to know what we think will happen during the simulation.

That could be thought of as the plot line for the scenario. Is this a sepsis patient? How will the patient change during the scenario? Have we included enough information for the participants to follow our plot line?

The team may reasonably consider other possibilities, but there should be enough clues for them to reasonably decide to follow our plot line.

Creation: Information for the Plot Line

Since this is a simulation, it’s not your job to ensure that your participants follow your plot line. You do need to give them enough information (at the start or during the scenario) that they could decide to take the path you want, if they so choose. If you want them to decide the patient has sepsis, you need to give them a patient who has the signs and symptoms of sepsis.

You don’t have to make it obvious, but don’t lay traps. A sepsis patient without an abnormal fever is mean (unless you’re in a place where they might actually see that, such as 8West). You don’t have to tell them the temperature at the start, but if they look for it, they should be able to find it.

You should also have other information that helps them stay away from other paths.
Covid-19: Intern Readiness Course

One of the biggest projects that we help with is the Intern Readiness Course in the School of Medicine. More than 140 fourth-year medical students participate in simulations as the physician as part of a two-week SoM course. This year, it was scheduled from March 16-27. Then Covid-19 came along.

We were able to do some simulations anyways, as remote simulations (see picture below). The students were able to teleconference in and be on the “hot seat” as the physician: interviewing the patient, asking for what they needed (new vital signs, for instance), and communicating with nurses and other staff members.

It was obviously not perfect, as they couldn't do their own assessment, but they were still able to practice in the role of physician and team lead. However, that role, since it is less hands-on, made it easier to run simulations this way.

The participants' informal feedback was that it was useful!


As of this writing, we have not performed any of these yet, but there is the possibility that we may run simulations for procedures that need to be modified for Covid-19. Some possible examples would be emergent intubations and cardiac arrest.

If these occur, we will bring you news of them in future issues!

Journal Article Spotlight

This month's journal article is an example of how to create a scenario, in this case by modifying actual cases. Be aware that using actual cases does increase risk of protected patient information coming out. You may want to use scenarios simply based on actual cases.

Our article is Lobos, A. T. et al. (2019). Simulation-Based Event Analysis Improves Error Discovery and Generates Improved Strategies for Error Prevention. Simulation in Healthcare, 14(4), 209-216. From a UVa Health computer, the following link should get you the entire article: https://insights.ovid.com/crossref?an=01266021-201908000-00001.

Meet our first high-fidelity manikin!

HAL is a Gaumard manikin. He joined us in December 2014 and has been working hard ever since!

HAL is flexible in what he can do. HAL is controlled wirelessly and is battery-powered, so he can simply show up in a room ready to go.

He can represent many levels of acuity, from “fine” to “I need to be trached”. Similar to his coworker 3G, he has pulses, chest rise and fall, breath sounds, heart sounds, and bowel sounds. His specialty that 3G can’t do is that he can be trached (and has been used for trach emergency simulations).

Since he is older, he has lost some capabilities, such as pupillary reaction. Also, he does not work as well with the new Zoll defibrillators. As with most manikins, neurological conditions can also be hard for him to show.

However, HAL is very interested in coming to your area and working with your providers!