

Welcome!

Welcome to our simulation newsletter!

We are going to pause our discussions about the steps of a simulation this month to take this entire issue to talk about simulation during a pandemic.

Simulation in our current situation brings up new concerns. We will have a

discussion about the risk versus the benefits of simulation during COVID-19, and changes to simulations to keep participants safe. On our second page, we'll go into more detail about whether we should simulate during a pandemic.

Next month, we hope to return to discussing the

steps of a simulation, re-summing with the Preparation step.

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

Inside this issue:

Welcome! 1

Risk vs. Benefits of Simulation 1

Sim Modifications for COVID-19 1

Sims in a Pandemic: Stop or Continue? 2

Journal Article Spotlight 2

Meet Our Staff! 2

Steps of a Simulation:

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

Risk vs. Benefits of Simulation

There are a lot of factors to consider in a risk versus benefit consideration for simulation during a pandemic. Let's walk through each, starting with risks.

A simulation, since it is education and not patient care, is not essential. We can run a hospital without simulations. It does, however, bring participants in closer proximity than they might be otherwise. This is the one additional risk of simulation during a pandem-

ic — that participating in the simulation may allow disease transmission.

The benefits of simulation are still present, even in a pandemic. Given that in-person classes are much harder to run now, simulation may be able to partly fill the gap. Simulation helps participants keep their assessment and critical thinking skills sharp through experience with low-frequency high-acuity patients in a safe environment.

In addition, simulation can be used to allow participants to practice caring for a patient with COVID-19 (with all their new processes and procedures) before caring for an actual patient.

The question, then, is: do the risks outweigh the benefits? In our next article, we will discuss modifications that we believe will help reduce the risks.

Simulation Modifications for COVID-19

We are making changes to simulations in three major categories: space, people, and PPE.

When we look for a space to do simulation, we are looking for enough space for social distancing. As a result, rooms we have used before may no longer be large enough.

We will need to minimize the number of people in the simulation space. We may not longer be able to have extra people around the edge of the room to watch. We may need to reduce the number of participants.

Finally, all participants must have masks and gloves on at all times.

We are using these changes to keep social distancing as much as we can during our simulations and reduce the risk of disease transmission.

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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/medical-emergency-simulation-area/simulation-newsletters>



Going home after a four-manikin simulation in Interventional Radiology, July 2020

Meet Our Staff!

Meet SimJunior (nicknamed Junior), our high-fidelity child manikin!

Junior is a Laerdal manikin. He joined us on September 2, 2014. It's almost Junior's 6th birthday! This is appropriate, since Junior can represent a six- to ten-year old child.

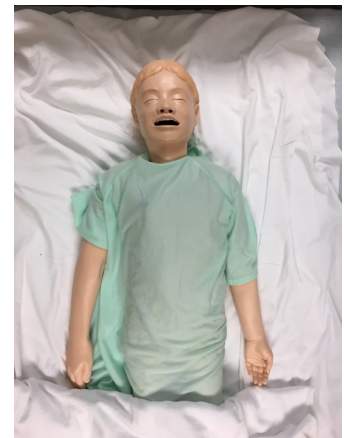
SimJunior comes from an older manikin generation

than either of our adult manikins. As they do, he has pulses, chest rise and fall, and breath sounds. As an older manikin, he has posts for his own clip-on defibrillation pads (so we need to work around this to use Zoll pads). In addition, he does not have pupillary response.

As with all of our manikins, neurological conditions can

be difficult to demonstrate.

However, for the great majority of pediatric simulations, Junior is an effective manikin. He's worked in PICU for their Procedural Sedation scenarios and on 7Acute and in the Emergency Department as well. He would like to work with you!



Sims in a Pandemic: Stop or Continue?

The Life Support Learning Center's opinion is that we should continue to run simulations during the COVID-19 pandemic.

The gains from simulation are significant and still present. Simulations are ideal for practicing high-acuity, low-frequency situations in a safe manner, without risk to an actual patient. We, as a health system, are always striving to improve clinical skills and critical thinking ability in our providers. This improves our patient care and also helps with staff retention, as a confident, supported staff member is more likely to stay with us. Simulation is one part of that improvement process.

There have always been some risks to simulation, especially when it is done *in situ*. We cannot allow simulated medications to slip into the real world, for instance. The pandemic adds another level of risk, by bringing participants close to each other when they don't absolutely need to be for patient care.

However, we believe that the self-monitoring that all health system staff are doing, combined with the additional precautions we've instituted for simulations discussed on the previous page, reduce that risk to a manageable level. As a result, we believe that simulations are still useful and valuable here at UVA.

Journal Article Spotlight

This month's journal article is Wenlock, R.D., et al. (2020). Low-fidelity simulation of medical emergency and cardiac arrest responses in a suspected COVID-19 patient — an interim report. *Clinical Medicine*, 20(4), e66-e71. This link should allow you to download the article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7385770/>.

This is one of many articles discussing how simulation can help in the middle of a pandemic. The articles discuss a variety of possible simulations, from clinically-focused such as this, to system simulations, to testing "what-if" possibilities.

Please see our newsletter repository address above!