

Pre-course



A lot happens before the day of a sim. This is what most people think simulation is (left).

This is what simulation actually is (below).



It's more than just the practice and debriefing. Simulation-based education requires prep work and follow-up, as well as work to set the stage for a successful learning experience. The facilitator is involved in all aspects of the training, from before the scenario runs, to after it's done. The purple arrow indicates that the facilitator role is dynamic & fluid: we often have to shift and adapt to the learner's needs as they arise throughout the simulation event. These parts of simulation are further explored and practised during the in-person simulation facilitator workshop.

Let's review Pre-Course work. This is all that should happen prior to the learners even stepping foot in the simulation space. This might look like:

Deciding or designing on a scenario - when deciding on what type of scenario you'd like your learners to engage in, think about what it is that you're hoping learners will practice and take away from the sim session. These are your learning objectives, and often they are a mix of clinical skills and teamwork skills. We will practice developing learning objectives during the in-person workshop.

What level of fidelity is required in the scenario?

Fidelity: The degree of exactness with which something is copied or reproduced. – Healthcare Simulation Dictionary

Remember that the technology aspect of simulation is a tool – choose the right tool for your learning objectives, not the other way around. Remind yourself: "High-tech" and "low-tech" are not the same as high and low fidelity.



A simulation manikin might be high-tech (see picture), but if you try to practice interviewing skills with it, it will result in poor fidelity. The manikin doesn't have facial expressions or body language – two things which are really important when the learning objective is establishing rapport. Some questions to ask yourself are:

Is a realistic environment important? Do learners need to know where to find equipment in a hurry? Do they need to practice manipulating certain pieces of equipment? Practicing in the same place where events occur is known as "in-situ" simulation.

Is the "feel" of something important? Sometimes the lowest tech is the best replacement for realistic haptic feedback. An orange can simulate skin and muscle for IM injections, a watermelon can replicate the feel of a lumbar puncture.

Could a family member be the best person to offer important information about the patient? The use of actors in simulation, known as standardized or simulated patients, can help achieve these levels of fidelity. Sometimes a combination of an actor with a partial task trainer such as a wearable birthing simulator – can be used to achieve both affective and clinical requirements. For more about fidelity, see the resources section on this page (https://simulation.vchlearn.ca/video/pre-course)

These things together,

- learning objectives
- level of fidelity
- whether simulation is the best fit for the learning objectives

are together known as Functional Task Alignment.

Before the day of a sim, a letter of introduction to sim may be sent out or made available to participants. Sharing learning objectives and resources prior to participants arriving for the sim is a "flipped classroom".

This might include clinical information that is relevant to the case. It provides the learners with an opportunity to review information which will be relevant in the case. We want learners to be as successful as possible – we're not here to test or evaluate them. Simulation can be a great motivator for learning, and we want to capitalize on that

If you are facilitating sim in an academic institution, sim-based assessments and evaluations may be used. There is a whole body of knowledge on that topic that we do not explore here.

Before the sim happens, gathering and planning for necessary resources during the actual simulation is also required. This might look like:

- Securing space for the sim event to take place
- Identifying and gathering supplies that will be needed for the simulation
- Contacting simulation participants and facilitators

Find out about Prebriefing, Familiarisation, Case Briefing and more, in the "Stages of Simulation: Pre-scenario" video.