Frequently Asked Questions
Simulation

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1. What is simulation in EMS education?

Simulation is a technique that creates a situation or environment that allows individuals to experience a representation of a real event for the purpose of practice, learning, evaluation, testing, or gaining understanding of systems or human actions.

2. What is meant by fidelity in simulation?

Fidelity is the degree to which the simulation replicates the real event or workplace; this includes physical, psychological, and environmental elements.

High fidelity does not require elaborate or expensive technology; it refers to the simulated reality created.

3. Does CoAEMSP allow for simulation of skills and patient encounters?

Yes. Programs are responsible for evaluating student progression from novice to competency and to use discretion in the development of the curriculum, the sequencing of content, and the use of simulation to augment live patient encounters.

The CoAEMSP *Student Competency Recommendations* identify where simulation is permitted.

4. Is there an approved ratio of live encounters to simulation?

There is no recommendation for the number of simulations that can replace a live patient encounter. The program determines if a ratio is appropriate (ex., 1:1, 2:1).

5. Is there a specific percentage of required skills and encounters that may be simulated? Is there evidence that helps inform effective use of simulation?

No, there is no established percentage of simulation. Research from other healthcare fields suggests that 25-50% of required clinical encounters is an effective instructional methodology.

6. Is simulation a technique that is only used at the end of the program?

Simulation should be used throughout the program. As the student moves from formative experiences to competency, the complexity of the simulations should increase.

7. We are in a rural area; can our students use simulation for the team lead requirement?

No, simulation cannot be substituted for live patient encounters in the capstone field internship phase.

8. Which is better, clinical experiences or simulations?

Both clinical experiences and simulations provide valuable learning experiences and should augment each other. Simulations can create experiences that are infrequently encountered and prepare the student for other high acuity situations in a safe and controlled environment. Simulation cannot replace all skill experiences and patient encounters, however.

9. We operate on a small budget and cannot afford expensive simulation equipment. Can we still do effective simulations?

Yes. Low fidelity, low tech equipment, and technology, combined with creative use of the environment, including various locations, developing simulated settings such as bathrooms, living quarters, and the use of live 'patients' (other students or programed patients) and props all assist in creating a realistic scenario.

10. Where can I get information on simulation?

The CoAEMSP and NREMT *Simulation Guidelines and Recommendations* are found at https://coaemsp.org/resource-library/#3 and provide a rationale for simulation and includes the purpose of simulation in EMS education, benefits of simulation, cautions when using simulation, enhancing skill acquisition and progression; scheduling and sequencing, option to live patient encounters, ratios, simulation plan, assessment tools and rubrics, and documentation.

The document also includes a robust reference list.

For additional information, visit the Society for Simulation in Healthcare at https://www.ssih.org/.

11. What is the difference between a scenario and a simulation?

A scenario is the script or story created for instructing the participants, including the simulators, on how to interact with the students.

The scenario forms the basis for the simulation, which is an educational technique that replaces or amplifies real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner.

The simulation design should incorporate specific objectives against which the learner's performance can be assessed.

12. What is the most important aspect of the simulation process?

While all aspects of a well-constructed simulation are important, significant learning should occur during the debriefing session making it an essential component of the simulation.