

**Session Title:**

**Simulation-based Learning:  
Keys to Success**

**Session Number:**

**C6001**

**Faculty:**

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**Disclosure:** In the past 12 months the speaker listed below has had the following financial relationships with manufacturers of commercial products and/or providers of commercial services:

**Louis Halamek:** Consultant, Laerdal Medical and Advanced Medical Simulation; Grant Recipient, Laerdal Foundation

# ***What is simulation-based learning?***

# Simulation-based Learning

- λ a methodology for learning in which trainees
  - λ are immersed in an environment filled with realistic visual, auditory and tactile cues
  - λ must integrate cognitive, technical and behavioral skills under often intense time pressure
  - λ are provided the opportunity to reflect on their performance

# Simulation-based Learning

- λ **train to *weaknesses* rather than strengths**
  - λ **failure in the simulator is OK**
  - λ **identify and address weaknesses**
  - λ **minimize risk of**
    - λ **repeated mistakes**
    - λ **false sense of confidence**

***What are the keys to  
success?***

# Keys to Success

- λ identify the learners
- λ establish learning objectives
- λ identify the skills to be taught
  - λ cognitive, technical, behavioral
- λ WHO needs to learn WHAT?

# Keys to Success

- λ **develop effective scenarios**
  - λ **base on important learning objectives, NOT a specific simulator technology**
  - λ **provide key cues: visual, auditory, tactile**

# Keys to Success

- λ **conduct effective scenarios**
  - λ **react, occasionally guide, even rescue but do not prescribe**
  - λ **allow trainee to journey down their own path as long as learning objectives are achieved**
  - λ **record with videotape**
- λ **follow with facilitated debriefings**

# Keys to Success

- λ **be smart about technology**
  - λ **higher fidelity comes with a price**
    - λ **more hardware**
    - λ **more software**
    - λ **someone to run (and troubleshoot) it all**
  - λ **sometimes, simpler is better...**

# Pointers for Trainees

- λ **suspend disbelief**
- λ **think out loud**
- λ **do it!**
- λ **debrief constructively**
- λ **maintain confidentiality**

# Pointers for Instructors

- λ **keep it**
  - λ **centered (on the trainee)**
  - λ **focused (on learning objectives)**
  - λ **moving**
  - λ **positive**
  - λ **objective**

**It's the methodology,  
not the technology,  
that is at the heart of  
simulation-based learning.**