Scenario Design and Construction Workshop

Paul E. Phrampus, MD, MBA, CPE, FSSH, FACEP
Director, Winter Institute of Simulation, Education, and Research (WISER)
University of Pittsburgh
Medical Director, Patient Safety, UPMC Health System
Past President, Society for Simulation in Healthcare

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About WISER

- **Academic Healthcare Simulation Center Founded in 1994**
- **Affiliated with University and a Large Hospital System**
- **Accredited by the Society for Simulation in Healthcare**

University of Pittsburgh

WISER
Education and Simulation
Improving Healthcare

UPMC LIFE CHANGING MEDICINE

Overview of WISER

University of Pittsburgh

UPMC LIFE CHANGING MEDICINE

Schools
- Medicine
- Nursing
- Pharmacy

Students

Research

Hospital Support

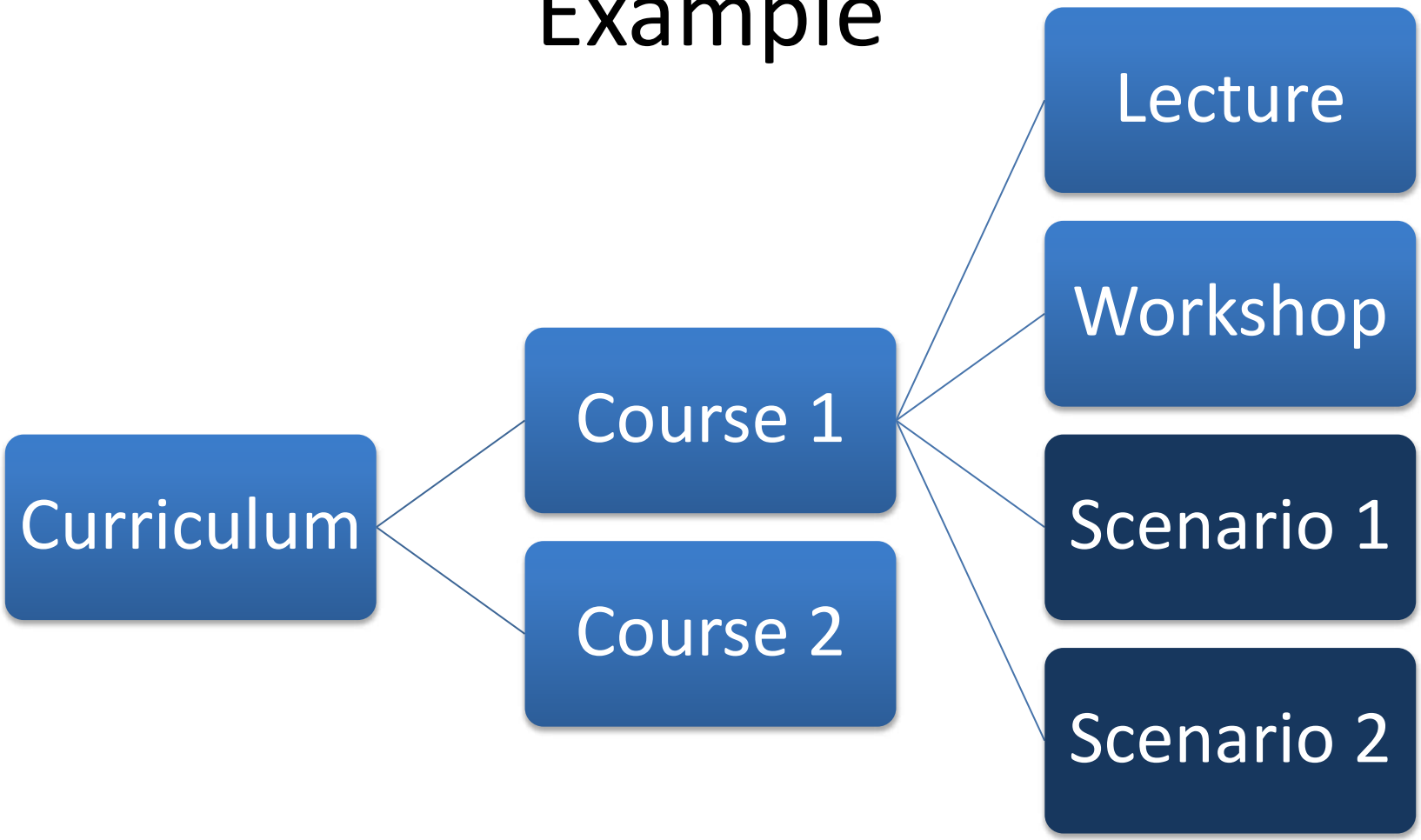
Patient Safety

Physicians, Providers, and Staff

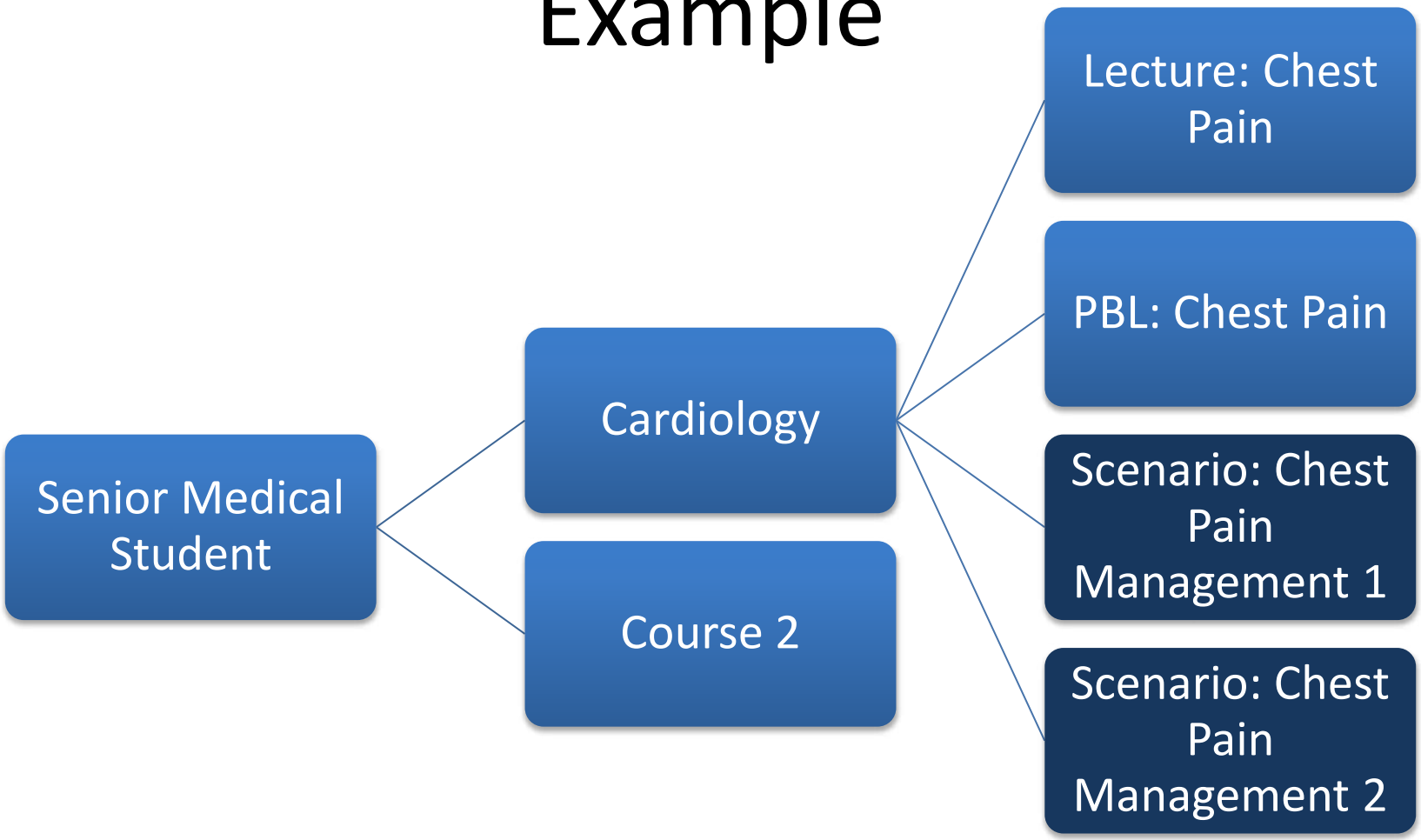
Resident Education

What is a Scenario?

Example


Curriculum
Course 1
Course 2
Lecture
Workshop
Scenario 1
Scenario 2

Example


Senior Medical Student
Cardiology
Course 2
Lecture: Chest Pain
PBL: Chest Pain
Scenario: Chest Pain Management 1
Scenario: Chest Pain Management 2

What is a Scenario?

Process

Who?

Who are Learners?
Level of Learner?

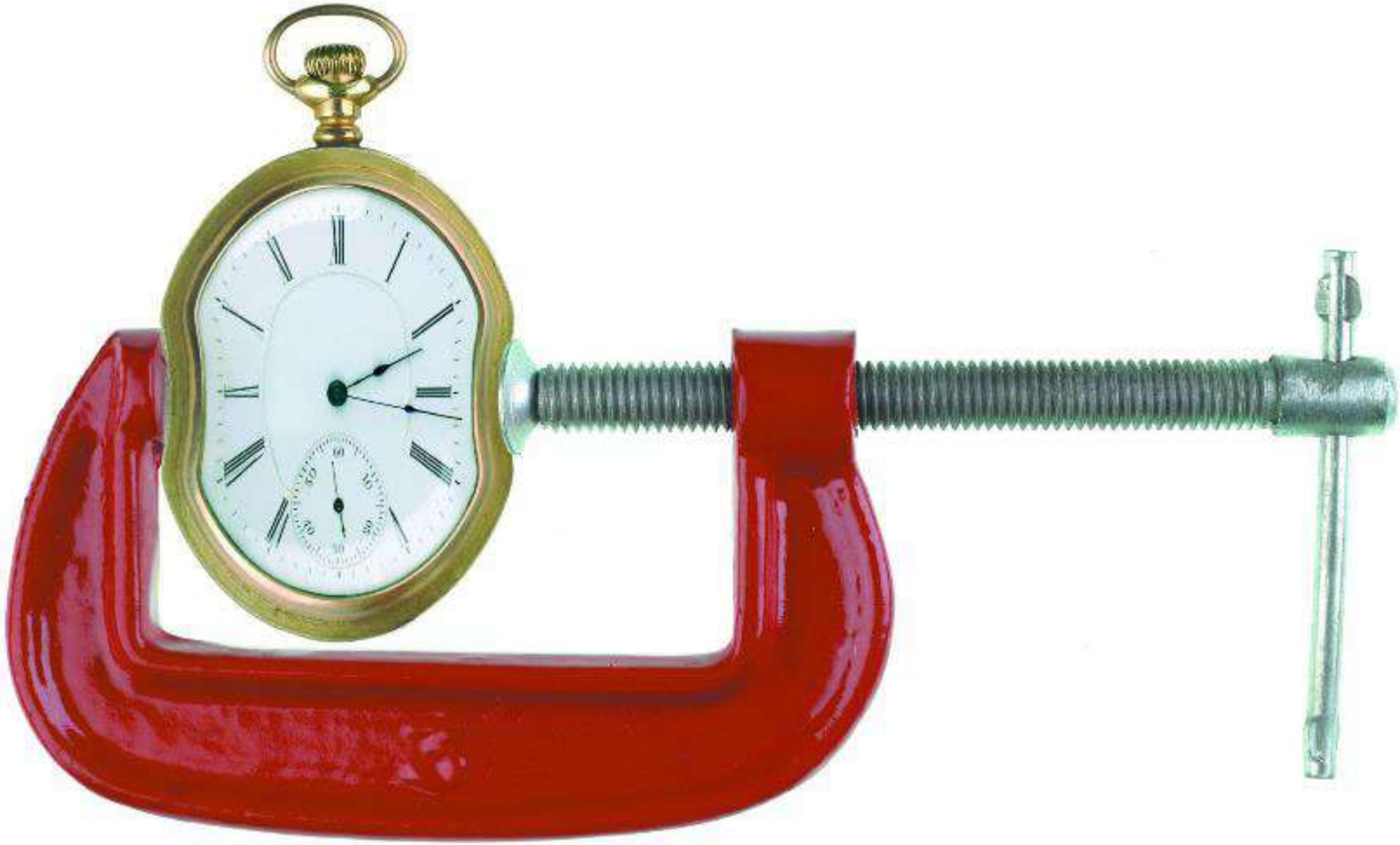
WHAT?

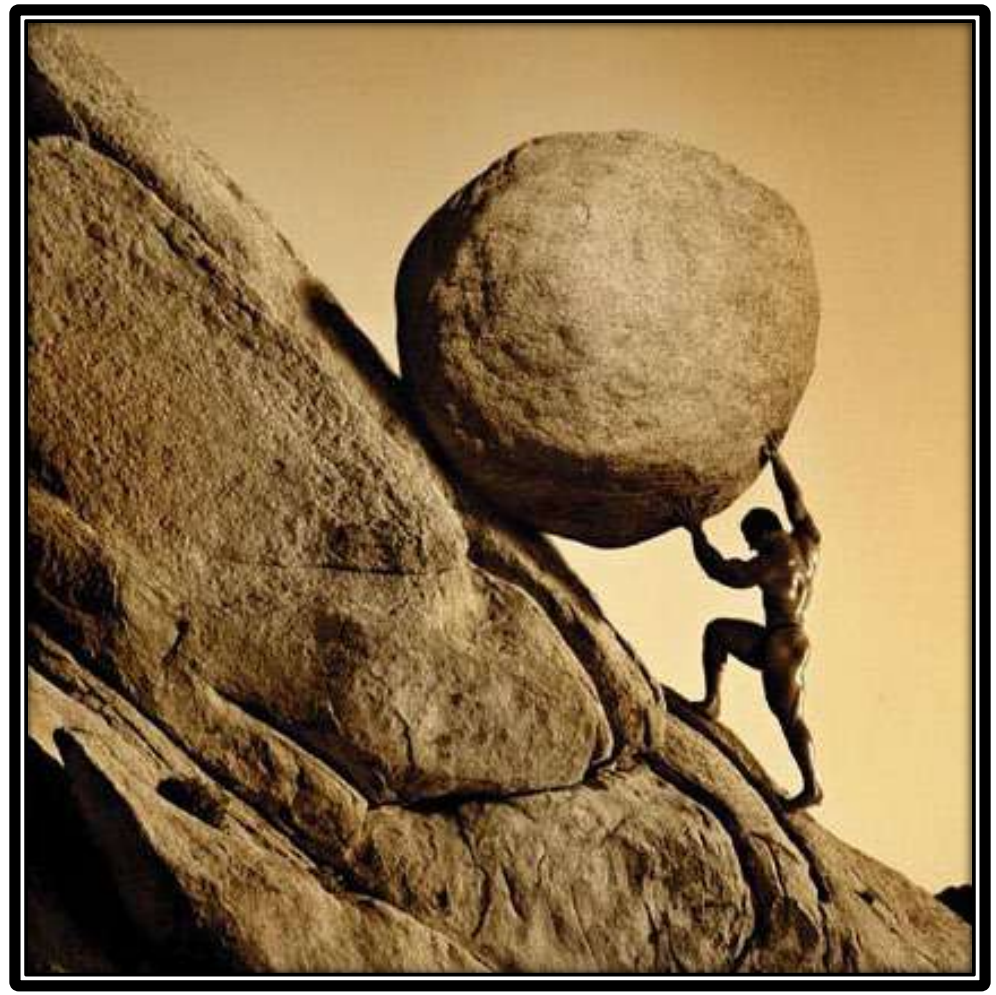
- What is being taught
- Objectives

HOW?

- Teaching Methods
- Assessment
- Equipment

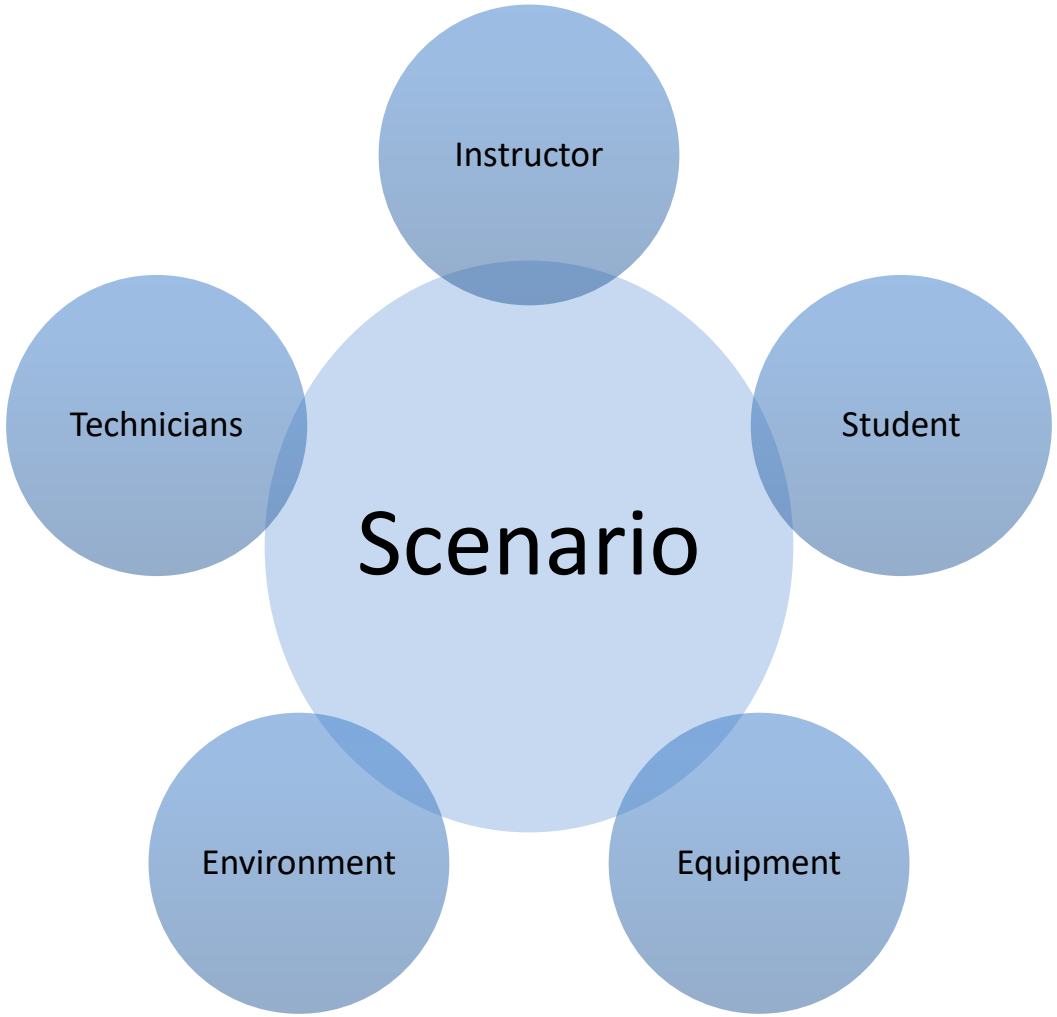
Why Create Scenario Materials?

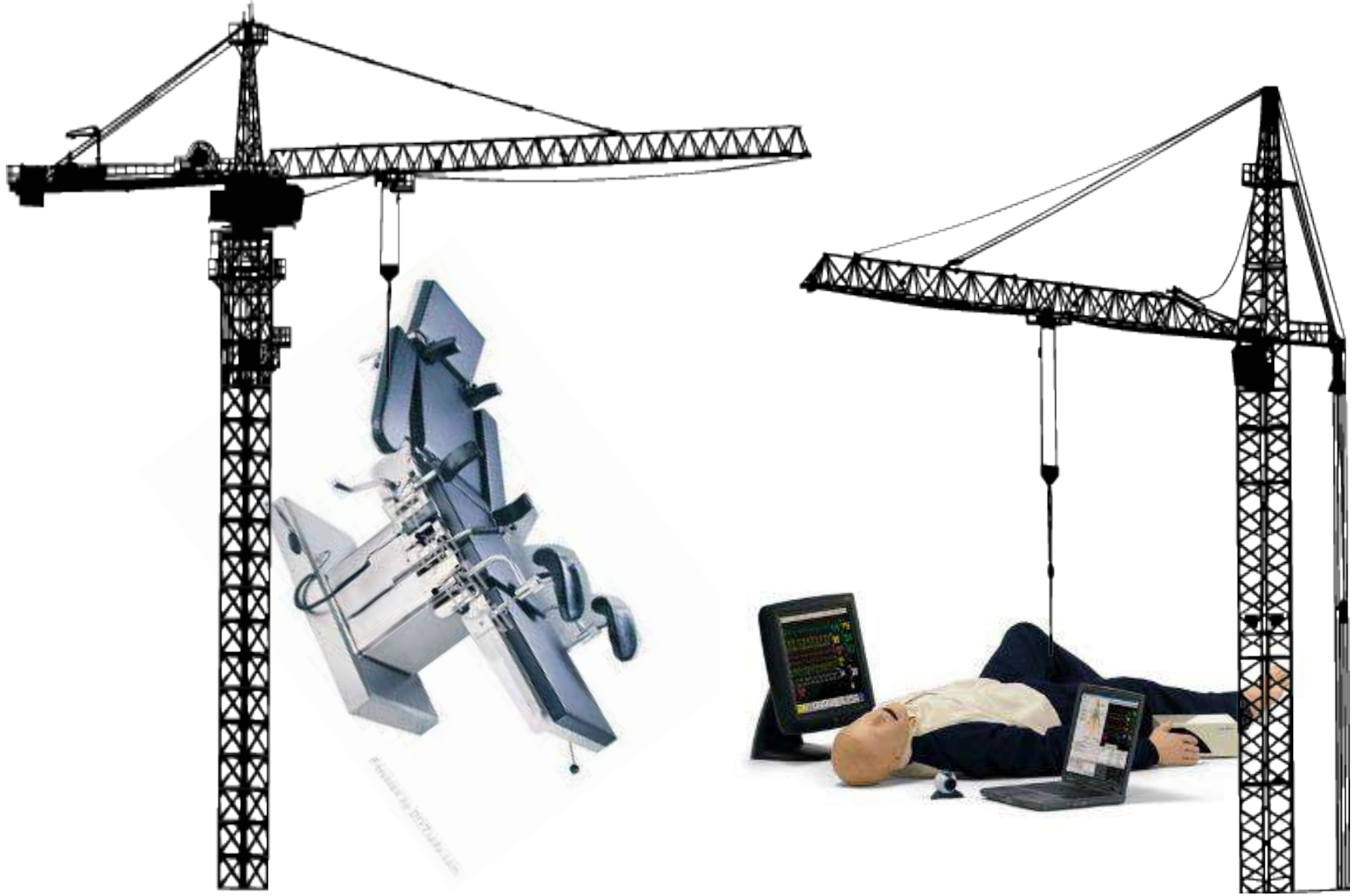




Scenario Construction

Critical Groups in Scenario Development





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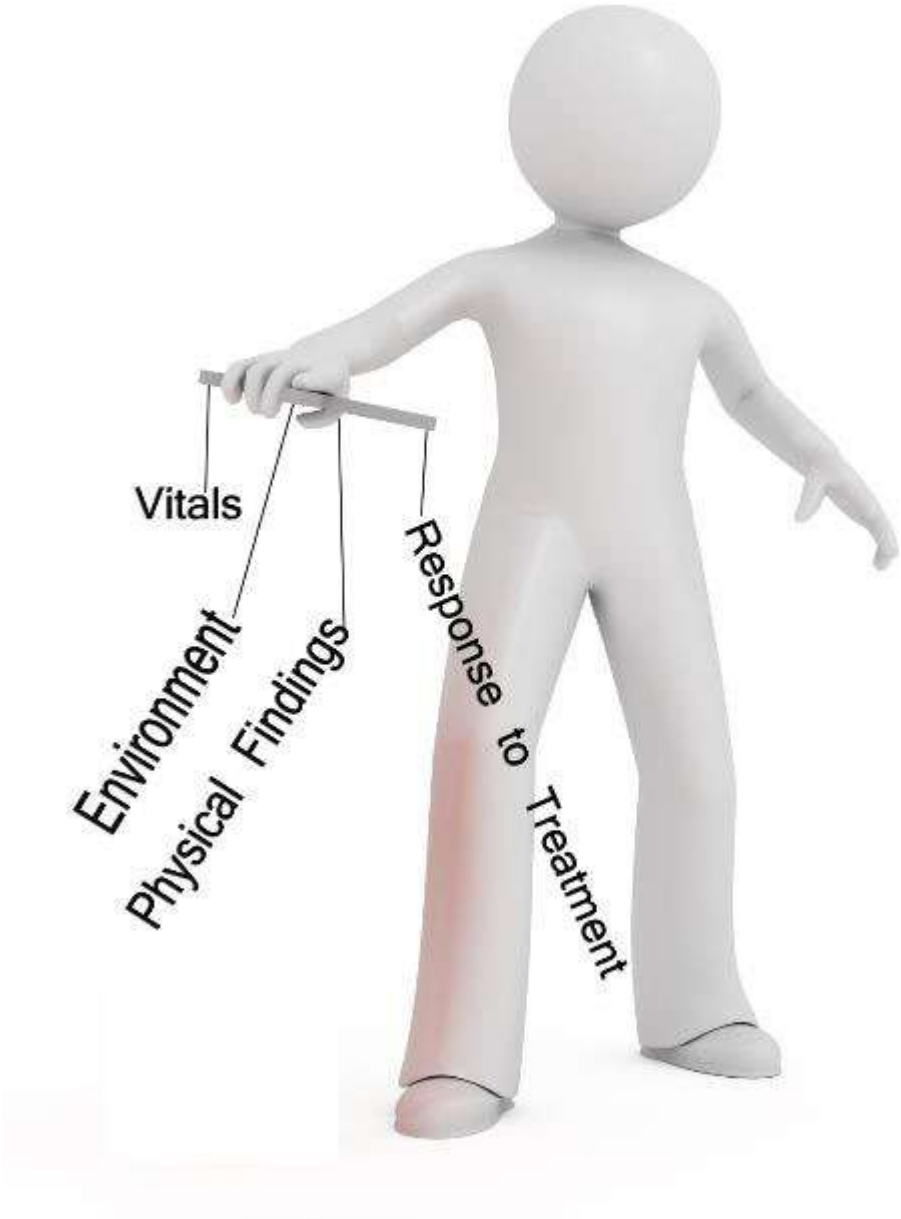
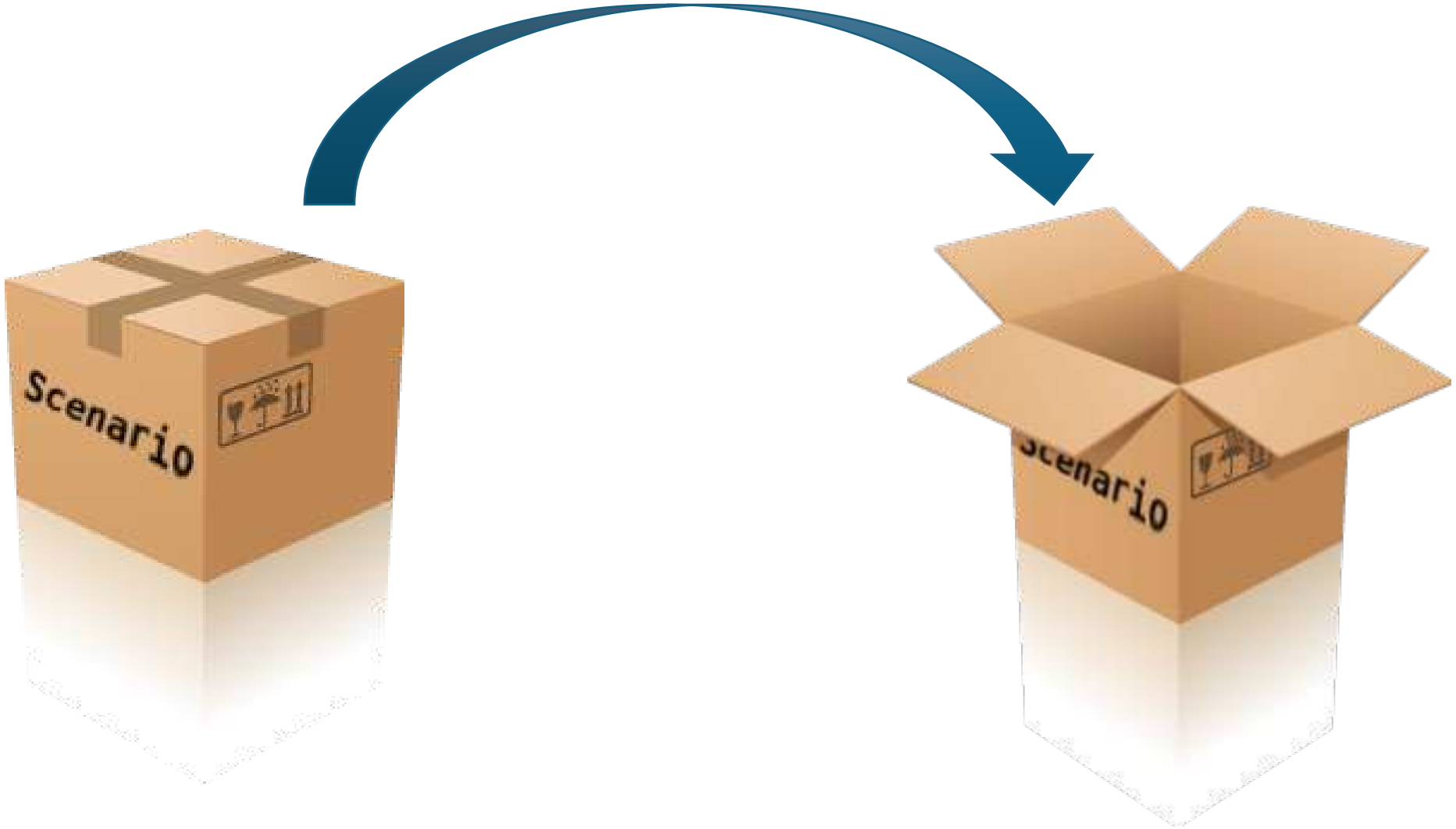

Vitals
Environment
Physical Findings
Response to Treatment

What do you want from the Box?



Who are the Learners?

- All of the Same?
- Mixed Group
- Level
  - Junior
  - Senior

Goals and objectives

- Identify
  - Teaching Goals
  - Assessment Goals
    - Faculty Clarity

Orientation for the Student

- Set Expectations
  - What is simulated vs. what is not
  - Orientation to
    - Environment
    - Equipment

Assessment

- FOCUS Instructor Attention
- Accuracy Capabilities
  - Video vs. non-video review
- Time Realities

Debriefing Intructions

- Linked to Learning Objectives
- Avoid overwhelming the participants
- Don't over-review the obvious
- Suggest a Debriefing Method

Instructor Preparations

- Instructor training is crucial
- Instructor Instructions
  - Understand Objectives
  - Understand Technical Features

Supplemental Debriefing Materials

- Attemp to Standardize Discussions
- Graphs, Pictures, Videos
- Slides of Main Points

Technician Instruction

- Room Set up
- Equipment Lists
- Expectations
- Room Re-set

Pre-Program the Scenario

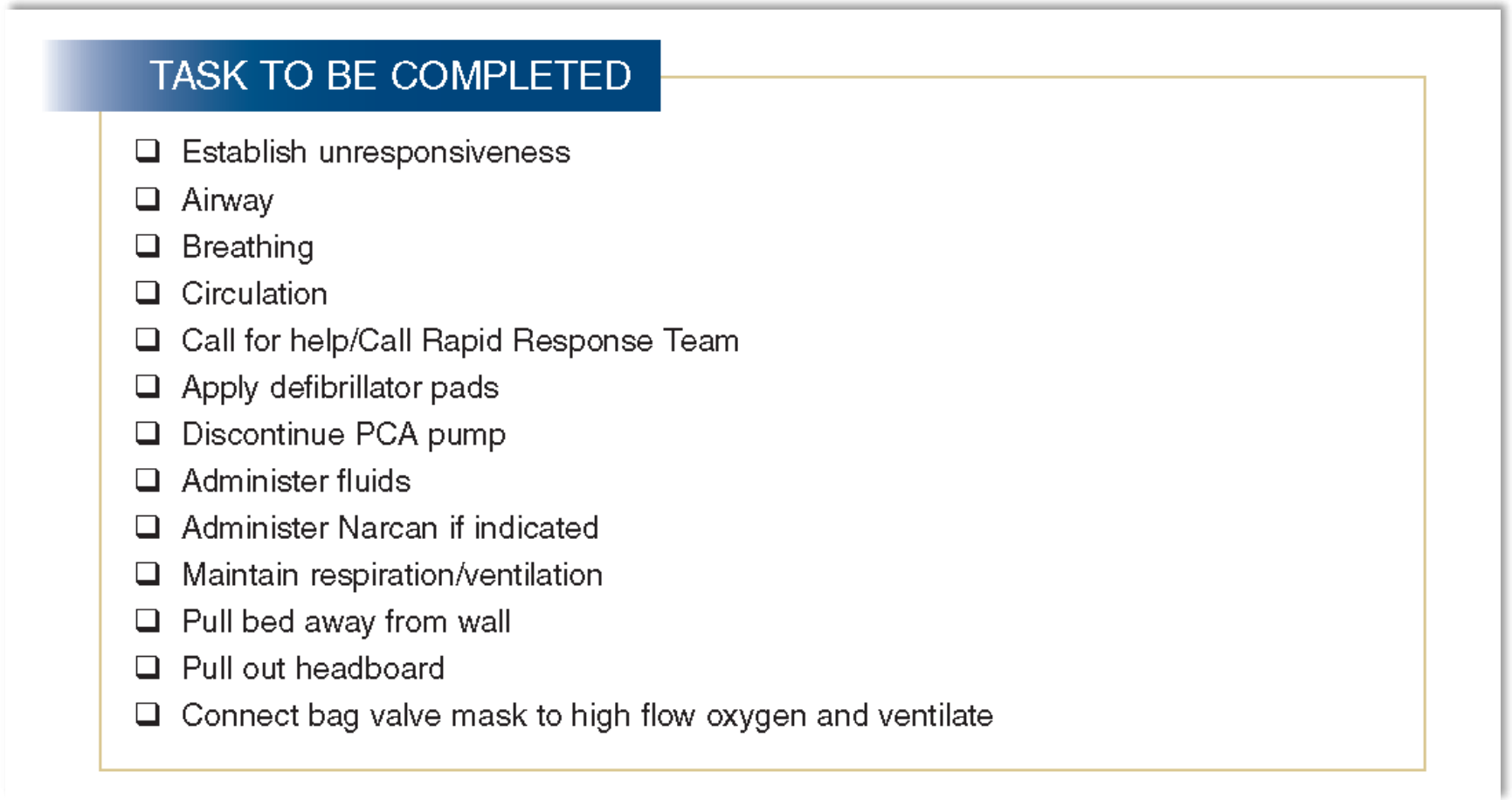
- Provides Standardization
- Helps with Debriefing
- Helps With Data Collection

Plan to Recycle Scenarios

- Decrease center development time
- Increase quality
- Easier to collect comparison data

Examples

Course Components: Instructor



Course Components: Instructor

CRITICAL DEBRIEFING POINTS

1. Review the positive actions displayed by participants regarding the Top 20 List in addition to the following:
   - Recognize PCA overdose
   - Discontinue narcotic
   - Maintain airway, breathing, circulation
   - Administer fluid as initial treatment
2. Note opportunities for improvement for the remainder of scenarios.
3. Note time markers within the scenario (Example: It was three minutes before the team defibrillated the patient).
4. Allocate five minutes within the first debriefing to discuss similar experiences that the instructor may have encountered.
5. Acknowledge participant experiences as well. This will serve as reinforcement of the materials and give participants an opportunity to raise questions or discuss concerns.
6. Assess proper assembly of flowmeter.

Course Components: Simulation Operator

EQUIPMENT LIST

Equipment	Quantity	Checked
Facemask	1	❑
Nasal cannula	1	❑
Oral airways	1	❑
Bag valve mask	1	❑
Crash cart with supplies	1	❑
Defibrillator	1	❑
Defibrillator pads	1	❑
AED (if not on crash cart)	1	❑
Backboard for CPR	1	❑
Blood pressure cuff	1	❑
IV fluid bag/tubing/catheters	1	❑
CPR code flow sheet	1	❑
Stretcher or bed	1	❑
Phone	1	❑
Pulse oximeter	1	❑
Oxygen flowmeter	1	❑
Suction canister	1	❑
Narcan	1	❑
PCA pump Sodium Chloride	1	❑

Course Components: Simulation Operator

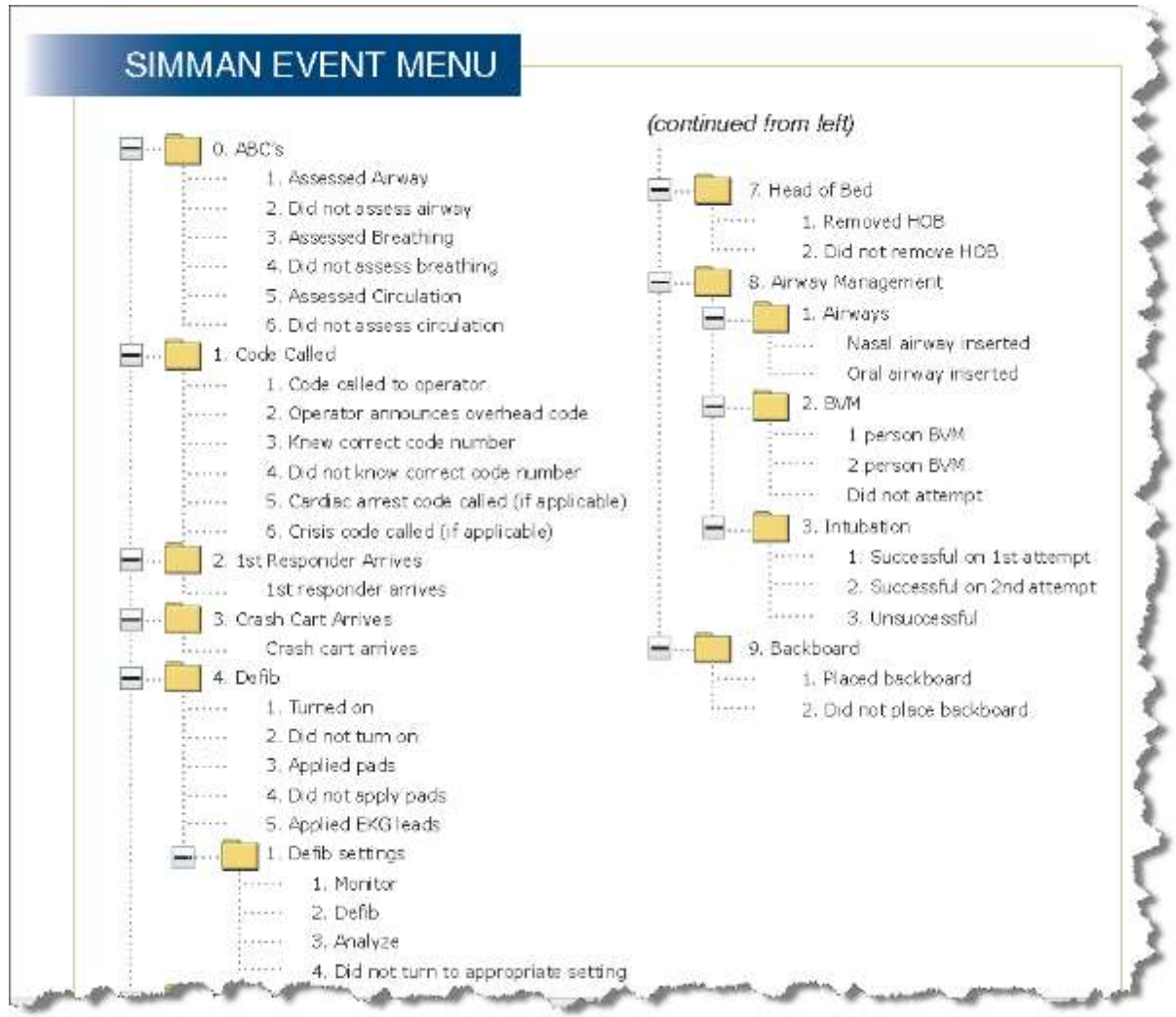
ROOM SETUP

- The ideal physical environment for this scenario should be similar to the patient care area that the participants are most familiar. Examples include:
  - Patient room for acute care provider
  - MRI suite for radiology personnel
  - Exam room for outpatient provider
- If unable to use clinical area, a classroom setting is an option.
- If a classroom is used, attempts should be made to simulate patient care environments with the images provided in each box (Example: oxygen and suction).

For this scenario:

- ❑ Prepare manikin to resemble patient corresponding with Scenario 6.
  - ❑ Oxygen flowmeter is in the room or use the photo substitute.
  - ❑ IV access
  - ❑ Monitored
  - ❑ Hospital gown
  - ❑ Blood pressure cuff
  - ❑ Pulse oximeter
  - ❑ Pillow
  - ❑ Other: _____
- ❑ Place crash cart outside the room.
- ❑ Elevate head of bed.
- ❑ PCA pump should be placed on the IV pole, adjacent to the patient's bed.

Course Components: Simulation Operator



Course Components: Simulation Operator

ROOM TRANSITION

After the debrief, return the room to its original state.

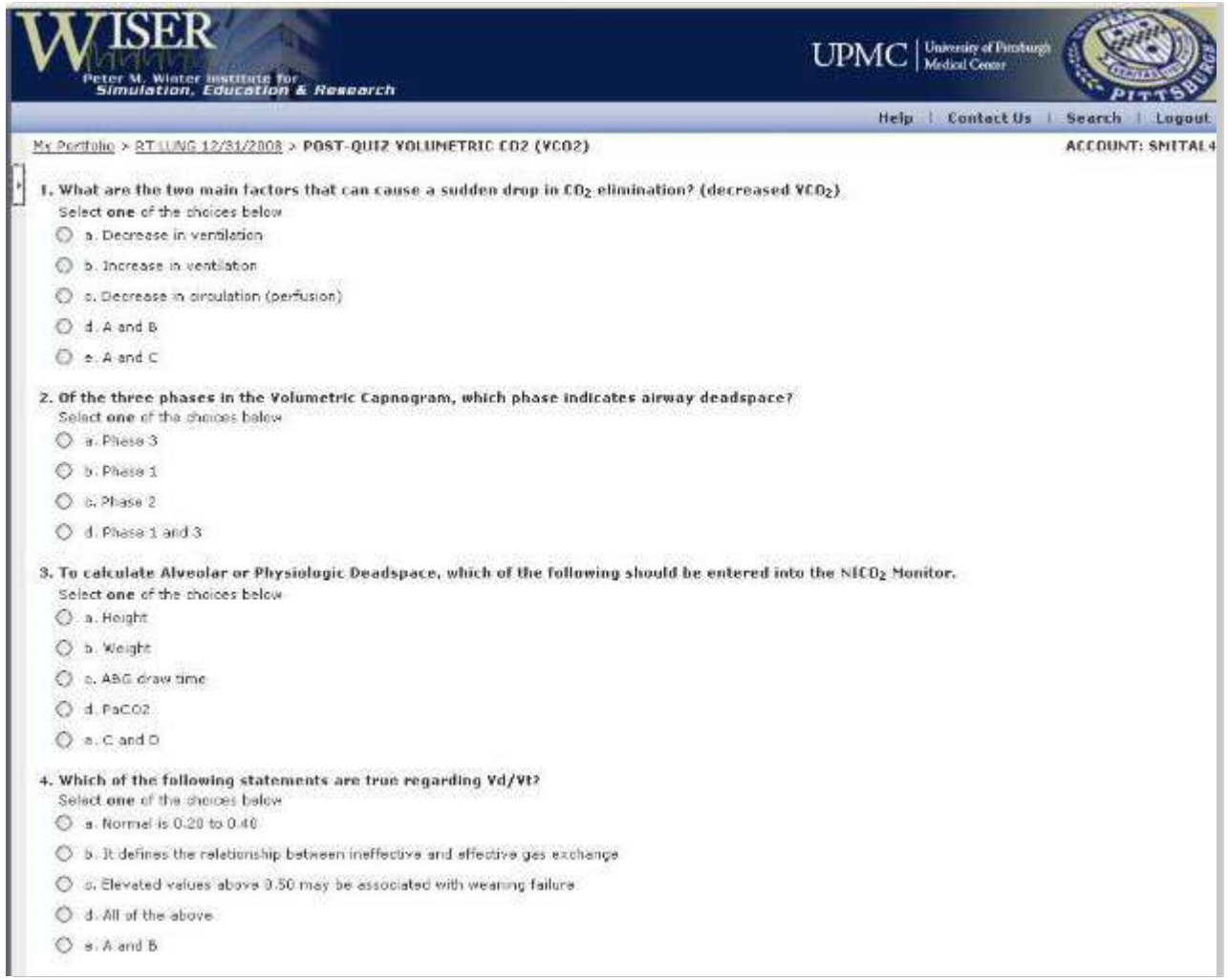
- ❑ Return the equipment to its pre-scenario configuration including bed placement, backboard, BVM, etc.
- ❑ Restock any disposables used in scenario.
- ❑ If IV is used, make sure that it is turned off, otherwise the bag will drain.
- ❑ Check IV fluids to ensure adequate level for next scenario.
- ❑ Turn the defibrillator off.
  - ❑ If defibrillator pads were used on the manikin, clean the surface area where the pads were attached to remove adhesive residue.
  - ❑ If pads are intact, return the pads to the adhesive backing for reuse in the next scenario.
- ❑ Return crash cart to outside of room.

Course Components

- Scenario and Debriefing Guide

Course Components: Participant

- Quiz



Course Components: Participant

- Survey

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Tying It All Together

- Developing Scenarios is a BIG Job
- Will Save Time
- Help With Consistency

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THANK YOU and Questions

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Thank You!

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phrampuspe@upmc.edu

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Paul Phrampus

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