

# Simulation Scenario Design

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# Objectives

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1

Recognize when simulation is appropriate

2

Explain the importance of objectives

3

Describe the cyclical nature of scenario writing

4

Understand the purpose of templates

# Simulation should be:



LEARNER CENTERED



VALUABLE



SAFE

How do I get  
started?



# Focus on Objectives

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Most important part

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Necessary to effectively teach your goals

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Drives assessment

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Avoids extraneous elements

# 3 Important Domains



COGNITIVE (KNOWLEDGE AND SKILLS)



PSYCHOMOTOR  
(PHYSICAL/TECHNICAL SKILLS)



AFFECTIVE (FEELINGS AND ATTITUDES)

# Objectives

TAKE HOME  
MESSAGES

LEARNER  
CENTERED

KEEP IT  
SIMPLE

MEASURABLE  
OR  
OBSERVABLE

# How to write objectives



IDENTIFY DESIRED  
OUTCOMES



BROAD VS. SPECIFIC  
OBJECTIVES

# S.M.A.R.T. Objectives

Specific

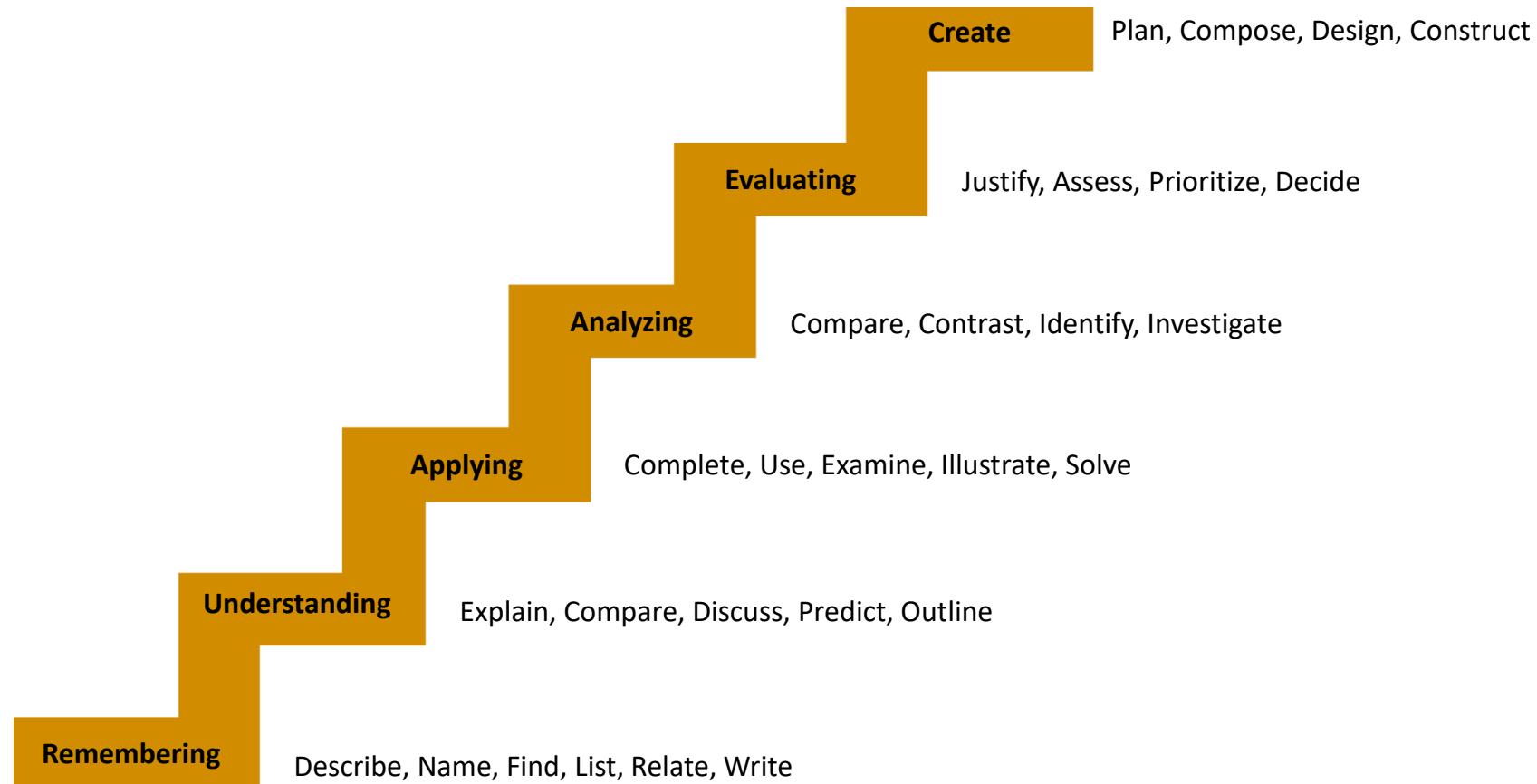
Measurable

Achievable

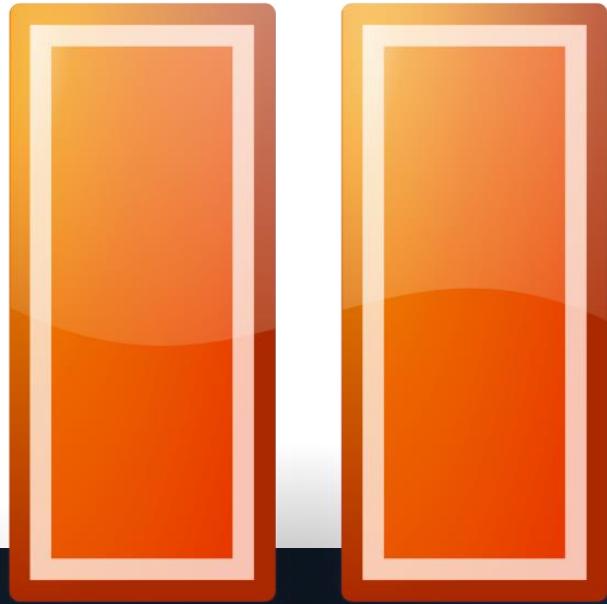
Realistic

Time-  
bound

# Revised Bloom's Taxonomy (Anderson – Krathow 2001)



Eager to write...but  
wait a minute!



# What Are Your Resources?

Money

Time

Equipment

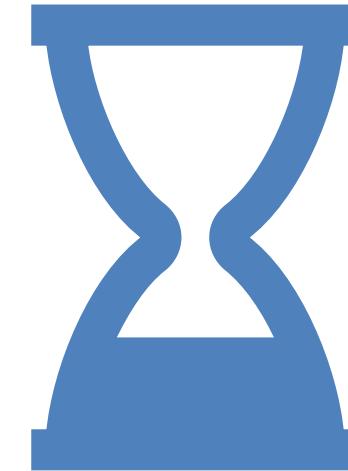
People (SPs, techs, content experts, etc.)

Space

Learners

# Plan Your Time

Prebriefing and Debriefing are the most essential elements of simulation



# Order of Events



# Elements of Simulation Scenario Design

## The Scenario

- Situation
- Back Story
  - Identity/History
- Events
- Medical Record
- Set-up sheet
- Script for SP/confederate(s)
- Simulator Script

## Other

- Prebriefing Guide
- Debriefing Guide
- References and handouts

## Remember!

- \*ALL of this needs to be written out for a simulation to be reproducible

# Cycle of Development

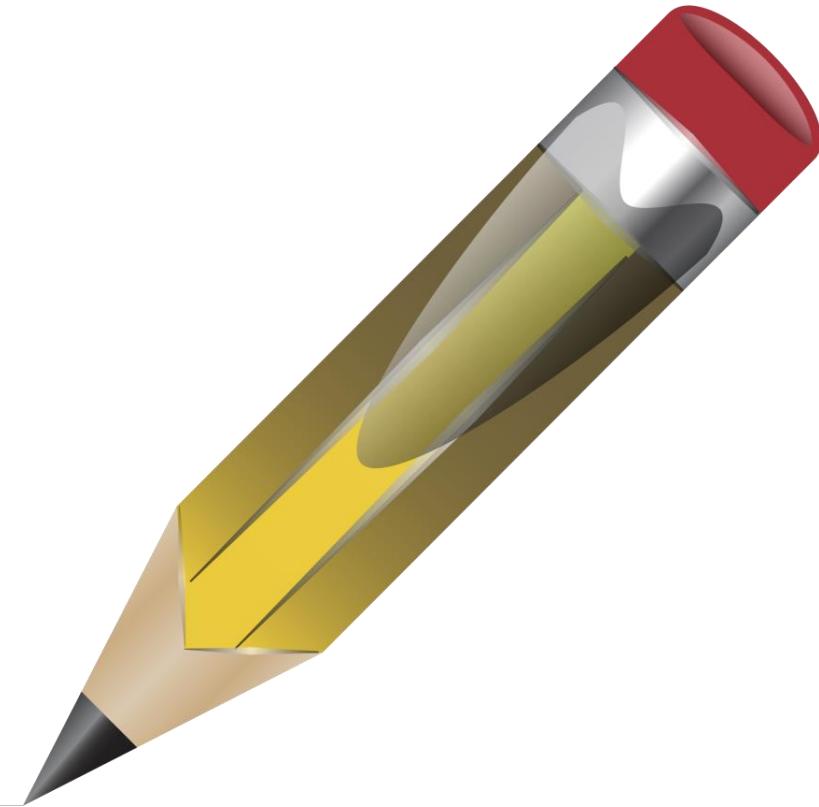
Objectives



Story

Resources





# Writing: The Scenario

# Writing: The Scenario

## The 5 W's

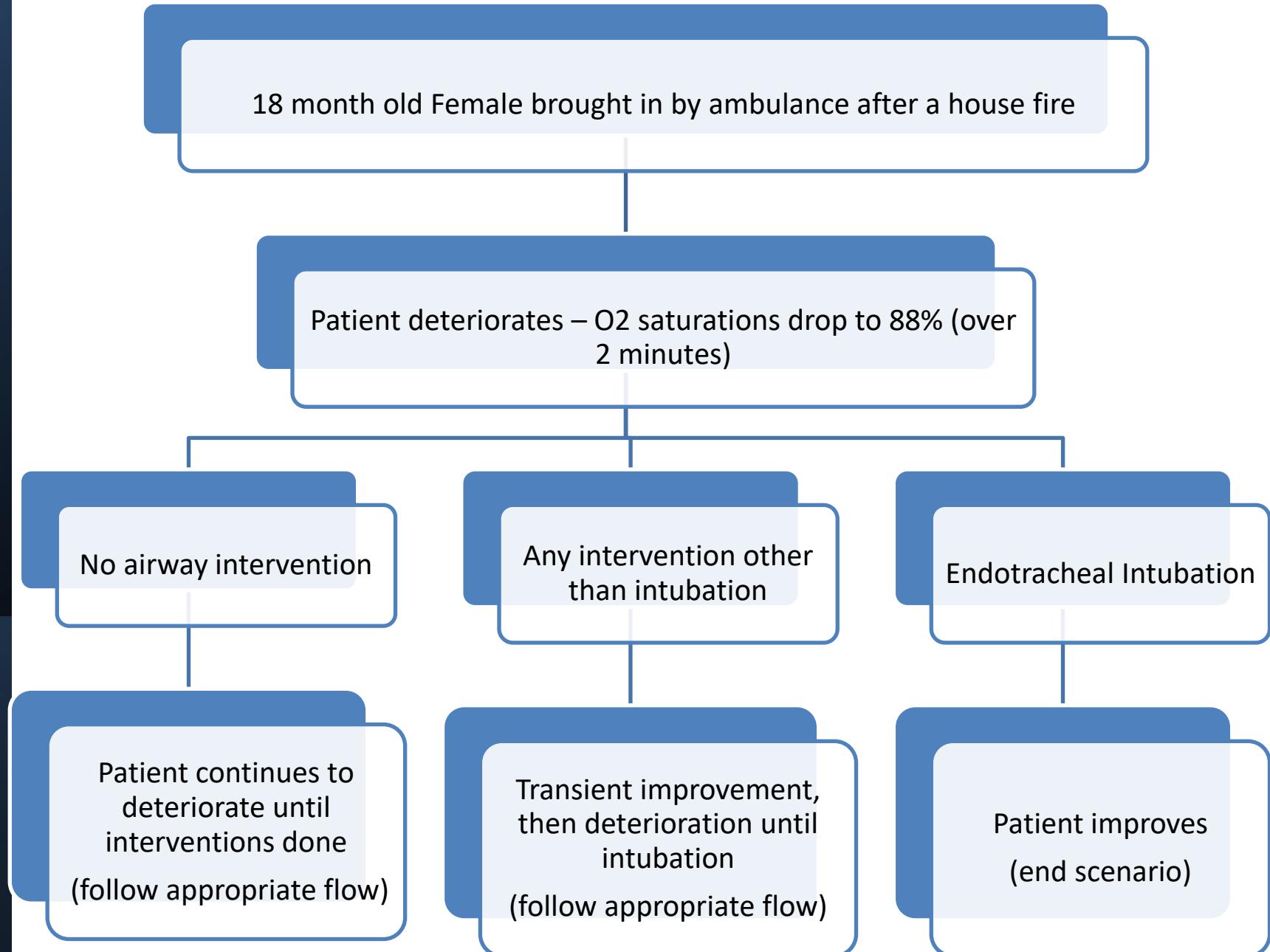
- Who?
- Where does it take place?
- When does it happen? (timeline)
- What happens?
- Why does it happen?

# Writing: The Scenario

- Make sure events flow logically
- Pre-program cues
  - Think about your timing
- Consider how learners might react
  - Build in flexibility
  - You cannot predict everything they might do
- Tie everything back to your objectives



# Writing: The Scenario



# Writing: The Scenario

- Evaluate how your resources fit your scenario
- Make sure you have included
  - Initial parameters
  - Planned events and transitions
  - Response to anticipated interventions
  - Script for patients/embedded participants

# Cycle of Development

Objectives



Story

Resources



# Writing: The Scenario (Fidelity)

# Don't Forget an Ending!

# Writing: The Pre-brief Guide

## Set the stage

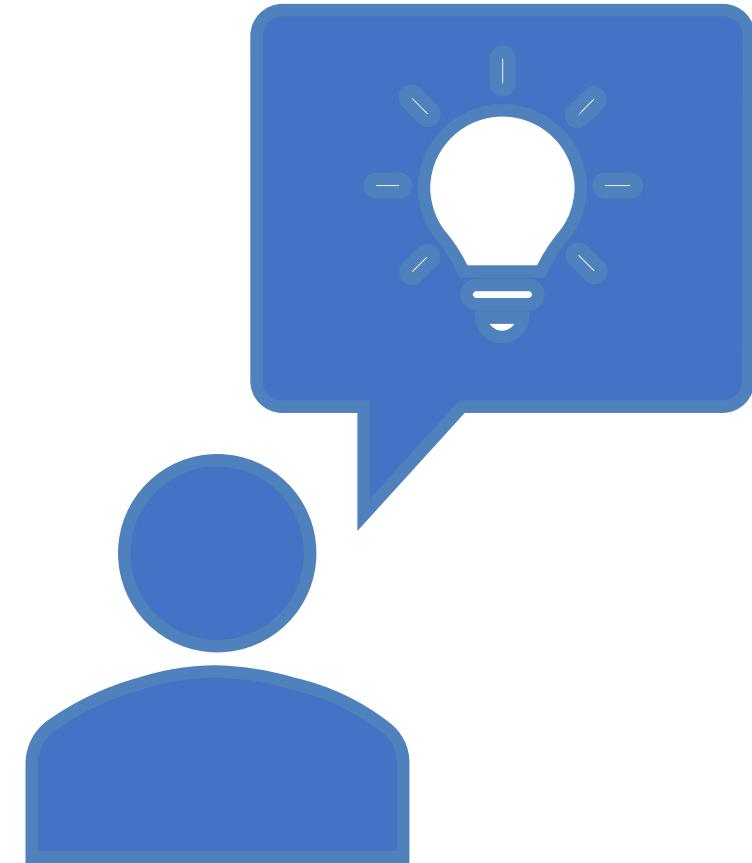
- Identify expectations
  - Trust
  - Integrity
  - Respect
- Establish ground rules and a fictional contract

## Orient to

- Space
- Equipment
- Limitations

# Writing: The Debrief Guide

Allow the **learners** to guide you and the  
objectives to drive you



# The Template: Bringing it all Together

- Templates prevent items from being missed
- There are many, many different templates out there

# Template



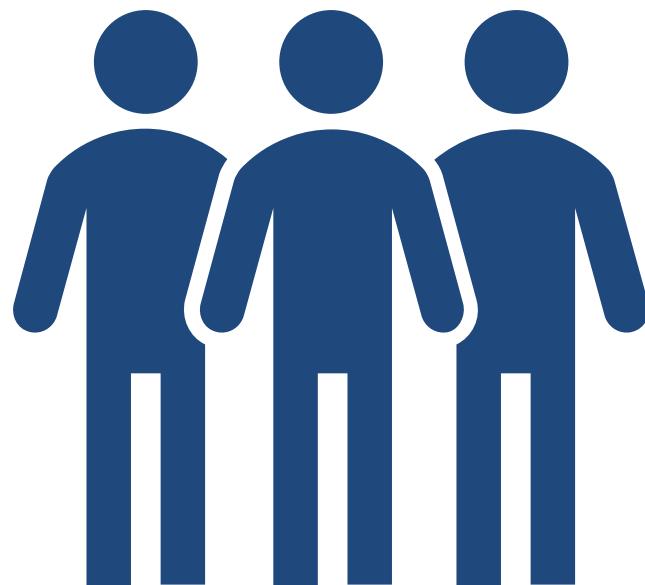
- Elements generally include
  - Objectives
  - Learners
  - Details of the case
  - Flow (algorithm)
  - Environment/Resources
  - Labs/radiographs/supporting materials
  - Debriefing Notes
  - Assessment tools (if using)
- Focus on what works for YOU

# Other Thoughts on Scenario Design

- Using Embedded Participants
- Pre- or post-simulation resources
- Assessment

# Embedded Participants

- Who are potential Embedded Participants?
- How might they be used?
  - Obtain equipment
  - Redirect learner
  - Offer clues that cannot be adequately simulated (ex. Rash)
  - Distractors (be careful with this one)
  - Obtain something that has “become available”
  - Labs/Diagnostics/Imaging
  - Provider input
- Make sure your script is SPECIFIC



# Pre-reading



- Prepare materials for review prior to the simulation that help the learner's ability to meet objectives
- May address
  - Knowledge
  - Skills
  - Behaviors
  - Attitudes

*Plan for  
Success!*

# ASSESS for Success



Don't leave out this important step



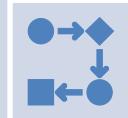
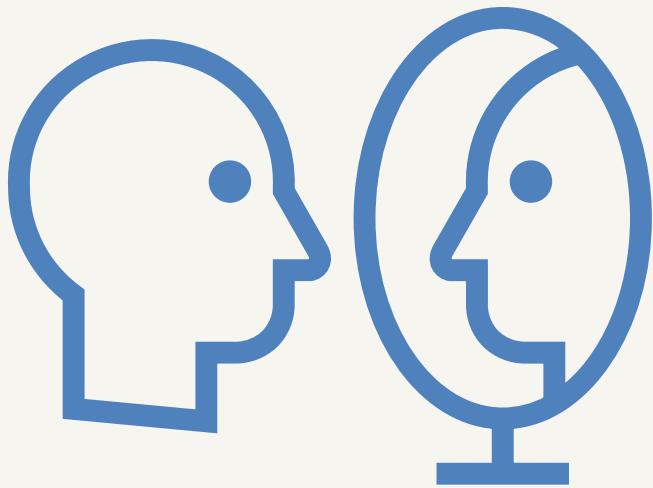
How do you know if something is working if you don't assess it?



Assess the learner AND the simulation

# Don't Forget the Dry Run!

# Reflect and Revise



Reflect after each time  
you run the scenario

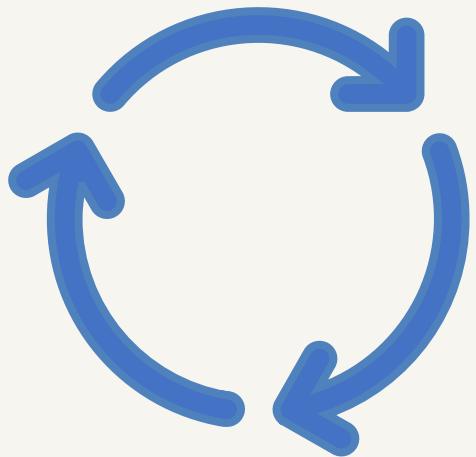
Were objectives met?  
What went well?  
Were there areas for  
improvement?



Revise documentation to reflect lessons  
learned



Communicate revisions to your team



All simulation-based experiences require purposeful and systematic, yet flexible and cyclical planning.

INACSL Standards of Best Practice: Simulation<sup>SM</sup>  
Simulation Design.

# Take Home Messages

Write clear objectives: Know WHY you are doing sim

Prebrief!!

Keep it simple

Dry run

Ensure adequate time for debrief

Review and revise EVERY TIME

# Resources

- INACSL Standards Committee. INACSL Standards of Best Practice: Simulation<sup>SM</sup> Simulation Design.  
<https://www.nursingsimulation.org/article/S1876-1399%2816%2930126-8/fulltext>
- INACSL Standards Committee. INACSL Standards of Best Practice: Simulation<sup>SM</sup> Outcomes and Objectives.  
<https://www.nursingsimulation.org/article/S1876-1399%2816%2930127-X/fulltext>