



BOISE STATE UNIVERSITY

# Operations Wizardry on a Budget

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BOISE STATE UNIVERSITY

COLLEGE OF HEALTH SCIENCES

*Simulation Center*



# ANCC

- Continuing Nursing Education



- INACSL is an accredited ANCC provider.



# DISCLOSURES

- **Conflict of Interest**
  - Becky Bunderson reports no conflict of interest
  - Julia Greenawalt (INACSL Conference Administrator & Nurse Planner) reports no conflict of interest
  - Leann Horsley (INACSL Lead Nurse Planner) reports no conflict of interest
- **Successful Completion**
  - Attend 90% of session
  - Complete online evaluation

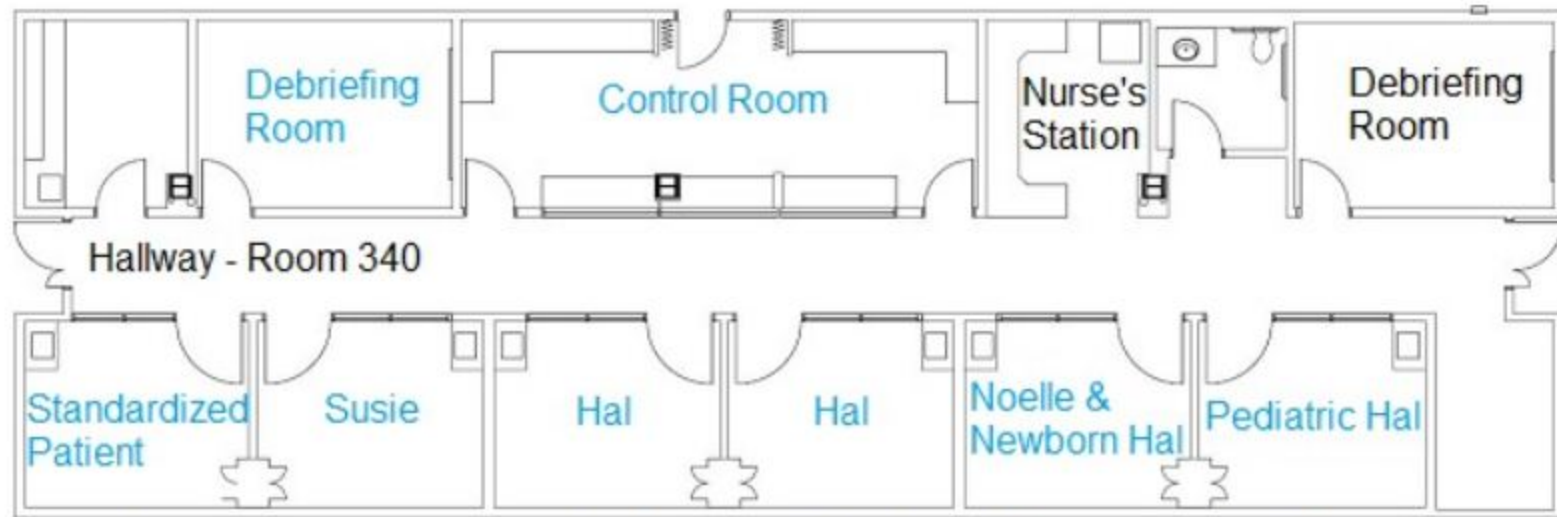


# Objectives

- Upon completion of this presentation, participants will be able to:
  1. Describe cost and time effective techniques for managing simulation supplies and simulation scenarios
  2. Describe an organizational method for preparing the simulation team for a simulation scenario
  3. Describe materials used at Boise State to save time and money



# Just a little about our simulation center.....



Susie | Standardized Patient | Noelle & Newborn Hal | Pediatric Hal | Debriefing | Control Room | Hal





- Customers
  - Nursing – our largest user
  - Respiratory Care
  - Radiology
- Volume – AY 2014/2015
  - Unique learners – 724
  - Total simulations – 991
  - Total learner hours - 6910






# Problem: How are we going to keep everyone on the same “page” during simulations?

## Scenario Template

- Create your own or use existing
- All information in one spot
- Techs know how to setup
- Students have prep materials
- Faculty/techs know progression
- Debriefing is consistent



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Last Review Scenario Na		Manikin/ Type:	Guided Reflection Debriefing Guide		
Author:		Position	Outcomes/Performance Measures/Objectives	Debriefing Prompt	
1	What an	Patient Name:	Opening	Initial group discussion/facilitation	<input checked="" type="checkbox"/> How do you think things went? <input checked="" type="checkbox"/> Can someone give me a quick summary of the scenario? <input checked="" type="checkbox"/> What did you see? <input checked="" type="checkbox"/> How was that?
2		Age:			
3		Gender:			
4		Diagnosis:			
Very brief de		History of P	Clinical Reasoning & Critical Inquiry	Objectives come from the first page under "Facilitator Information." There may not be an objective for every curricular thread.	<input checked="" type="checkbox"/> Tell me about the priorities of your patient care?
		Environment			
		Past Medication			
		Safety			
		Current Medication	Communication		
		Significant			
		Hospital			
		Social History			
1	Clinical Reason Critical	IV	Experiential Learning		
2	Commu				
3	Experie Learning	Medication			
4	Global Worldvi				
5	Profess & Leadi	Labs/Xr	Global Worldview		
		Chart Re			
		Other:			
		Learning Outcomes/			
		Lecture	Professionalism & Leadership		
		Readings			
		Websites			
		Other:			
		Other	Closing	Wrap up group discussion	<input checked="" type="checkbox"/> What would you do differently next time? <input checked="" type="checkbox"/> What are some things from this
1	Desired not distr				
3					



## Problem: How are we going to schedule and communicate with all users involved with simulations?

### SignUpGenius.com

- SPs, faculty, staff, students
- Free
- Easily build signups
- Invite to signup
- Can review their signups at any time
- Can send emails to groups
- Auto reminders for session sent out via SignUp Genius
- Print signups



# Problem: How are we going to keep the simulation setups organized?

## Scenario Boxes

- Everything ready to go
- Techs can quickly grab and setup
- Everything goes back in correct box



# Problem: How can we create realistic labeling?

## Google Images

- Readily available
- Lots to choose from
- Remove specific manufacturer identifiers

## Dymo Label Maker

- A must have

0.15% Potassium Chloride in  
5% Dextrose and  
0.20% Sodium Chloride  
Injection USP

REF L6450	1000 mL
NDC 0264-7645-00	EXCEL® CONTAINER
DIN 01931598	

**20 mEq K<sup>+</sup>/liter**  
Y94-003-096 LD-265-1

Each 100 mL contains:  
Hydrous Dextrose USP 5 g  
Sodium Chloride USP 0.2 g  
Potassium Chloride USP 0.15 g  
Water for Injection USP qs  
pH: 4.4 (3.5-6.5)  
Calc. Osmolarity: 360 mOsmol/liter, hypertonic

Electrolytes (mEq/liter):  
Na<sup>+</sup> 34      K<sup>+</sup> 20      Cl<sup>-</sup> 54

Sterile, nonpyrogenic. Single dose container.  
Do not use in series connection.  
For intravenous use only. Use only if solution is clear and  
container and seals are intact.

**WARNINGS:** Some additives may be incompatible.  
Consult with pharmacist. When introducing additives, use  
aseptic techniques. Mix thoroughly. Do not store.

Recommended Storage:  
Room temperature (25°C). Avoid excessive heat. Protect  
from freezing. See Package Insert.

LATEX DEHP PVC Rx only OTHER

EXCEL is a registered trademark of B. Braun Medical Inc.

# Problem: How are we going to have a running IV?

## Drain Bags

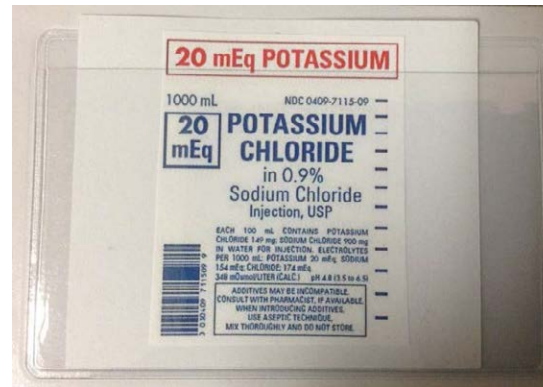
- Manikin arms don't work that well for a flowing IV
- Bypass the manikin arm



# Problem: How can we avoid a new IV setup for each simulation?

## IV Bag Removable Tags

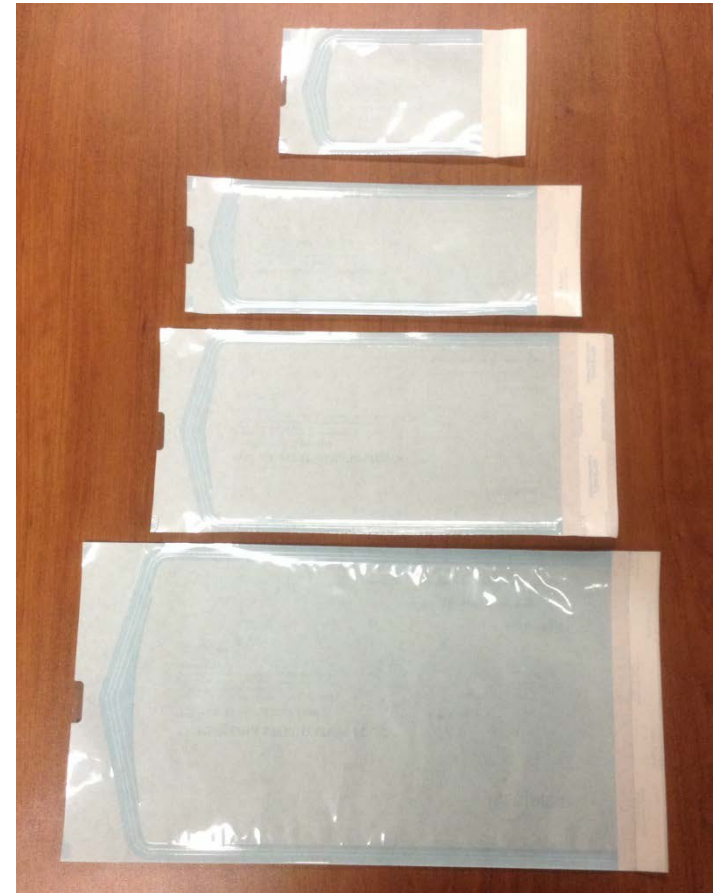
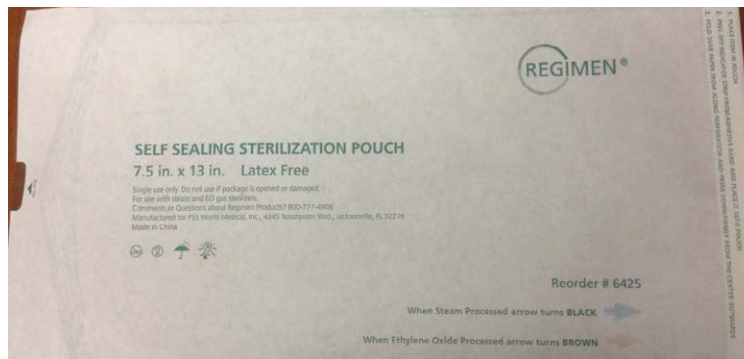
- Can leave IV setup attached to manikin
- Attach business card holder to bag
- Change labeling only
- Looks professional
- Keep tag labels in setup boxes for each simulation



# Problem: How can we re-package disposable supplies but make them look “real?”

## Self Sealing Sterilization Pouches

- Students get experience of opening supplies
- Helps maintain fidelity of the simulation
- Looks professional, \$5-\$45 for 200





Problem: How can we re-package disposable supplies but make them look “real?”



# Problem: How can we reuse saline and heparin lock flushes?

- Use sealable sterilization pouches

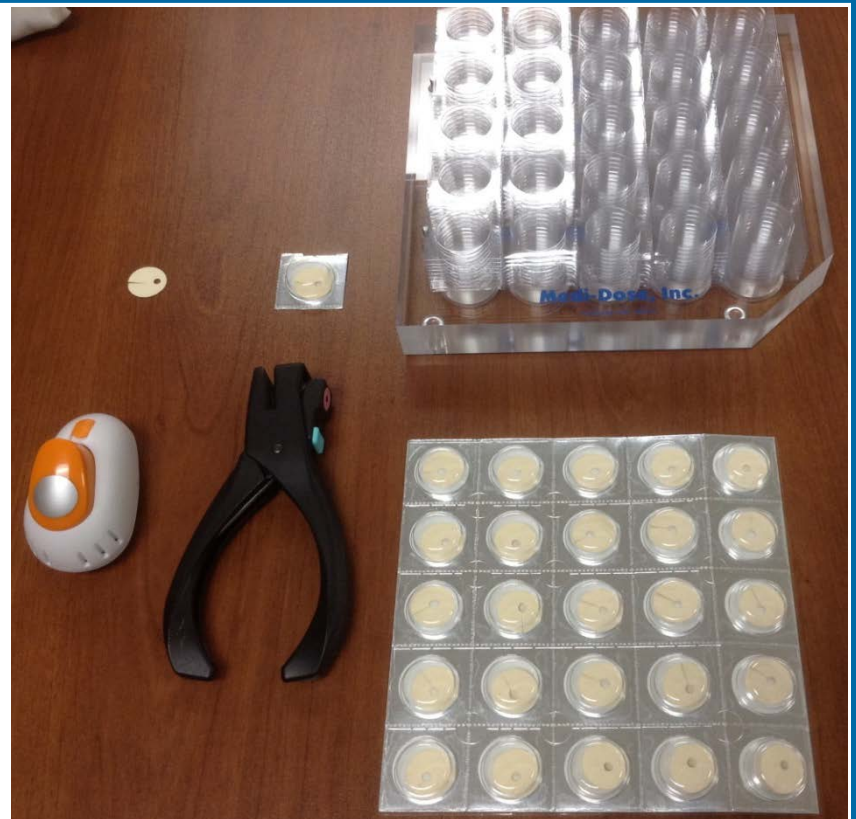




Problem: Faculty are requesting a new/packaged biopatch for each CVL dressing change practice?  
 Biopatches cost \$10. What to do?

### Make Our Own

- Adapted an existing example
- Students get the experience of opening a new supply each time



Source: Carol Okupniak, MSN, RN, director, Center for Interdisciplinary Clinical Simulation and Practice, Drexel University's College of Nursing and Health Professions

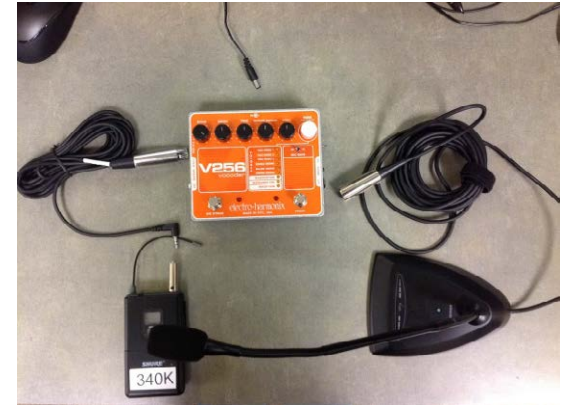
## Problem: How can we reuse IV bags?

- Evolution of solutions
  - Golf tees
  - Hot glue gun
- Current solution
  - Parafilm, Tubing
  - \$25.00 roll 2' x 250"



# Problem: How can we modulate the voice of the person that is speaking for the manikin?

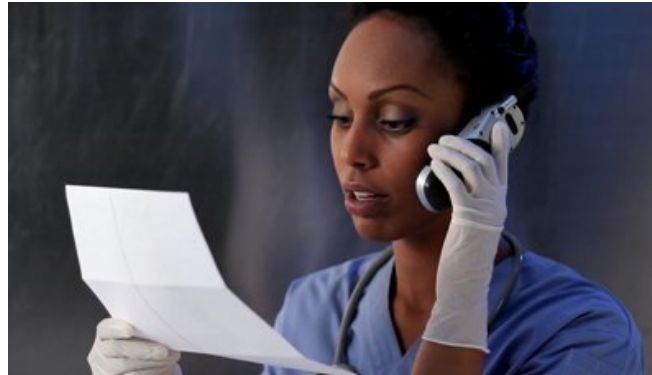
- Voice changer
  - Microphone – control room
  - Electro Harmonix – control room
  - Wireless transmitter – control room
  - Wireless receiver – simulation room
  - Powered speaker – simulation room



Problem: Needed to have phones in the simulation rooms, but didn't want to pay for monthly phone lines...

## Intercom Phones

- A simple and inexpensive solution
- Conference call
- Students can call out or faculty can call in
- Speaker phone



# Safety

- Caution for repackaging and relabeling
- Simulated versus real supplies
- No real drugs allowed
- Things must be labeled carefully





# REFERENCES

- Biopatches
  - Carol Okupniak, MSN, RN, Director, Center for Interdisciplinary Clinical Simulation and Practice , Drexel University's College of Nursing and Health Professions
- Palaganas J, Maxworthy JC, Epps CA, Mancini M. Defining Excellence in Simulation Programs. Philadelphia, PA: Wolters Kluwer Publishers; 2015



# QUESTIONS...

Email

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# THANK YOU!!