

Clinical Escape Rooms: From Concept to Reality



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College of Health Sciences

School of Nursing



Presentation Objectives

- The purpose of this presentation is to share our experiences developing and implementing a clinical escape room designed to improve knowledge, confidence and skills of undergraduate nursing students in performing safe medication administration.



Determine the Problem

- IOM's To Err is Human
 - Medication related deaths top 7000 people annually
- Novice student uncertainty when giving medications
 - Our students are no different!
 - Gap between didactic content and practical skills
- NCLEX pharm sub-score



Gather Intel

- Field Trip!
 - 2014
 - 22 Escape Rooms
 - 2019
 - > 5000
 - Social Media Hashtags
 - #WeEscaped!

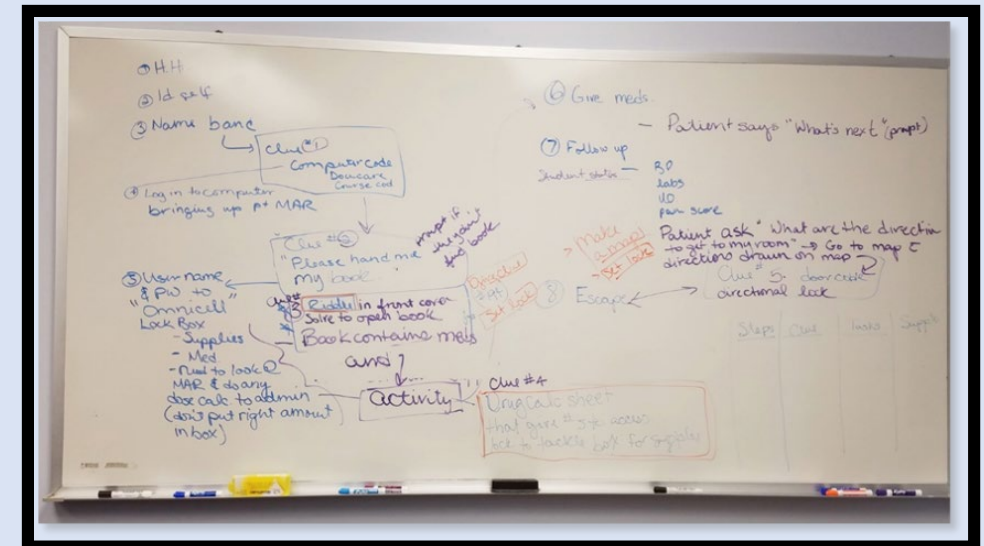


The background of the image is a light gray surface covered with numerous black metal springs of varying sizes and orientations. In the center, a brass padlock is partially visible, with its shackle and body obscured by the text. The text is white, bold, and sans-serif, arranged in three lines.

EDUCATIONAL ESCAPE ROOMS

Make a Game Plan

- Brainstorming session
- Faculty Innovator Grant (FIG)
 - Provides Center for Learning and Teaching support to develop a computer gaming activity
- More brainstorming!
 - Educational goals & skills needed
 - Storyline
 - Converting Skills to Games
 - Math for Meds & Vital Signs
 - Sequencing
 - Developing clues



Develop the Goals

- Demonstrate the proper techniques to safely administer medication during simulation.
- Demonstrate teamwork and effective communication to complete an assigned task.
- Improve aggregate NCLEX scores in patient safety, communication, and pharmacology.



Merrill's Principles of Instruction

Merrill's Principles:

- Problem/Task Activation
- Demonstration
- Application
- Integration

Safely Administer Medication



Relevant
Transitional
Skills



Immersive
Interactive
Experience



Demonstration



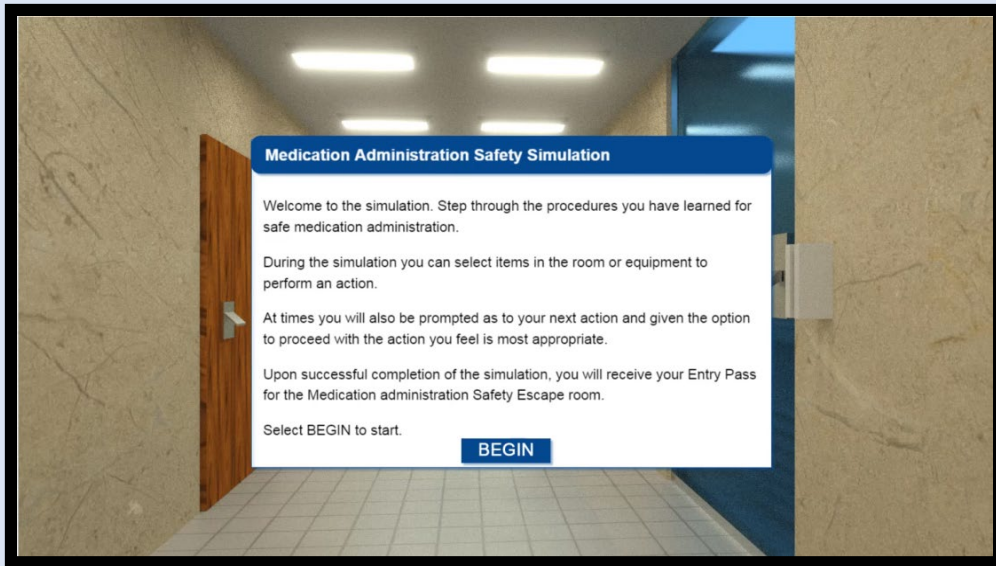
Content

Prepare the Students

- Tutorial for Medication Administration
 - Reviews concepts presented in prior semester
- Skills Mastery / Gaming
 - Participate in avatar activity
 - Return demonstration of proper procedure



Check Knowledge



Set the Scene

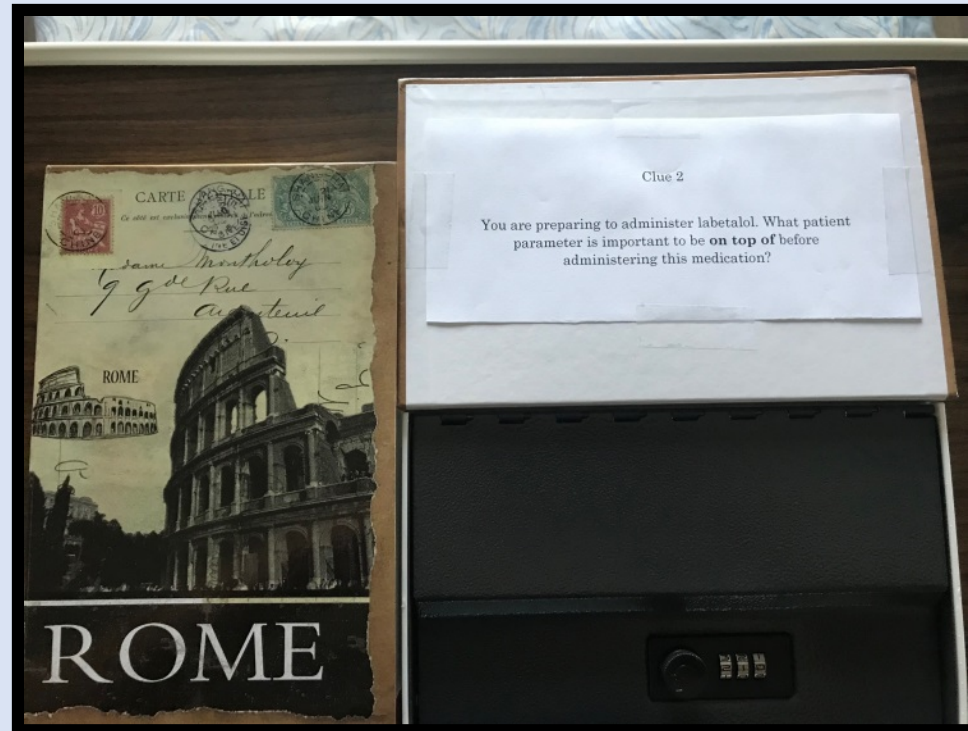
ODU 49 35 VT



Create the Clues

Username: BigBluesNurse@odu.edu

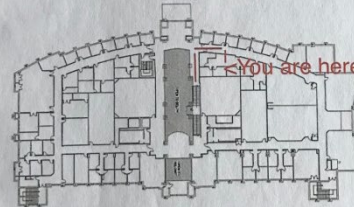
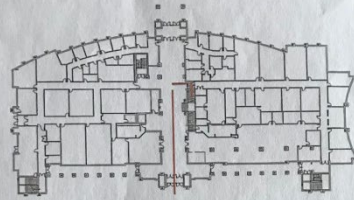
Password: ODU__VT__



Make the Escape

Once you have safely administered all medications, look for signs to make your escape

Escape route



Congratulations!
EXIT PASS

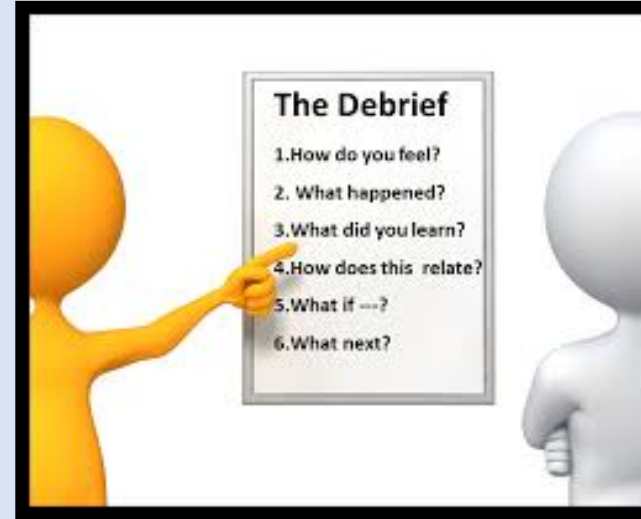
YOU ESCAPED!



...assuming you gave all your meds to complete this mission!

Debrief & Evaluate

- Debriefing after each simulation
 - Overall reaction
 - Ability to achieve goals
 - Time it took to escape (if they did)
 - Number of clues needed
 - Communication and teamwork



Pilot the Process

- Escape time established
- Confirmed need to ask for clues set limit
- Feedback
 - "I loved the computer module and escape room."
 - "I wish we'd been able to complete the game and escape room before clinical-it really would have helped me."
 - "This is the perfect level for Adult Health I students"
 - "It helps us to work as a team."



Develop Student Success Plan

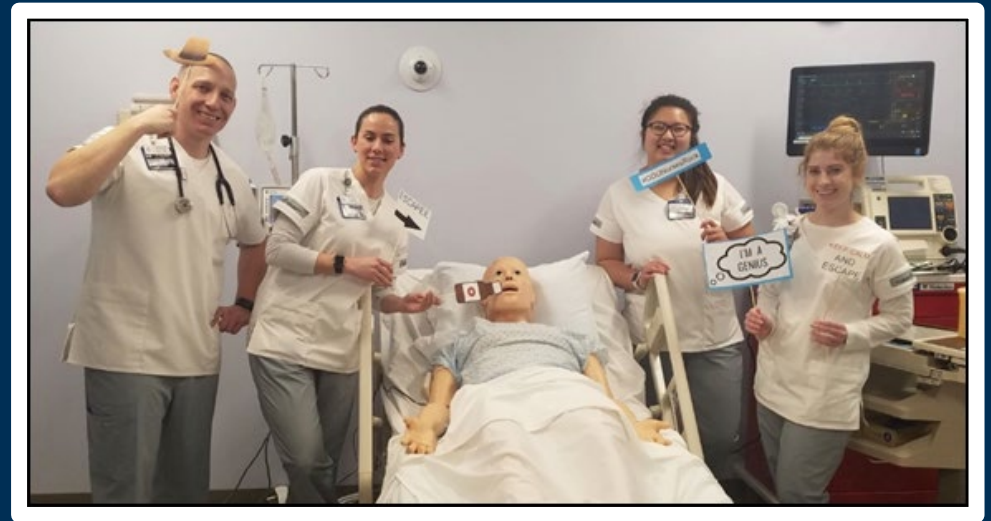
- **Content Remediation**
 - Review med safety learning module
 - Repeat computer module / gaming activity
 - Skills practice in the lab practice
- **Process (Escape Room) Remediation**
 - Focus: safety techniques & correct math calculations
 - Repeat skills in lab
 - Do not require repeat escape room simulation based on unfamiliarity with escape room / difficulty non-safety focused following clues (i.e. PW for computer and directional lock)



Evaluate Impact

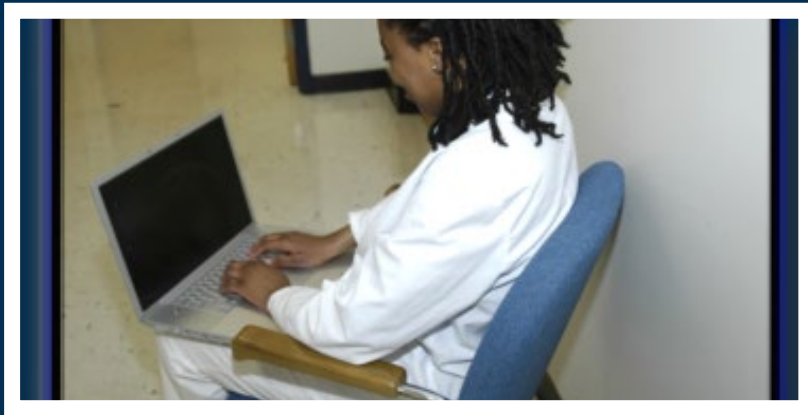
- Overall Project Impact

- 84.5% of students agreed the online medication administration module was an effective refresher for information related to safe medication administration
- 87.5% of students rated the escape room an effective way to practice skills related to safe medication administration.
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Impact- Computer Module

“The module was a great refresher for a skill that we learned but didn't practice in our first clinical.”



“The computer review module was short, to the point, and allowed you to learn from your mistakes and retry for better understanding.”



Impact- Escape Room

“The escape room was fun and interactive approach to learning.”

“I loved working as a group to figure out the puzzles.”

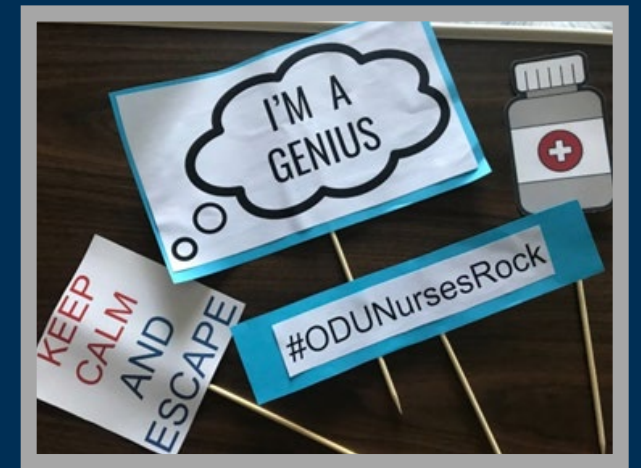


“The most valuable aspect was being able to work as a team- where one person lacked another person could help out. This helped everyone distinguish areas where they were strong or needed more work.”



Lessons Learned

- Faculty buy-in critical
- Balance between safety, creativity & fun
 - Creating clues and creating a fun environment
 - Maintaining focus on medication administration safety checks
- Competition versus sensitive delivery



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