Clinical Escape Rooms: From Concept to Reality

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Disclosure and Sponsorship

• Presentation authors do not have any conflicts of interest to disclose.

• The project was supported by a Faculty Innovator Grant from the Center for Learning and Teaching at Old Dominion University, Norfolk, VA.
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!
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 safety 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
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

Medication Administration Safety Simulation

Welcome to the simulation. Step through the procedures you have learned for safe medication administration.

During the simulation you can select items in the room or equipment to perform an action.

At times you will also be prompted as to your next action and given the option to proceed with the action you feel is most appropriate.

Upon successful completion of the simulation, you will receive your Entry Pass for the Medication administration Safety Escape room.

Select BEGIN to start.

KEEP CALM AND LET THE GAMES BEGIN

Administering Medication Entry Pass

Name: WILES, LYNN
Date: 5/15/2019

Print this Entry Pass from your browser and take it to the Administering Medication Escape Room.
Set the Scene
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.

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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