

Escape the Office: The use of escape rooms as an alternative teaching strategy for QI principles in medical education.

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INTRODUCTION

Background: Gamification is the application of game-design elements & game principles in non-game contexts. It is a set of activities & processes to problem solving by using/applying the characteristics of game elements.



Escape rooms are a growing phenomenon that can be leveraged for educational needs. In addition to reinforcing QI principles using problem solving skills, the escape room allows learners to develop teamwork, leadership & communication abilities.

OBJECTIVES

Objective: To design a virtual escape room to strengthen & review the basic Quality Improvement principles for family medicine learners.

Learning Objectives:

- 1- Review basic concepts of QI:
 - QI terminology
 - Identify a gap in care
 - Component of a “SMART” aim
 - Perform root cause analysis using common tools (process map, pareto chart, fishbone)
 - Organize change idea based on relevance
 - Basic understanding of run charts
- 2- CanMEDS roles: demonstrate efficient communication & leadership while working as a team to solve various puzzles.

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DEVELOPMENT

First step: Identify QI principles we wanted to teach or reinforce.

Second step : Brainstorm list of games including common puzzles seen in escape rooms but also common to computer and tabletop games.

Third step: Combine a QI principle with a game that reinforces the teaching point of that QI principle.

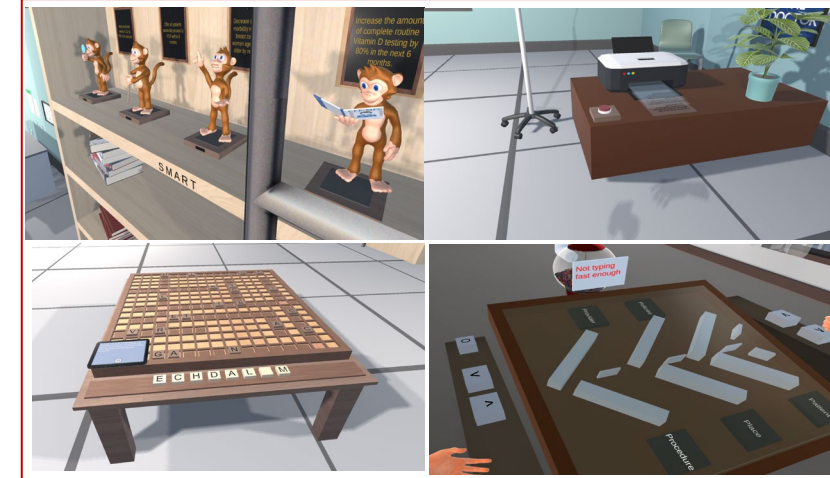
Fourth: Incorporate an interactive teamwork component to the puzzles.

QI Principle	Puzzle	Interaction
QI terminology	Cross word	Scrabble board where player need to place letters
Fishbone	Tiltable labyrinth	Up/down and Left/right bottom cannot be operated by same player
Run chart	Directional lock	Lock and answer are separated players must communicate to unlock

ESCAPE THE OFFICE

- The premise is a family medicine office. There are multiple rooms to unlock in order to complete the game.
- Various parameters will be collected to measure participant performance to ensure adequacy of the puzzles.
- Some puzzle require teamwork and communications and cannot be solved by a single player.

EXAMPLES



CURRENT & FUTURE DIRECTIONS

- Puzzles & clues have been developed in collaboration with medical learners
- Programming into a virtual reality experience almost completed
- Pilot testing running since Winter 2022
- Report card function to measure participant performances.
- Create different ‘difficulty levels’ for the game

A room only a MASTER in QI can escape.

Who will escape and who will be found in the morning, buried under all the paperwork?