Connecting resilience engineering to healthcare practice: Clinical engagement through a serious video game

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Resilience Challenge

Adapting Safely in Healthcare
Resilience Challenge

• Scenario-based game
• Player assumes role of several healthcare professionals
• Guide patient’s journey through the hospital
Development
Resilience Challenge - launched on 02.02.17!
Trade Offs

Your pager beeps and you call the orthopaedic ward. A nurse says she is worried about the patient and fears he may have sepsis. You are in the Emergency Department, in the middle of seeing patients. You have 3 people awaiting discharge, and several patient consultations elsewhere. What do you do?

- Leave rounds and go see the patient immediately.
- Tell the nurse to wait and you will come see the patient after you finish rounds.

Good choice! You have many factors to consider and this plan will address the patients’ needs safely.

Continue
Outcomes

• 2,700+ game plays
• Featured on 9 blogs
• Shared at 2 education sessions
• Played in UK, North America, Australia, Europe, Brazil
Evaluation

• Content and process, built in from beginning
• Proof of concept
• Online survey
Results of Survey Evaluation

- N=141
- Female 75%, Male 25%
- Mean age 40 years
- 75% work in healthcare
  - 50% of these are nurses
Percentage Agreed/Strongly Agreed

• Playing the game increased my awareness of how clinicians adapt safely at work: 71%
• Playing the game helped me to think through the impact of my actions on patient safety: 83%
• The game introduced me to the concept of organisational resilience: 64%
• The game is relevant to my work: 82%
• The game is engaging: 93%
• I would recommend the game to others: 88%
CARE Model
Reflecting on the pressures faced by myself as an out of hours site manager of acute NHS hospital & having to balance the risks across the site during periods of severe pressure on bed capacity. Very difficult decisions that will affect safety/quality whatever the choice. Working with other members of team to identify most safe/appropriate adaptations. Have faced these situations as a clinical practitioner & this makes me reflect on the dilemmas faced - and the courage required to challenge decisions made by Senior staff (clinical & managerial) when you do not agree with decisions. Site managers have the same dilemmas with decisions made by on call executives. Executives face the same from 'above'..... (A67).
Demand

- Pressures and challenges
  - Targets and benchmarks
  - Bed flow
- On staff
- Management
- Stress
- Pressure is universal
Capacity

- Experience
- Support
Adaptation

- Decisions and choices
  - Difficulty
  - Options
  - Prioritizing
Outcomes

- **Reflection**
  - Do something differently
  - Increased awareness
  - Relevance to practice
- **Responses to answers**
  - Right and wrong
  - Nuanced
- **Safety**
- **Impact on patients**
- **Resilience**
  - Other understandings of resilience

“Thank you so much for all of your support. I’m feeling better about everything.”

Patient
Future Plans

• Applications of the game
  • Target audience
  • Teaching potential

• Integration of game into staff education at NHS Foundation trust

• Potential scaling to include future research

• Keep sharing game!
Take the Resilience Challenge!


@CARE_KCL

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Questions:

• Is it important for people to know the ‘brand’ of resilience engineering? Or ok to know the concepts?