

# Utilizing the Learning Tool of Gamification to Positively Impact Patient Safety and Suicide Prevention

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## Purpose

- Suicide is one of the leading causes of death in the United States.
- CDC reported an increase of 2.6% in deaths by suicide (2022).
- As healthcare providers, it’s imperative that we can identify patients at risk to keep our patients safe.
- Educating our front-line providers on risk prevention can reduce the incidence of patients harming themselves.

## PICO Question

- In a 220-bed urban tertiary hospital, will gamification through an escape room, increase nurses’ comprehension and application in the care of patients who are at a high-risk of suicide?

## Methods

- The escape room utilized a design of linear progression.
- The target audience for the activity focused on inpatient nursing staff.
- Participants navigated through two hospital rooms, which were embedded with clues and questions, related to the care of high-risk suicide patients.

Activity Title	Suicide Prevention in the Inpatient Medical/Surgical Units
Subject/Content Area	Behavioral Health
Game Format	<input type="checkbox"/> Open <input checked="" type="checkbox"/> Linear <input type="checkbox"/> Virtual
Target Staff Roles	Nurses
Difficulty Level	<input checked="" type="checkbox"/> Novice <input type="checkbox"/> Experienced <input type="checkbox"/> Combination
Time Considerations	Set-up: 30 minutes Pre-Briefing: 10 minutes Activity: 15 minutes Debriefing: 15 minutes Reset: 20 minutes
Space Considerations	Simulation Lab (2 Rooms)
Learning Objectives	<ul style="list-style-type: none"><li>• Identify patients with high risk for suicide.</li><li>• Assess patient using the Columbia Suicide Severity Rating Scale.</li><li>• Understand the process for 1:1 observation.</li><li>• Identify high risk items used for suicide.</li><li>• Understand the role of patient care companions (PCC).</li><li>• Differentiate the role of PCC and Family members in the care of patient with high-risk for suicide</li></ul>
Role of the Facilitator/Moderator	Conduct Pre-brief, hand clue if needed and conduct debrief after the activity
MCP and SOPs used for the Activity	SOP 11-53-27 One-to-One Precautions Procedures MCP 118-46 Suicide Precautions on Medical/Surgical and Critical Care Units
Room Set-up Directions	<ul style="list-style-type: none"><li>• Reserve Simulation Lab Room 4293 (Inpatient) and 4294 (Emergency Room)</li></ul> <b>Emergency Room:</b> <ul style="list-style-type: none"><li>• Patient Triage Table (Box 1, Box 2)</li><li>• Opposite Corner (C-SSRS) Table (Box 3)</li><li>• Patient on Patient Cart in the middle of the room with multiples items (Box 4)</li><li>• Table with Phone (Box 5)</li></ul> <b>Inpatient Room:</b> <ul style="list-style-type: none"><li>• Patient on Hospital Bed (Box 6)</li><li>• Chair close to door (Box 7)</li><li>• Patient Belonging Chart in the corner of the room (Box 8)</li><li>• Small table close to the door (Box 9)</li><li>• Back of the Door (Box 10)</li></ul>

Figure 1: Escape Room Planning Worksheet

## Evidence Synthesis Table

Level	Authors	Year	Design	Key Findings
Level I	Malicki A, et al. J Contin Educ Nurs	2020; 51(11): 509-515	Systematic Review	The use of interactive digital learning in the form of games, gamification, and scenario-based learning has a positive effect on learner engagement and satisfaction, no study was able to quantify any objective data on knowledge retained over time.
Level I	Van Gaalen AEJ, et al. Adv Health Sci Educ	2021; 26(2): 683-711	Systematic Review	Gamification seems a promising tool to improve learning outcomes by strengthening learning behaviours and attitudes towards learning
Level IV	Siva A, et al. CHEST	2023; 164(4): A3830-A3831	Cohort Study	Medical escape rooms provide an enjoyable and engaging method of teaching high-yield information.  Gamification through escape rooms allow for a memorable educational session that can enhance retention of knowledge.
Level IV	Seymour A, et al. J Emerg Nurs	2023; 49(6):805-810	Cohort Study; Likert Scale for Evaluation	Escape room offered a unique learning opportunity that challenged teamwork, communication, and decision making, and developed skills through an interactive environment.  Improved knowledge, engagement and communication
Level VI	Hudson A, et al. J Trauma Nurs	2023; 30(6): 364-370	Descriptive	Using a pediatric trauma escape room as an interprofessional simulation-based educational tool was an effective and engaging approach to improve pediatric trauma readiness and foster team collaboration.

## Outcomes

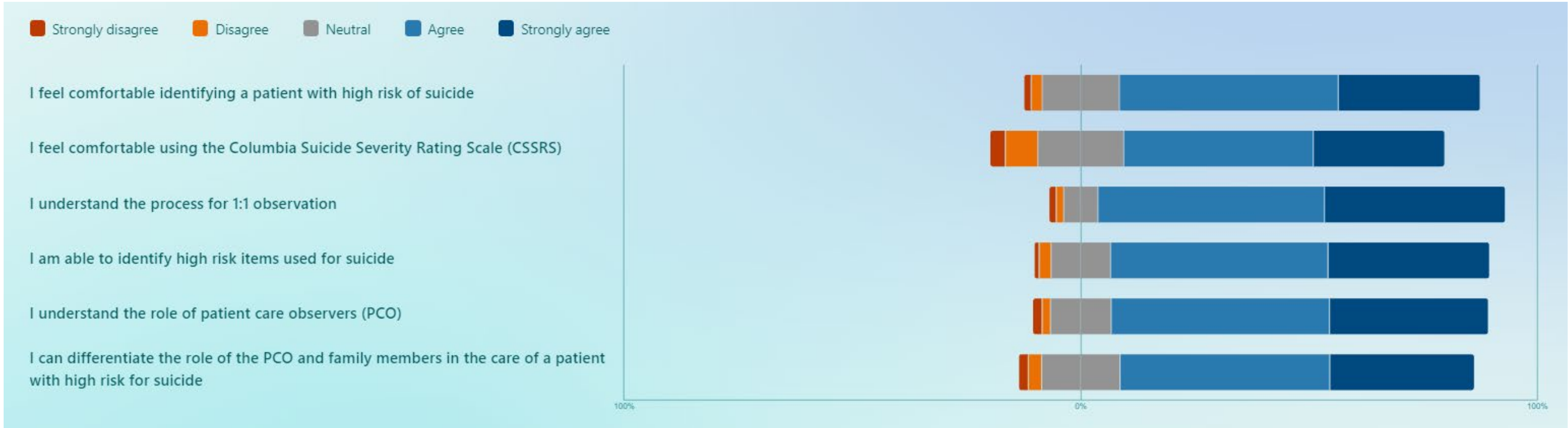


Figure 2: Pre-survey Results

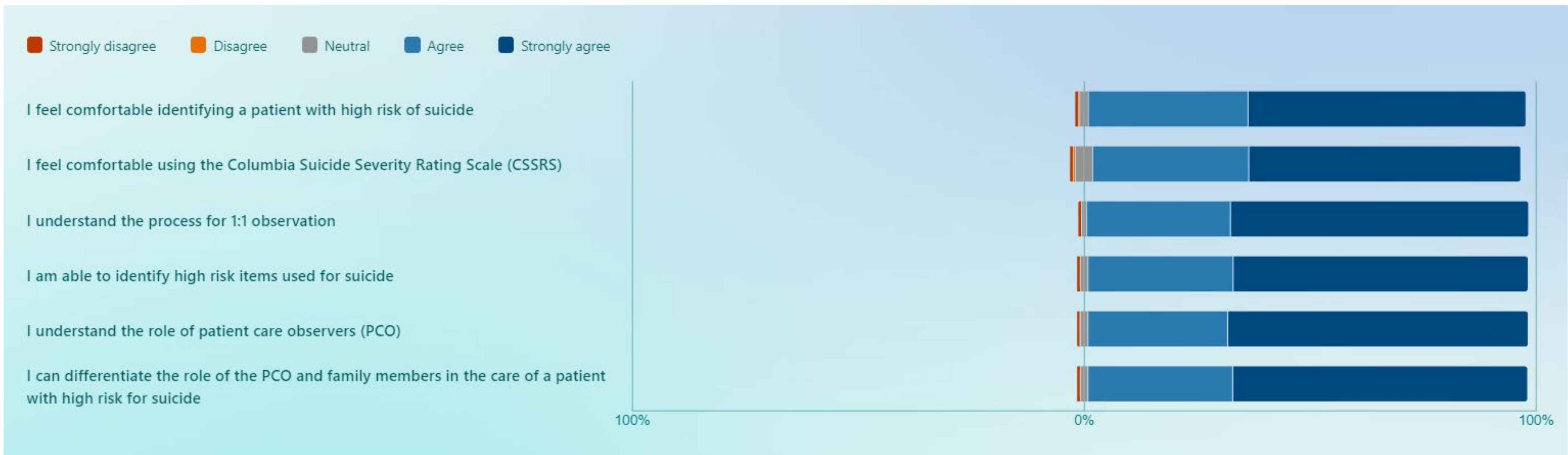


Figure 3: Post-survey Results

- Overall survey results demonstrated a significant improvement in identifying at-risk patients.
- There were 369 participants – 76% were nurses and 24% are nursing assistants.
- 80% participation house-wide: 49% came from Medical-Surgical Nursing, 13% from critical care, 11% from emergency room, 17% from behavioral health and 11% from surgical services.

## Implementation

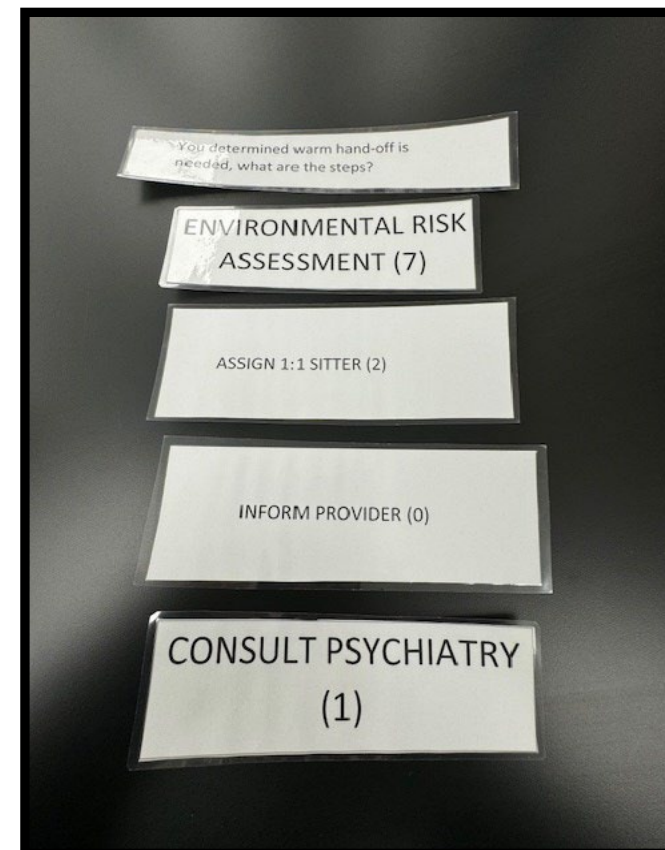
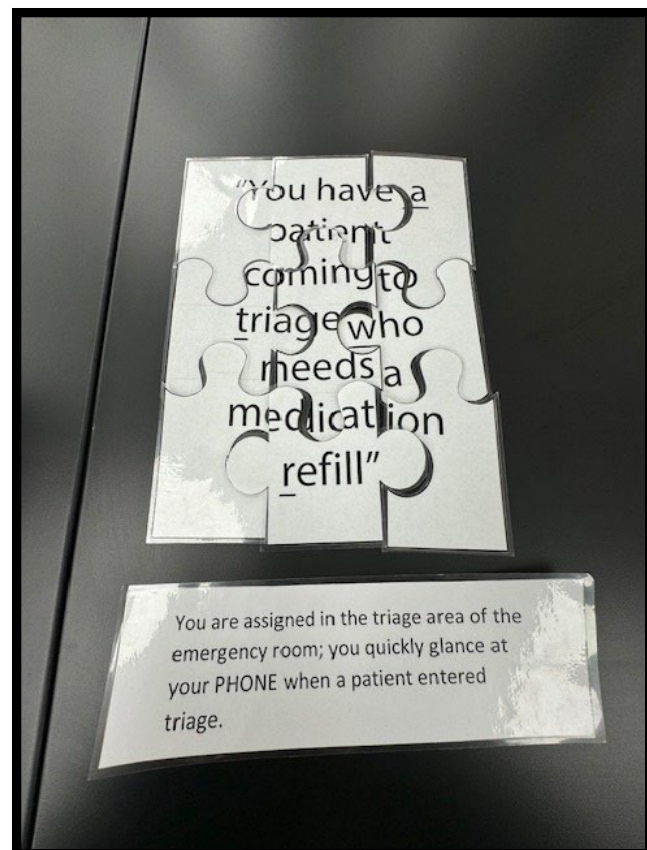


Figure 4: Sample Puzzles utilized during the escape room activity

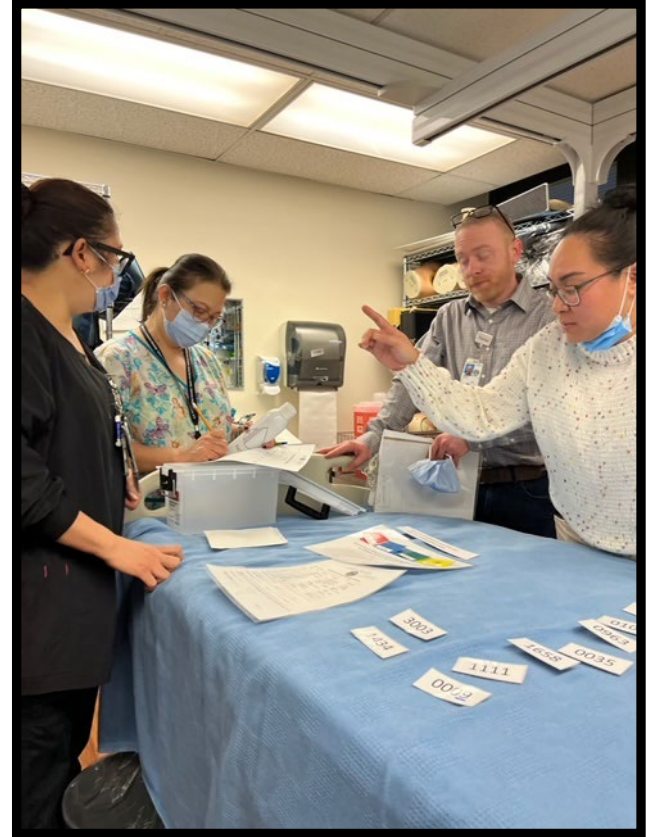


Figure 5: Participants in action

- Activity was open to all bedside nursing team.
- Minimum of 4 and maximum of 8 participants per session.
- The activity was moderated by 1-2 NPDP.
- A Likert scale survey was given pre and post activity to measure confidence.

## Implications for Nursing Practice

- Gamification has the potential to increase Nursing engagement and learning, in educational activities. The activity tapped into participant’s critical thinking and collaboration skills.
- Further use of gamification in educational settings is recommended to further enrich the nursing experience.
- Future studies in gamification could prove beneficial to Nursing practice and education

## References

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