All work, no play? No way!
Gamification of Perianesthesia Competency Validation

Katharine Erwin Gregory, MSN, RN, CPAN

Background

Ongoing nursing competency validation is completed annually by the Nurse Professional Development (NPD) Practitioner.

- Donna Wright's Competency Assessment Model is used as a framework for competency assessment.
- Incorporating adult learning principles is the professional standard when planning activities (Harper & Maloney, 2022).
- Traditional methods of competency validation include skills checklists or exams. However, alternative methods can develop critical thinking skills (Wright, 2021).

Objective

The project aims to develop a learning activity that provides an engaging way to effectively validate nurse competency through gamification.

Process of Implementation

Gamification was explored as a method of competency validation using an escape room. Participants completed a series of puzzles before exiting a room.
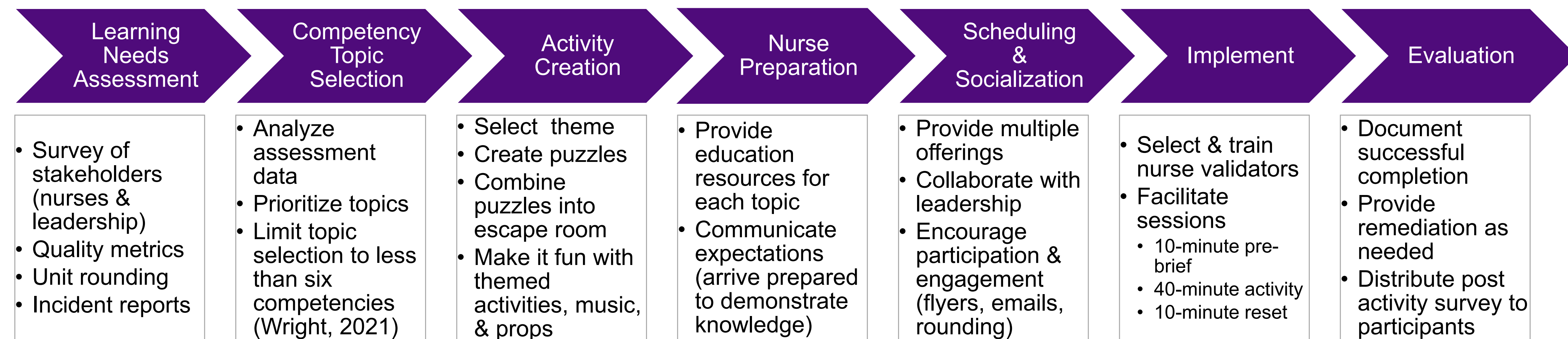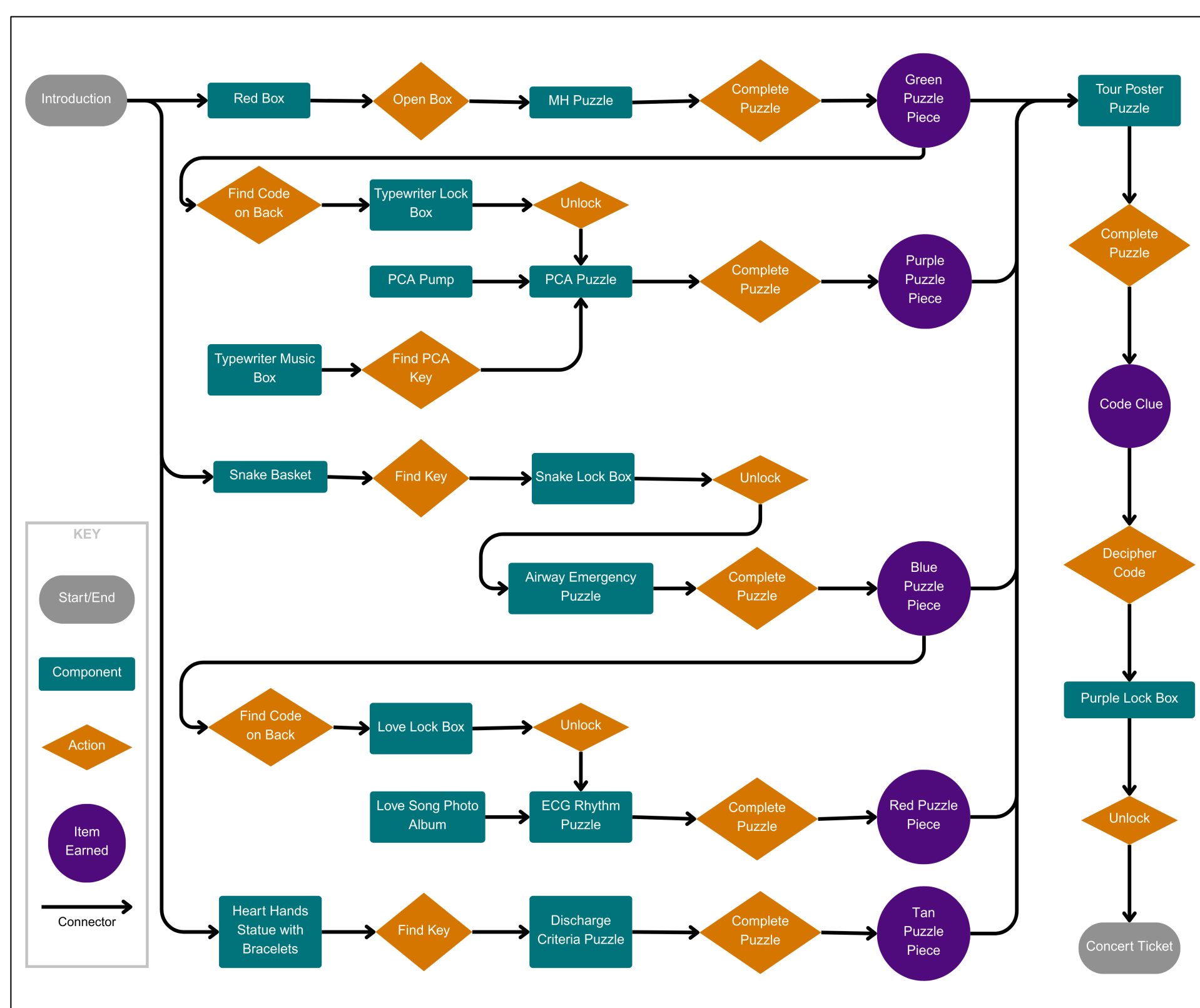
- Learning needs assessment completed with stakeholders.
- Themed puzzles developed for each selected competency.
- Scheduling challenges addressed by collaborating with unit leadership. One-hour time slots were provided at various times to accommodate the surgical schedule and unit flow.
- Three nurses worked together to complete the escape room.
- Nurse validators facilitated the activity to provide an opportunity for staff professional development.
- The activity was socialized with themed flyers, email reminders, and unit rounding to increase engagement.
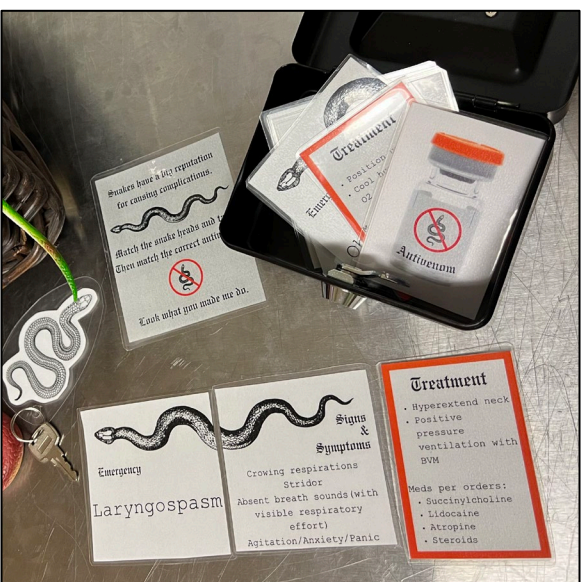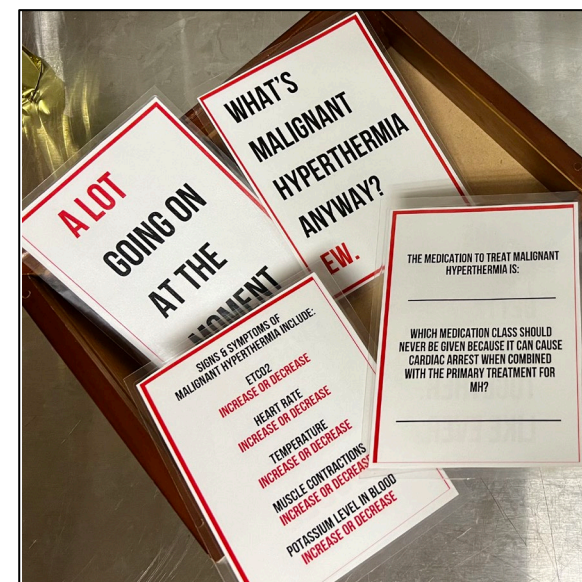
Theme: Perianesthesia Popstar Escape Room

- **Scenario:** Breaking News! Your favorite Perianesthesia Pop Star has added one final concert to their worldwide "Perianesthesia: The Validation Tour." And guess where it is located? Dallas, TX! Everyone wants tickets to the show!
- **Goal:** Find VIP tickets to Perianesthesia: The Validation Tour

Escape Room Flow Chart

Process flow (top banner)

Learning Needs Assessment	Competency Topic Selection	Activity Creation	Nurse Preparation	Scheduling & Socialization	Implement	Evaluation

• Survey of stakeholders (nurses & leadership)
 • Quality metrics
 • Unit rounding
 • Incident reports
	• Analyze assessment data
	 • Prioritize topics
	 • Limit topic selection to less than six competencies (Wright, 2021)
		• Select theme
		 • Create puzzles
		 • Combine puzzles into escape room
		 • Make it fun with themed activities, music, & props
			• Provide education resources for each topic
			 • Communicate expectations (arrive prepared to demonstrate knowledge)
				• Provide multiple offerings
				 • Collaborate with leadership
				 • Encourage participation & engagement (flyers, emails, rounding)
					• Select & train nurse validators
					 • Facilitate sessions
					   - 10-minute pre-brief
					   - 40-minute activity
					   - 10-minute reset
						• Document successful completion
						 • Provide remediation as needed
						 • Distribute post activity survey to participants

Escape Room Competency Validation Activities

Big Reputation	Friendship Bracelets	Love Songs	What's MH Anyway? EW.	Narcotics in My Songs
Postanesthesia Airway Emergencies	Postanesthesia Discharge Readiness	Electrocardiogram Rhythms (ECG)	Malignant Hyperthermia (MH)	Patient Controlled Analgesia (PCA)
Match snake heads, tails,& antivenom. • Head: Airway complication • Tail: Signs & Symptoms • Antivenom: Treatment	Select friendship bracelets that match the color of each Modified Aldrete Score component for 3 scenarios. State next intervention/s.	Match each ECG rhythm polaroid to the correct love song heart rhythm strip.	Answer MH questions on cards.	Find supplies. Correctly set up PCA pump with end-tidal carbon dioxide monitoring & document prime volume.

Results

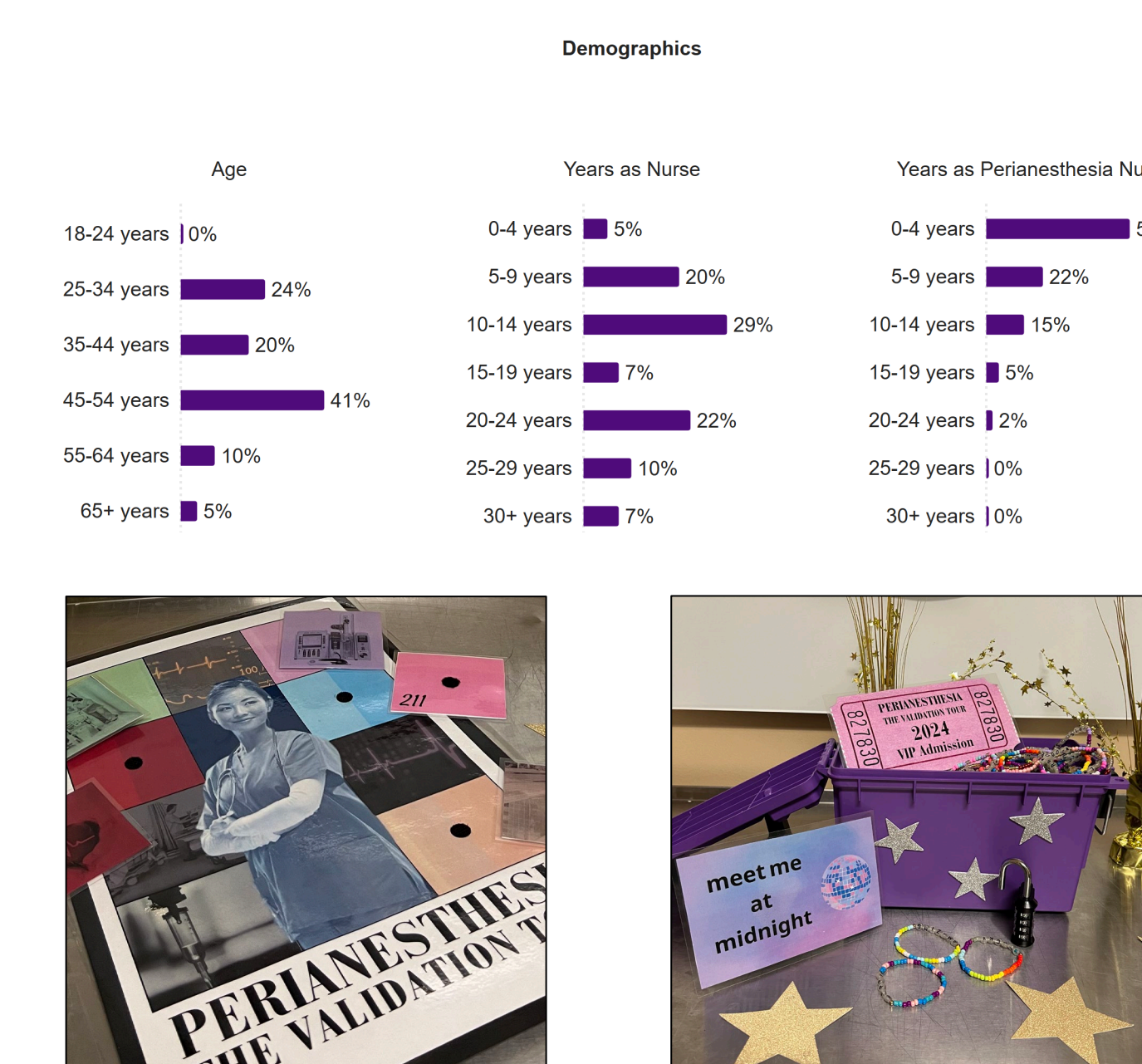Data was obtained through a post activity survey.

95 Total Participants

- 46% Survey Response Rate
- 93% Survey Completion Rate
- n=41

The participants ranked the below statements using a 4-point Likert scale ranging from strongly disagree to strongly agree.

- Knowledge of the competency topic increased
- Confidence in the competency topic increased
- Effectively verified competency

Qualitative data was collected through open-ended questions. Significantly more likes than dislikes were reported by participants.
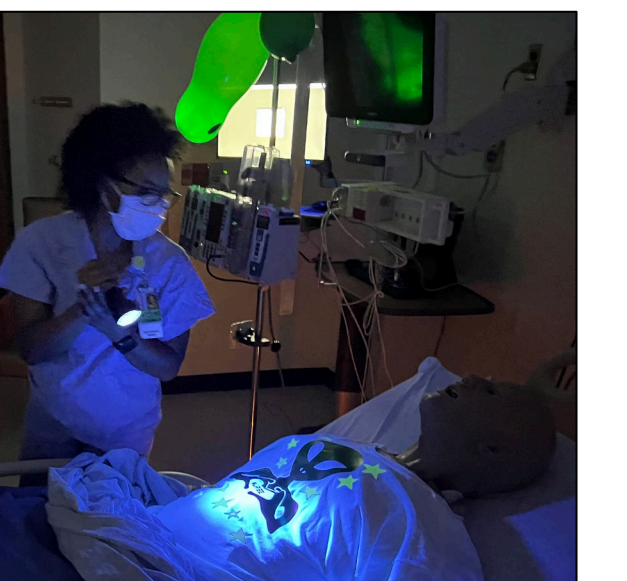

Statement of Successful Practice

Escape rooms have been successfully used for annual competency validation of perianesthesia nurses for three years.

- The data indicates that the escape room activity increased nurse knowledge, increased nurse confidence, and effectively validated competency.
- Nurses reported overall satisfaction with the escape room activity for competency validation.

2022 Alien Invasion Escape Room

- Discharge Criteria Documentation
- Perianesthesia Standards of Care
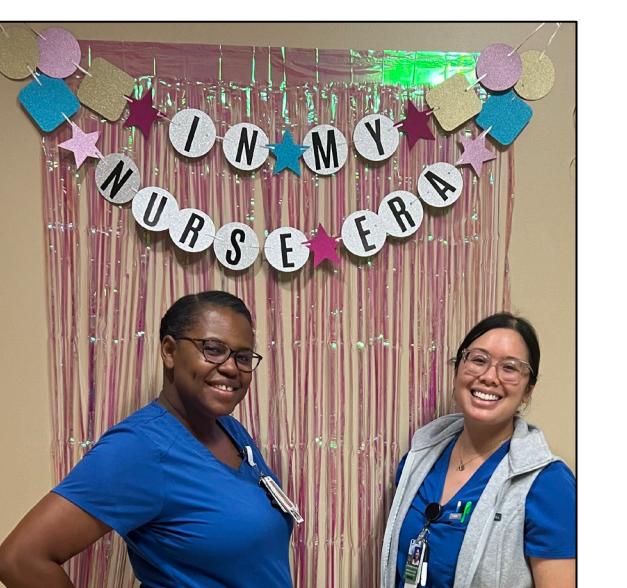- Pain Reassessment Requirements
- Ventilator Management

2023 Wizard World Escape Room

- Implanted Venous Access Port De-access
- Arterial Line Management
- Pain & Sedation Reassessment
- Safe Patient Ratios
- Phase I & Phase II Documentation Requirements

2024 Pop Star Escape Room

- Postanesthesia Discharge Readiness
- ECG Rhythm Identification
- Malignant Hyperthermia
- Airway Emergencies
- Patient-Controlled Analgesia

Implications for Future

Gamification of annual competency validation is an effective way to validate competency while providing an engaging team-building activity for nurses. These games can increase nurse confidence and knowledge while verifying competency.

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Pop star escape room theme inspired by Taylor Swift's Eras Tour

References

Harper, M. G., & Maloney, P. (Eds.). (2022). *Nurse professional development: Scope and standards of practice* (4th ed.). Association for Nursing Professional Development.
Wright, D. (2021). *The ultimate guide to competency assessment in health care* (4th ed.). Creative Health Care Management.