



# Innovation in Patient Safety Education for Learning Communities: A Scavenger Hunt Approach



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## Background

- As part of the University of Hawaii John A. Burns School of Medicine's Learning Community (LC) program, students meet in small groups with a faculty mentor for interactive sessions on various topics.
- One primary objective of LC is to help learners understand health systems science, including identifying barriers to high-quality care and patient safety.
- Diemer et. al and Farnan et. al showed that patient safety escape rooms/"room of horrors," in which first year residents and medical students had to identify and mitigate potential safety issues, improved confidence in identifying such hazards.

## Objectives

- Identify the barriers to delivery of high quality care
- Identify patient safety errors in the hospital setting
- Discuss methods to improve the performance of the healthcare system

## Methods

- In 2022 and 2023, fourth year students participated in a patient safety scavenger hunt with their LC groups.
- Students were tasked with identifying as many patient safety hazards as possible in simulated adult and pediatric hospital room settings, within a set time interval.
- Led by their faculty mentor, students debriefed and accessed brief teaching points about safety hazards using QR codes.
- After completion, students responded to a post-survey.



Left: Learning community students hunting for patient safety hazards.  
Below: Scan this QR code for a link to this poster.



## Patient Safety Sample Checklist and Teaching Point Example

Patient Safety Hazard		Did team identify the safety hazard?	
		Yes	No
(Hazard Category)	(Specific Hazard)		
Ex. Medications	Ex. Incomplete Reconciliation		
	Ex. Medications for incorrect patient		
	Medications hazard #3		
	Medications hazard #4		
(Hazard Category)	(Specific Hazards)		
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Patient Safety Priority: Reconciliation  
You found a clue!  
CSSTARS Password: Welcome!

- Medication reconciliation is the process of creating the most accurate list of all medications a patient is taking possible. The list must include: including drug name, dosage, frequency, and route.
- The list must be confirmed and verified each time a patient is admitted, transferred, or discharged to ensure that the patient is administered the correct medication at all transition points within the hospital.
- When a patient is admitted, verify the list of medications that the patient is taking with him or her directly. Do not rely on electronic or old medical records of the patient's medications.
- When a patient is transferred from one level of care to another, review the patient's home medication list, current medication orders, and the transfer orders, which should all be documented in the same place in the medical record.
- When the patient is discharged, reconcile the patient's home medication list, current medication orders, and discharge medication orders. Discuss all changes (including whether the dose or form of a medication has been changed) with the patient and the patient's next provider (if possible).

(Image from <https://www.cureatr.com/medication-reconciliation-the-key-patient-safety-issue-for-healthcare-providers>)

## Results

- 93.8% of 65 students in 2022 and 87.5% of 40 students in 2023 agreed the activity helped them identify patient safety errors in a hospital setting (Kirkpatrick level 1).
- Students reported statistically significant increases in confidence in identifying patient safety hazards before and after the QR code activity ( $p < 0.001$ ) (Kirkpatrick level 2).

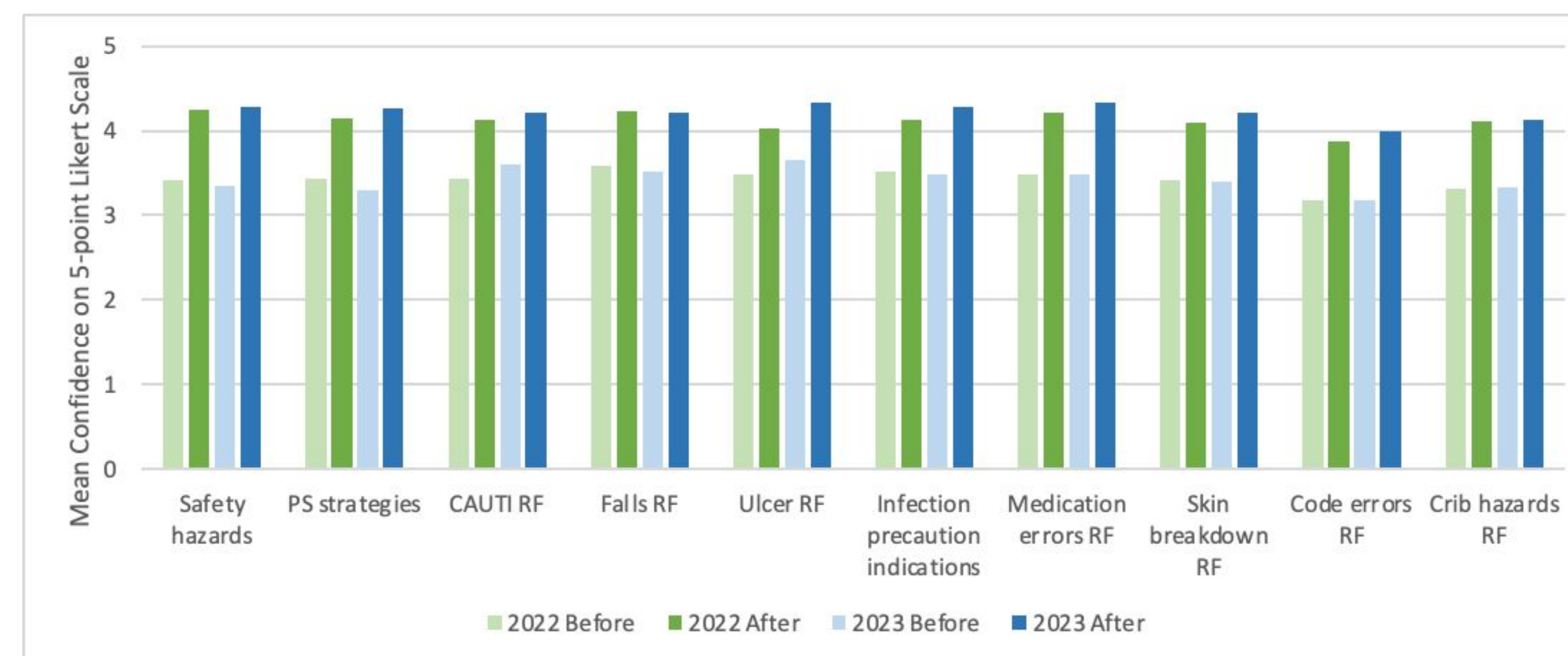


Figure 1: Mean self-reported confidence identifying various patient safety issues before and after QR code activity (PS = patient safety; CAUTI = catheter-associated urinary tract infection; RF = risk factors)

## Qualitative Feedback Excerpts

"Great activity! Super educational and pretty fun overall, QR codes with teaching points were great"

"Lots of fun and learned a lot of valuable things. Having to look for our own findings was a great way to stay engaged"

"Exercises were relevant to patient care and encouraged critical thinking"

"Great job! A really good workshop and fun with great teaching points. Very painless way to learn about patient safety in the hospital"

## Discussion

- The patient safety scavenger hunt increased fourth year students' confidence in identifying patient safety hazards and strategies to improve patient safety (Kirkpatrick level 2).
- Faculty-led debrief within LC allowed for richer discussions in small groups.
- Students commented that this interactive style of learning was effective.
- For future sessions, we recommend extended debriefing sessions and further emphasis on interdisciplinary teams.

## References

- Diemer G, Jaffe R, Papanagnou D, Zhang XC, Zavodnick J. Patient Safety Escape Room: A Graduate Medical Education Simulation for Event Reporting. *MedEdPORTAL*. 2019;15:10868. Published 2019 Dec 27. doi:10.15766/mep\_2374-8265.10868
- Farnan JM, Gaffney S, Poston JT, et al. Patient safety room of horrors: a novel method to assess medical students and entering residents' ability to identify hazards of hospitalisation. *BMJ Qual Saf*. 2016;25(3):153-158. doi:10.1136/bmjqs-2015-004621

## Disclosures and Acknowledgements

- This poster has not received any external funding. The authors declare no conflicts of interest.
- The authors would like to thank Kris Hara and the Learning Community Mentors for their support with this project.



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