

## ***'Using gaming to innovate a patient safety and systems improvement workshop'***

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### **CURRICULAR INNOVATIONS**

*Problem/Needs Assessment:* The American Association of Medical Colleges' Entrustable Professional Activities require patient safety and quality improvement education in medical training.<sup>1</sup> We implemented an innovative, high-yield patient safety and systems improvement (PSSI) workshop for third-year medical students (MS3s) transitioning to clinical clerkships.

#### *Program Objectives:*

Distinguish between system and individual failures.

Develop techniques to de-escalate an agitated patient.

Define process improvement.

Demonstrate how to file an RL6, don sterile attire, and select personal protective equipment (PPE).

Identify common threats to inpatient safety.

*Description of Program:* In February 2019, MS3s (n=137) participated in a half-day PSSI workshop composed of gaming activities, including minute-to-win it, escape room, and Lego building. Seven 20-minute interactive stations highlighted the following topics: de-escalation of an agitated patient, introduction to process improvement, PPE based on isolation scenarios, order to don and doff PPE without contamination, donning sterile attire, filing a safety concern in the reporting system, and identification of safety risks in an "Inpatient Room of Errors".

*Evaluation/Assessment:* Workshop evaluation included quantitative assessment of participant satisfaction and attitudes and knowledge on PSSI with a questionnaire pre-workshop (n=27), immediately post-workshop (n=90), and 8-months post-workshop (n=110) using a 5-point Likert scale. Students self-reported PSSI-related behavior 8 months post-workshop. Participants reported 97% and 99% event satisfaction and station utility, respectively. Post-workshop, participants had a 33% increase in agreement that "most medical errors are the result of system failures and not failures caused by a single individual" and a 49% increase in agreement that they "were confident about voicing a patient safety concern." Eight months later, these two attitudinal changes persisted. Students used station content to varying degrees; the highest utilization was for PPE stations. Although the majority of students (87%) reported confidence to voice a patient safety concern, 53% reported that they never initiated a discussion or filed a safety report. 16% of students reported never witnessing an error at all.

#### *Conclusions and Lessons Learned:*

This PSSI workshop had high participant satisfaction with attributable improvements in student attitudes and knowledge on common PSSI topics. There is a gap between self-reported confidence versus behavior in voicing a safety concern. Future workshop revisions include addressing barriers to voicing safety concerns and adding more gaming-style sessions