

Title: Proactively Preventing Medical Errors: A Student-Led Approach to Patient Safety in Pre-Clinical Curriculum

Authors: Sahar Panjwani, Daniel Nwosuocha, Nelson Gonzalez, Ayleen Godreau, MD

Introduction: Preventable medical errors are currently the third leading cause of death in the United States following heart disease and cancer (1). This study was designed to assess the change in knowledge from earlier education of medical students during pre-clinical years.

Methods: Patient safety trainings have been conducted for two years for interested first and second-year medical students and responses are assessed through a pre-test, immediate post-test, 3-month post-test, and 6-month post-test. The survey assesses student knowledge on aspects of patient safety and has Likert scale questions assessing if the training influenced students' desire to learn about patient safety.

Results: From the original data from the first training, improvements were seen in students considering themselves to be well-versed in different aspects of patient safety in the 3-month post-test (33.3%; p-value=1.00) compared to the pre-test training (11.8%). The percent of students that agreed they plan to incorporate patient safety techniques into their future practice improved from 83% in the 3-month post-test to 100% in the 6-month post-test. Data gathering is ongoing for the second group that participated in the training.

Conclusion: The improvement in students who considered themselves to be knowledgeable about patient safety 3 months after the training is promising, despite the results of the 6-month post-test, as it highlights the need for long-term training and can be further assessed using data from the second training. The lack of statistically significant findings can most likely be attributed to small sample size and will likely improve with further data collection.

1. Makary, M. A., & Daniel, M. (2016). Medical error—the third leading cause of death in the US. *Bmj*, 353, i2139.