

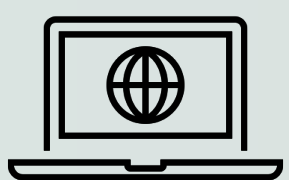


Caleb Sokolowski, Megan Walsh, Diane Levine
Wayne State University School of Medicine

INTRODUCTION

- Medical errors are estimated to be the third leading cause of death in the United States¹.
- Despite this, patient safety and quality improvement are often an overlooked part of medical training.
- COVID-19 has added additional challenges to formal medical education as many in-person events have been cancelled.
- The goal of this project is to improve the knowledge of first year medical students on quality theory and patient safety using a virtual event.

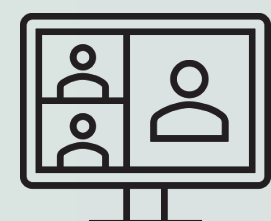
METHODS



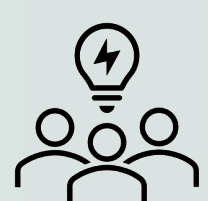
Patient Safety (PS) Day was adjusted to an online format using the Zoom platform.



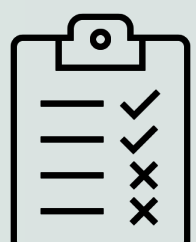
A 30-minute lecture was given that covered the basics of quality improvement (QI) theory and designing a (QI) project.



Students were then sent to breakout rooms based on the specialty of their choice. In these rooms, students were paired with a senior medical student proctor who had experience with QI in the given specialty. The proctor assigned a QI and/or patient safety-related "problem" within that specialty to the students e.g. "delayed in surgical start times due to unknown COVID status."

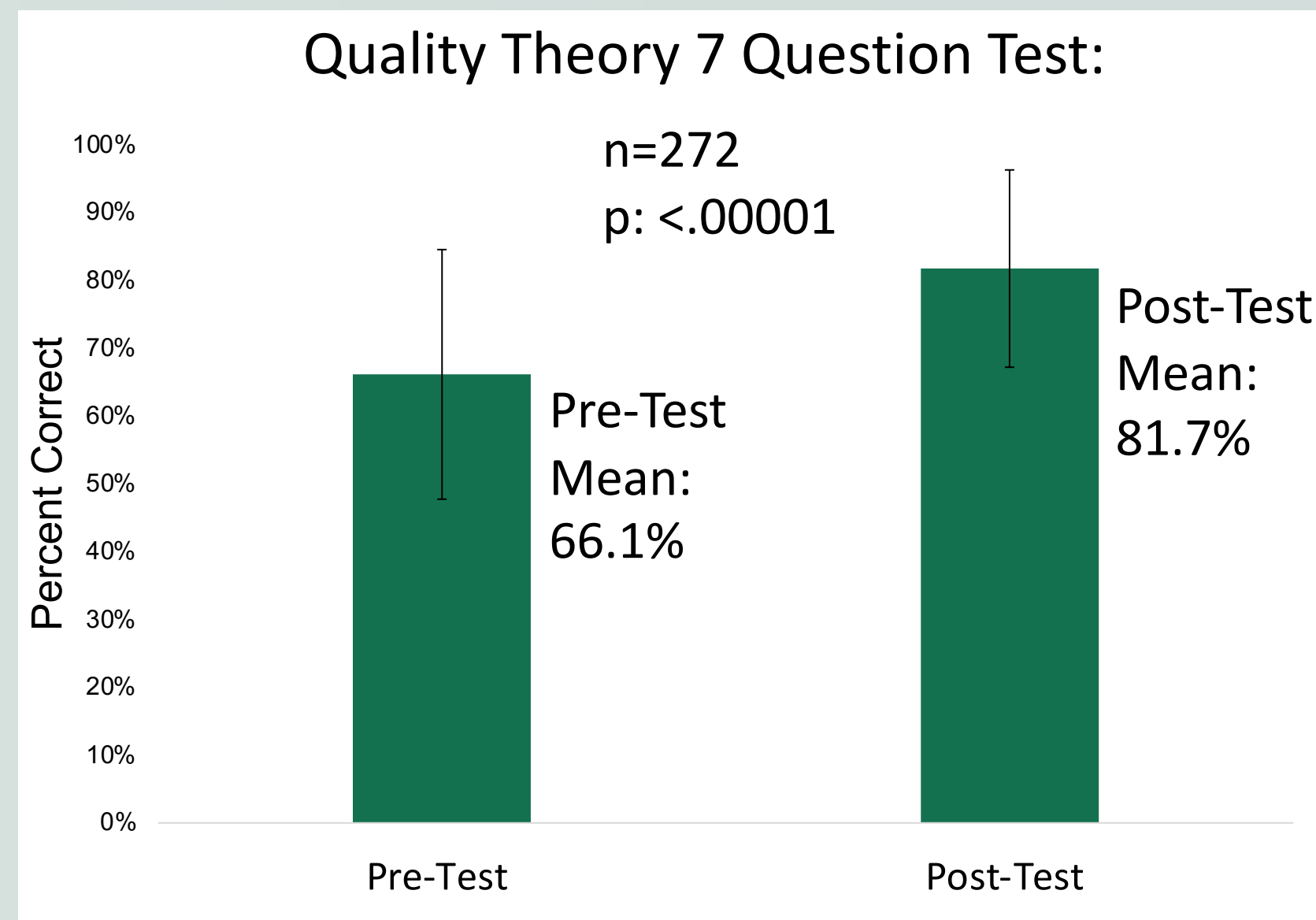


Students developed an aim statement, created a driver diagram, and designed PDSA (plan, do study, act) cycles that could be implemented to address the problem.

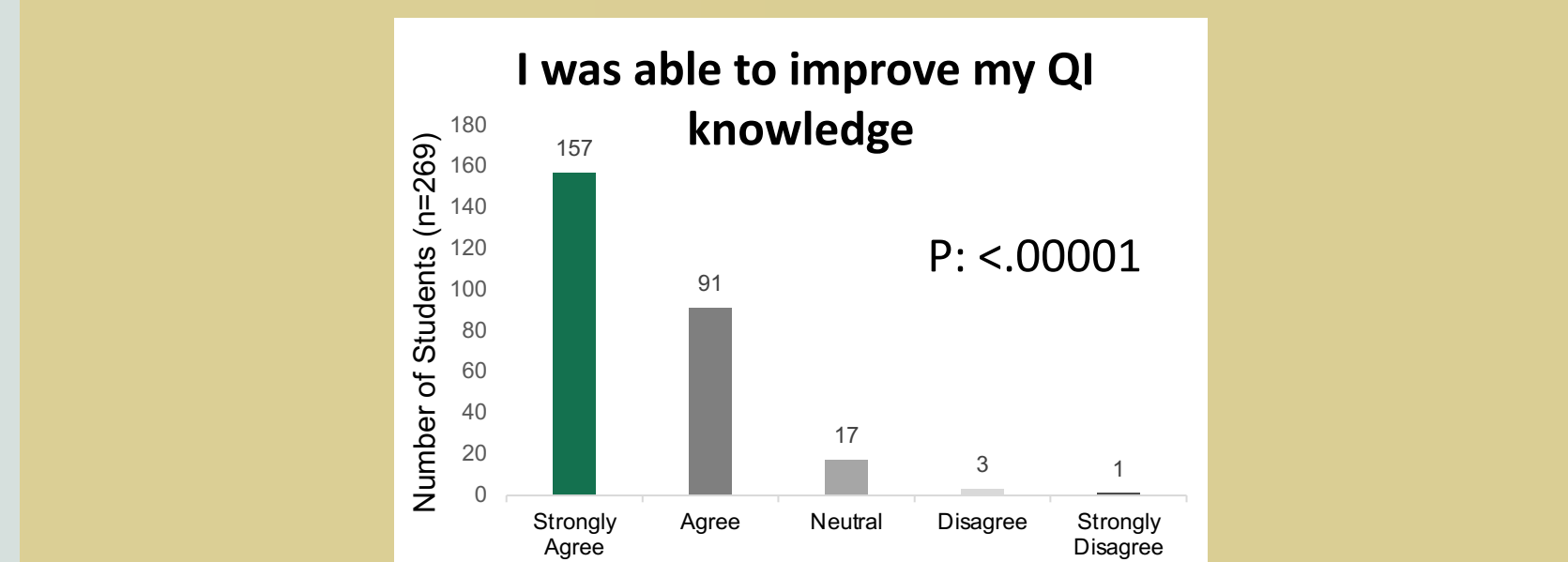
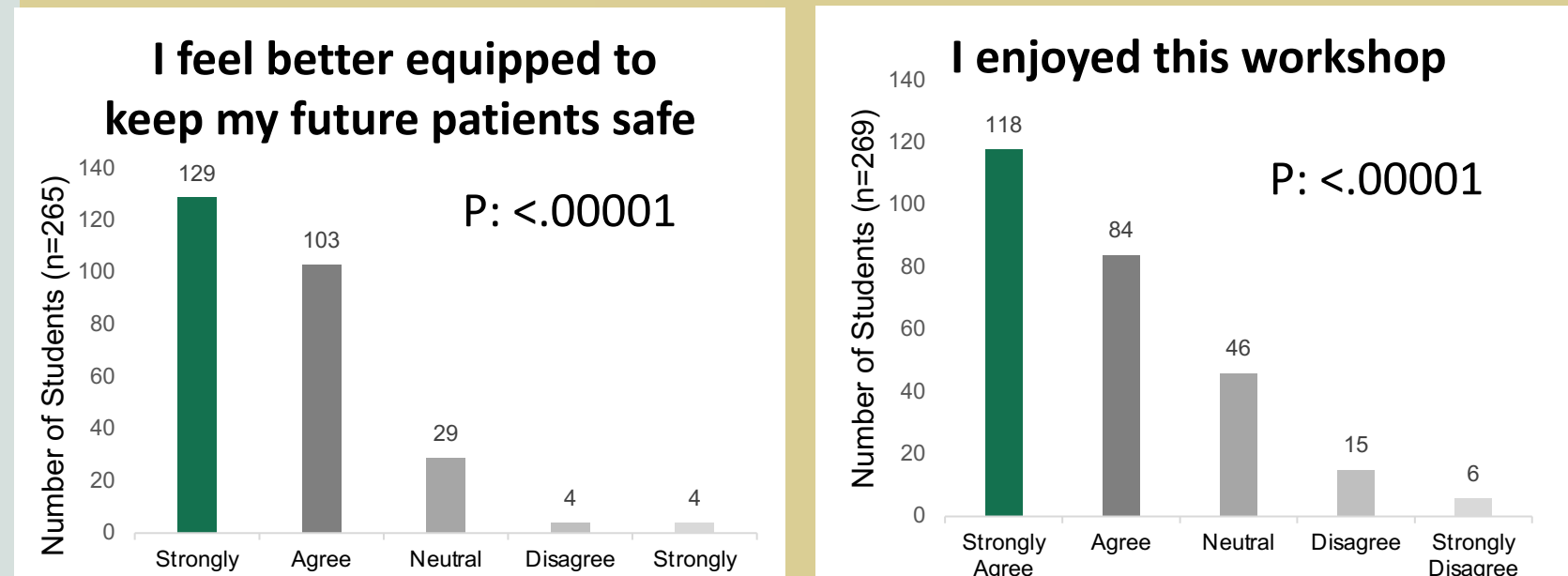
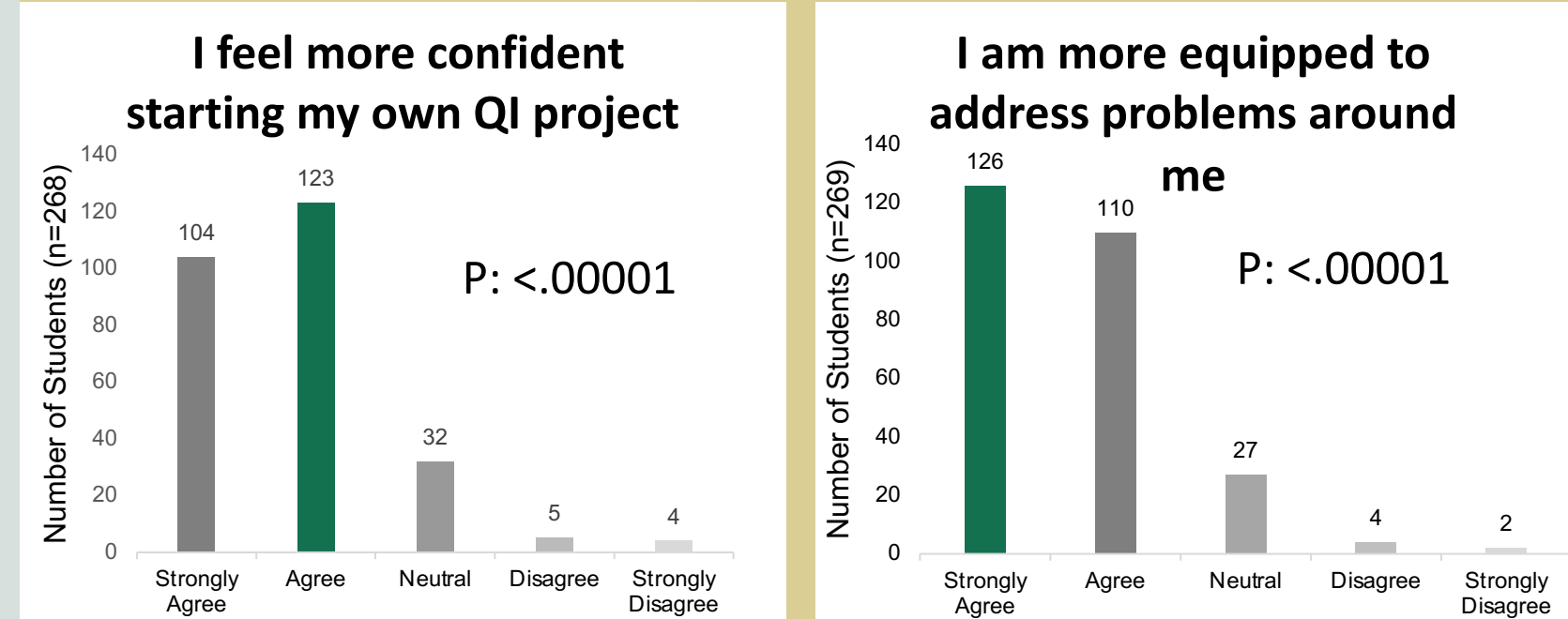


Students were evaluated using a pre and post-test survey which included a 7 question test on quality theory, Likert scale questions for perceived growth, and a space for feedback. Statistical analysis was completed using a paired t-test and chi-squared analysis.

RESULTS



Self-Perceived Growth:



RESULTS CONTINUED

Positive Student Feedback:

- "This was a super interesting idea, I enjoyed it!"
- "I enjoyed the breakout room idea with different specialties!"
- "It was a great seminar!"
- "This was great. I learned a lot and feel like I now can come up with a QI project to help improve patient safety."

CONCLUSIONS

- An interactive online platform can be used to teach QI theory and is an effective way to provide experiential education in training about QI in healthcare.
- Students increased their knowledge about quality improvement. They also developed increased confidence in starting their own project, addressing problems they face, and keeping their future patients safe.
- A 1.5 hours virtual session with interactive breakout sessions led by near peers is a feasible and effective way to improve understanding of QI science in medical students early in their medical training.

FURTHER STUDY

- Further work includes assessing the longitudinal impact of the workshop on student involvement in quality involvement projects.
- We also believe that additional sessions to further refine QI projects may allow students to implement their proposals.
- Although more study is needed, it is our hope that this event will translate to medical students becoming involved in QI to improve our health systems and ultimately patient care.

REFERENCES

1. Makary Martin A, Daniel Michael. Medical error—the third leading cause of death in the US BMJ 2016; 353 :i2139