INTRODUCTION

• Operating room (OR) management plays a pivotal role in the healthcare system due to the high cash flow it yields; the OR produces 40-70% of hospital revenue.1,2
• Enhancing communication in the OR, which is the common root problem for delays, may improve OR efficiency and revenues for healthcare1
• This study aims to evaluate the impact of an OR relay strategy on OR turnover time (TOT)

Methods

• A quality improvement project was conducted using the Define, measure, analyze, improve, and control (DMAIC) strategy.
• After establishing the TOT as the outcome variable an OR relay strategy was implemented in which a lead CRNA was outside of the OR coordinating the process activities necessary to get the next patient ready in each room.
• This lead CRNA communicated bidirectionally with the anesthesia providers in the OR via Microsoft Teams chat; one lead CRNA was assigned to four ORs at a time.

DISCUSSION

• An operating room relay strategy can improve efficiency of OR turnover in rooms with a baseline TOT above 40 minutes and decreases variability in each room.
• TOT reduction may be insufficient to add another case to the daily schedule; however, it could positively impact revenue by reducing overtime staffing needs.
• In our study, the lead CRNA did not raise the expenses, given that the role was assigned to one of the floating CRNAs.
• These results may help to develop a lean six sigma strategy for improving overall quality and cost of a given OR.
• Further studies must be conducted to assess the effect of customized interventions directed to specific subspecialties.

CONCLUSION

The relay strategy improves efficiency in rooms with a baseline TOT above the desired range and decreases variability in each room and for the overall OR in an academic center.

REFERENCES


Most of the ORs with a baseline TOT above the institutionally accepted threshold of 40 minutes exhibited a decrease in mean TOT after the intervention.

A decrease in variability between ORs was demonstrated by an F-test, showing a statistically significant difference in variance between the intervention and control groups.