Traffic Control: A New Route to Infection Prevention in the Operating Room

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INTRODUCTION

Over the past year, our facility has seen a significant increase in surgical site infections (SSI's), prompting a thorough review of our daily perioperative practices. While multiple factors may contribute to the development of SSI's, we have focused our attention on one critical but often overlooked element-traffic in and out of the operating room (OR). Frequent movement disrupts airflow, compromises sterile fields, and increases the risk of contamination.

Purpose/Framework

By following the IOWA Model of Evidence Based Practice our focus is on interprofessional collaboration. Examining our current practices and identifying opportunities to limit unnecessary OR traffic, our aim is to improve patient safety by reducing SSI's, thus by reinforcing a culture of accountability and excellence.

OBJECTIVES

1. Surgical team members will be able to describe the link between OR traffic and maintaining a sterile environment by reducing air-borne contaminants therefore decreasing the potential for SSI.
2. Interdisciplinary education will be demonstrated by decreasing unnecessary staff traffic during surgical procedures promoting adherence to recommendations that minimize room entry and exit.

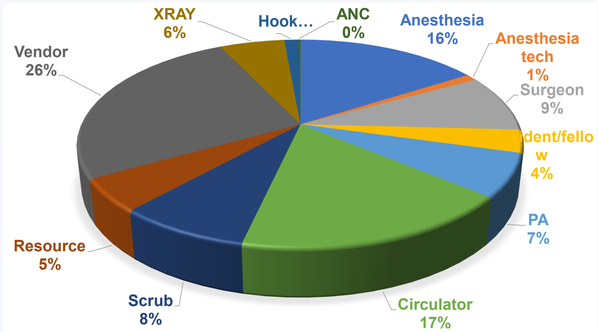
METHOD

A multidisciplinary team was assembled to investigate the relationship between OR traffic and SSI rates. We developed a data collection tool to monitor and record the number of times the front and back OR doors were opened. Additionally, we identified the individuals responsible for each instance of traffic during the surgical procedure. Following our initial audits, a series of targeted interventions were implemented to reduce OR traffic.

- Multidisciplinary team education
- Real time updating of surgical preference cards
- External door signage
- Use of retractable caution tape

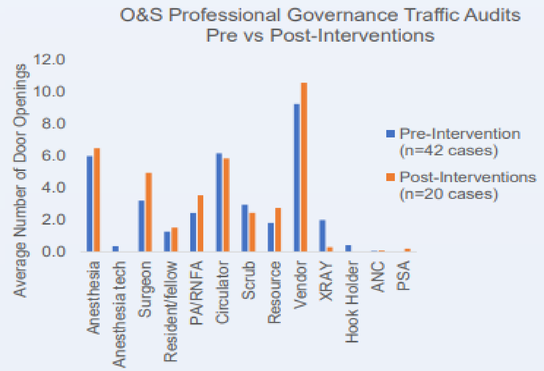
Image by Kraus

RESULTS



As seen in the graph above, the results of the audit were compelling and highlighted a clear need for change. Data revealed a high frequency of door openings during surgical procedures-many of which were unnecessary and preventable.

Following the implementation of the mentioned interventions, the data suggests a downward trend in door openings in both scrub and circulator staff roles. Unfortunately, the data reveals little change to interdisciplinary participants.



CONCLUSION

After a brief learning curve our efforts to reduce OR traffic as a means of lowering SSI rates have been ongoing. However, shortly after implementing our interventions, we received positive feedback from different members of the team. This feedback manifested in more mindful movement in and out of the OR. Although we plan to expand the use of telephone communication, the phones have been ordered and are currently pending delivery. Their purpose will allow us to optimize communication more effectively. The need for more education and accountability among other members of the team is apparent. We will continue to educate, audit traffic and monitor SSI rates. Ultimately our goal is to foster a safer surgical environment, awareness of our surroundings thus improving patient outcomes.

REFERENCES

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