

Baptist Health South Florida

## Scholarly Commons @ Baptist Health South Florida

---

All Publications

---

2-2-2024

### Nursing Advocacy Reduces Surgical Site Infections

Zebina Rodger

West Kendall Baptist Hospital, ZebinaSR@baptisthealth.net

Claudia Chanes

West Kendall Baptist Hospital, claudiach@baptisthealth.net

Follow this and additional works at: <https://scholarlycommons.baptisthealth.net/se-all-publications>

---

#### Citation

Rodger, Zebina and Chanes, Claudia, "Nursing Advocacy Reduces Surgical Site Infections" (2024). *All Publications*. 5062.

<https://scholarlycommons.baptisthealth.net/se-all-publications/5062>

This Conference Poster -- Open Access is brought to you for free and open access by Scholarly Commons @ Baptist Health South Florida. It has been accepted for inclusion in All Publications by an authorized administrator of Scholarly Commons @ Baptist Health South Florida. For more information, please contact [Carrief@baptisthealth.net](mailto:Carrief@baptisthealth.net).

# Nursing Advocacy Reduces Surgical Site Infections

Zebina Sonia Roger, RN, BSN, BS, MT(ASCP), CIC, FAPIC, SSGB

Claudia Chanes, MSN, RN, CNOR

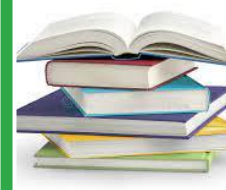
West Kendall Baptist Hospital



## Background/Significance

- SSIs remain a substantial contributor to morbidity, prolonged hospitalizations, and death.
- FY22, FY23 and FY24 Q1, SSI data collection by Infection Prevention, using National Healthcare Safety Network (NHSN) guidelines, revealed SSIs were due to anastomotic leaks and incidental lacerations.
- Project aim was to reduce SSIs through nurse advocacy for adherence to literature supported EBP measures to prevent SSIs.
- Root cause analysis and action plans were undertaken.

## Methods



Systematic review of strategies to prevent SSI from leak anastomosis and incidental laceration in colectomy and hysterectomy surgery patients, revealed multimodal EBP strategies.

Between FY22 and FY23, nurses began advocacy for adherence to EBP guidelines, engaging surgical team to pursue EBP surgical bundle top recommendations:



- > Infectious disease MD intraoperative consult after incidental laceration for antibiotic adjustment
- > Surgical creation of a "true" end-to-end circular staple reinforced intraoperative anastomosis integrity to prevent leakage
- > Using flexible endoscopy for left colectomy and manual visualization for right colon
- > Use of indocyanine green fluorescence angiography

## Results/Outcomes

- Through nursing advocacy, surgeons adopted new EBP recommendations including enhanced recovery after surgery (ERAS) protocols.
- Root cause analysis was undertaken in all SSI cases.
- Eligible SSI cases were only those reported to NHSN for inclusion based on risk hierarchy and the rest of cases were excluded per NHSN.
- The Standardized Infection Ratio (SIR) – number of actual infections divided by the number of predicted infections – for colon surgeries in FY22 was 0.850 and abdominal hysterectomies was 1.800.
- The SIR for colon surgeries in FY23 was 0.335 and abdominal hysterectomies was 1.110, a decrease of 61% and 38% respectively.

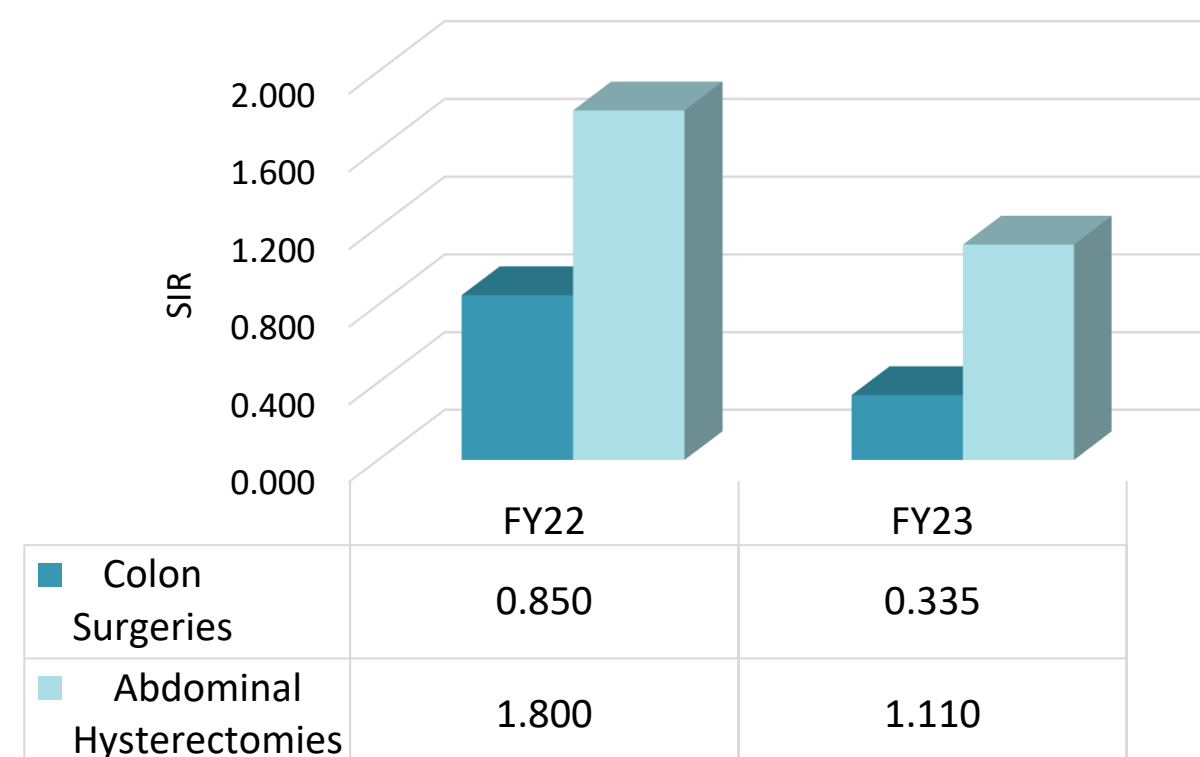
## Project Goal/Objectives

- The purpose of this project is to reduce surgical site infections (SSI) by advocating the use of the latest evidence-based practice (EBP) literature addressing prevention of anastomotic leaks and incidental colon lacerations, shown to significantly contribute to SSI.



## Results/Outcomes

Standard Infection Ratio (SIR)  
Colon Surgeries and Abdominal Hysterectomies  
FY2022 and FY2023



## Implications/Conclusion

- Nursing advocacy is pivotal for adherence to EBP in SSI prevention strategies.
- Having clear communication with perioperative staff, collecting individual SSI case data, and monitoring recommended guidelines compliance is crucial in decreasing SSIs in colectomies and hysterectomies.

## References

- Luo, W., Qian, C., Lu, T., Zhang, L., Sun, M., Li, F., Xu, Z., & Jia, Y. (2020). A modified side-to-side anastomosis using a circular stapler reduces anastomotic leakage in colonic surgery. *Surgical Innovation*, 27(2), 143–149.
- Trastulli, S., Munzi, G., Desiderio, J., Cirocchi, R., Rossi, M., & Parisi, A. (2021). Indocyanine green fluorescence angiography versus standard intraoperative methods for prevention of anastomotic leak in colorectal surgery: Meta-analysis. *British Journal of Surgery*, 108(4), 359–372.
- Additional references available upon request.

