

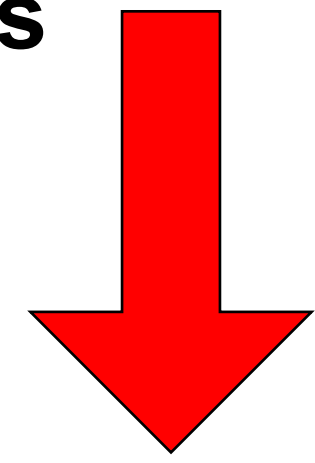
Surgical Site Infection (SSI) Colon Reduction Through a Multidisciplinary Approach and Culture Change Strategy



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Site Name: Advocate Christ Medical Center

Background:

- Rolling 12-month Colon SSIs in 2022 = 2,396 with 27 infections



- Patient Safety Concern** = increase morbidity, length of stay, readmissions, & costs
- Variation in compliance with SSI bundles was an opportunity for improvement

Objective:

- Goal:** Reduce Colon SSI rates by creating an interdisciplinary & interdepartmental team for structured SSI drilldowns and gaps in evidence-based practice (EBP) to improve outcomes

Approach:

- SSI Committee: High focus on Colon SSI's
- Roles included: Surgeon, Anesthesia, Nursing, Infection Prevention, Epidemiology, Quality, Surgery Leadership and Pharmacy

Approach / Focus in 2023

- Surgery case observations with monthly rounding
- Environmental Services high-touch surface areas
- Preparation of the surgical patient
- Infection Present At Time Of Surgery (PATOS)

Additional Measures in 2024

- SSI Deep Dive Sub-group to review colon bundle elements and opportunities
- Perioperative Glycemic Control Focus
- SSI EBP Bundle Elements with PATOS focus

Expansion Measures in 2025

- Preoperative Surgery Checklist
- PATOS Real-time review of documentation
- SSI Frontline Group and Pediatric Group to reduce variation in practice for colon surgery patients
- Perioperative Temperature Management Committee

Approach (continued):

Christ Hospital SSI Committees & Subgroups			
Time	Group/Initiative	Interval	Focus & Goals
2022	SSI Committee	Quarterly	Report-out & update of all action items
2023	Surgery Case Observations	Monthly	Observe O.R. practices & identify opportunities for improvement (OFI)
2023	Surgery Environment of Care Rounding	Monthly	Rounding & testing high-touch surfaces, environment, & equipment for OFIs
2023-2024	RN Patient Preparation and PATOS Education	Ongoing	RN Education for preparing patient MD Education for PATOS EMR needs
2024	Midwest Region (MWR) Preop Surgery Checklist	Monthly	Integrate SSI colon bundle elements into EMR surgery preop checklist
2024	SSI Deep Dive Group	As SSI's identified	SSI review of colon bundle elements & EBP to identify OFI's with interventions
Q3-2024	EBP Perioperative Glycemic Control	As SSI's identified	Review EBP and system protocol use per SSI for OFI's with Interventions
2025	Christ Hospital Periop Checklist Job Aid	In Progress	Align job aid with EMR preop checklist & added Christ Hospital periop EBP
2025	SSI Clinical Workgroup	Monthly	Enhance EBP; report to Professional Governance Council to align Nursing
2025	MWR Temperature Management Committee	Monthly	Standardize EBP & products to maintain normothermia in all phases of care
2025	Pediatric SSI Subgroup	Monthly	Incorporate & standardize SSI bundle elements / EBP with a dashboard goal
2025	PATOS Op Note Real-Time Review	Ongoing	RN review for MD needs to amend PATOS inaccuracies per NHSN needs

Table 1. SSI Committee Overview of Workgroups & Initiatives with Focus/Goals

Phase	SSI Bundle Element	Met?	Rationale & Identified OFI
PRE-HOSPITAL or INPATIENT PREOP UNIT	Abnormal Preop tests or history addressed before surgery	✓	
	CHG Bathing with bed sheet change per instructions	✓	
	Pre-Surgical Optimization Clinic (PSOC) to optimize surgery	✓	
	Bowel: Mechanical Bowel Prep & Antibiotics	✓	
PREOPERATIVE	Clear Pre-surgery Drink per Surgeon Instructions	✓	
	Surgical Team Approach Advanced Recovery (STAAR) orders	✓	
	3M Povidone-Iodine to Nares	✓	
	CHG Bath/Wipe (with bed sheet/linen change)	✓	
	Preoperative Shave/Clip	N/A	Documented: no abdominal hair to shave
	ABX (timing, weight-base & type needed)	No	Ancef given 2 min. late; Flagyl given on time
INTRAOPERATIVE	Normoglycemia (BS checked/maintained & orders placed)	✓	
	Normothermia (Temperature checked/maintained)	✓	
	CHG Skin Prep	✓	
	Bowel Surgery: Glove/gown/instr./sterile field change	✓	
	ABX re-dose given if applicable	✓	
	Normothermia (Temp. checked/maintained/documentated)	No	Missing documentation within incision time
POSTOP & DISCHARGE	Normoglycemia (BS checked/maintained per Anesthesia)	✓	
	Trays opened/set up in appropriate area/environment	N/A	Not observed during this case
	Aseptic technique maintained & O.R. traffic limited	N/A	Not observed during this case
	STAAR postop ordersets placed?	✓	
POSTOP & DISCHARGE	Normoglycemia (BS checked/maintained & orders placed)	✓	
	Normothermia (Temperature checked/maintained)	✓	
	Wound dressing intact 24-48 hours post-surgery	✓	
	D/C Instructions: at-home Wound/Incision & Hygiene Care	✓	Working to improve patient education

Figure 1. Image of SSI Colon Bundle Drilldown Elements Reviewed & Addressed

Results:

- ★ **26.7% improvement** in Colon SSI rate from 2022 to 2024
- ★ **58.1% improvement** in Colon SSI events from 2022 to 2025

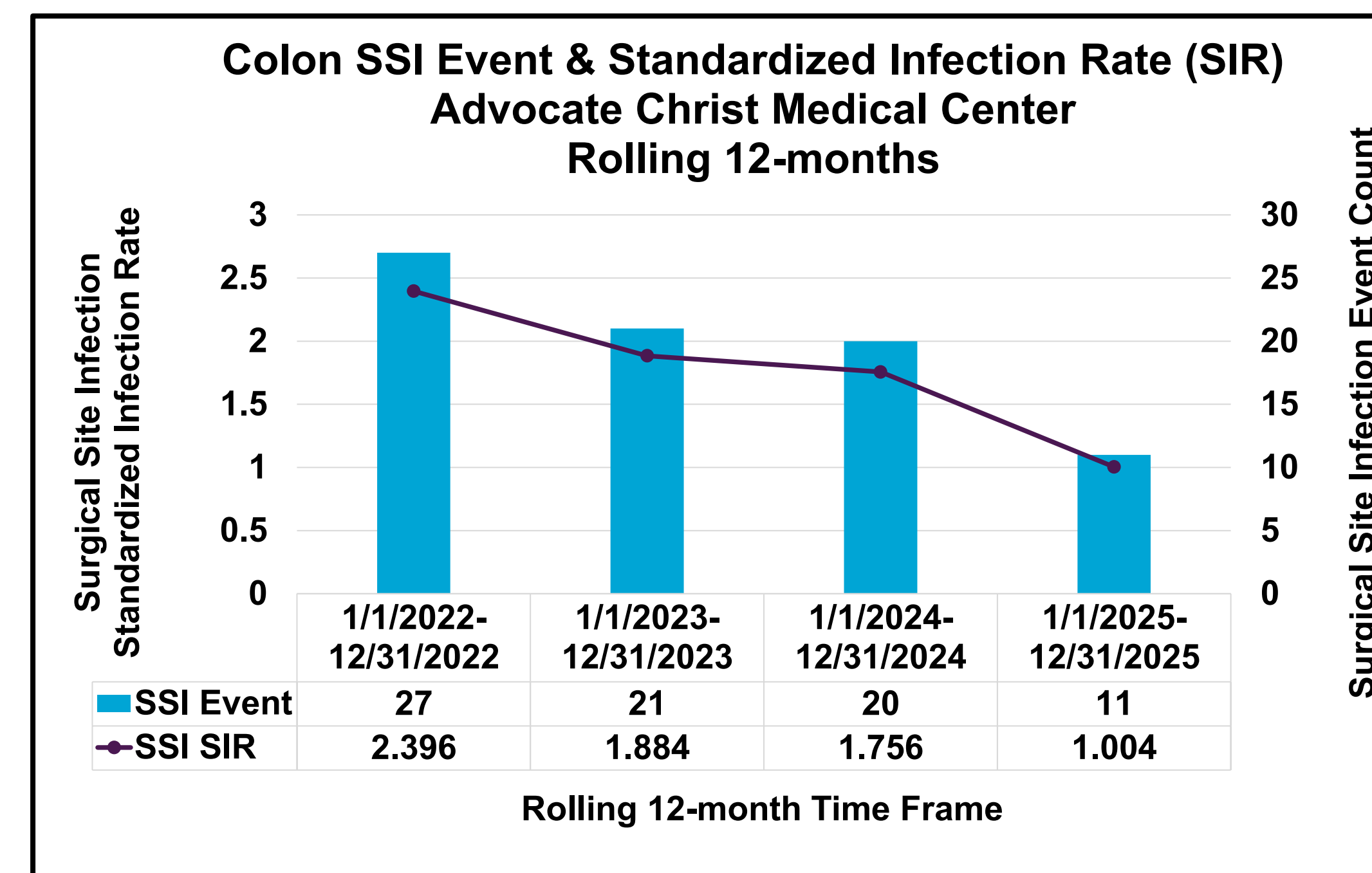


Figure 2. Colon SSI Events & Standardized Infection Rate (SIR) over a rolling 12-months each year

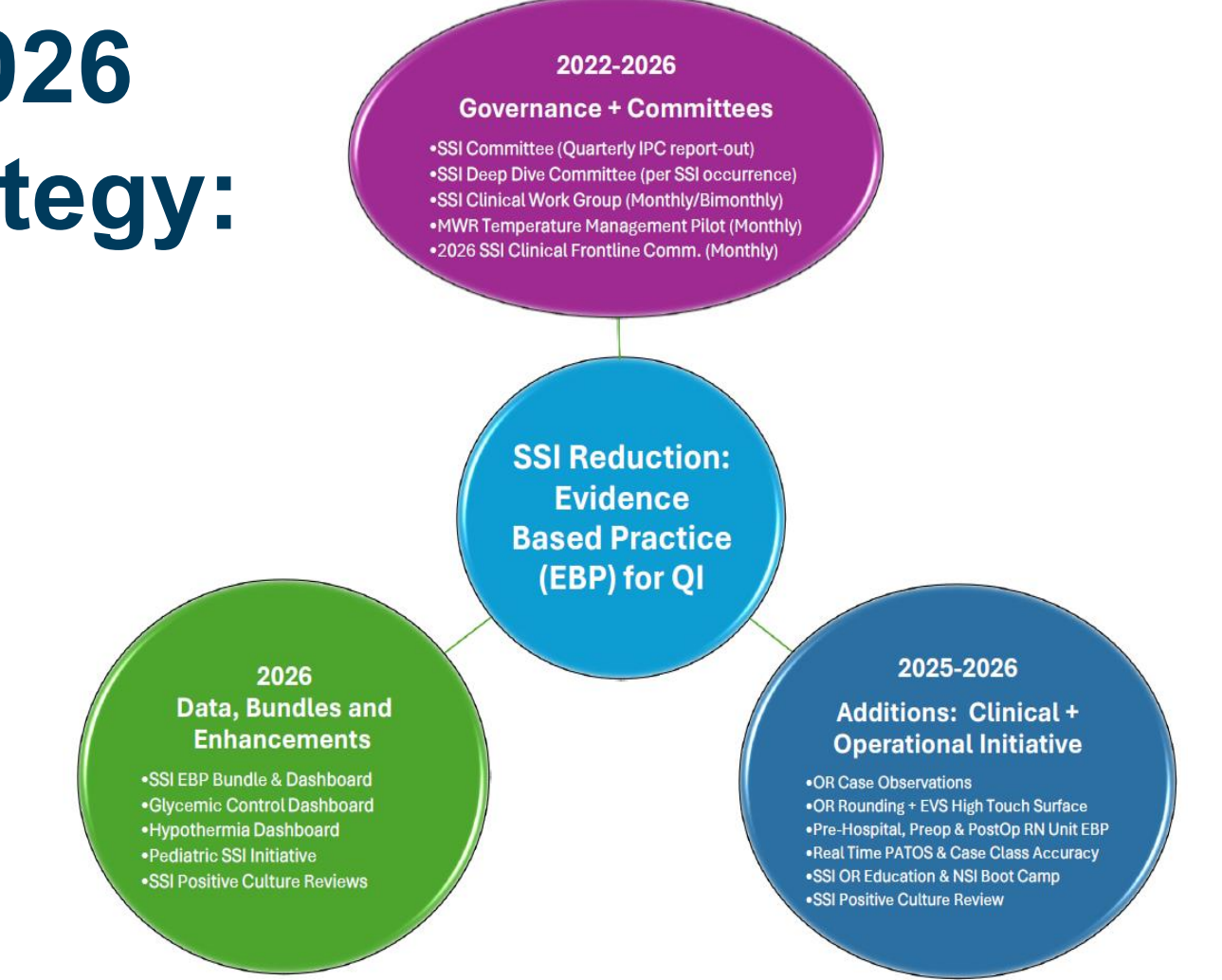
Discussion

- Our strength lies in unifying departments and teams** with an EBP SSI Bundle approach
- An Interdisciplinary Approach with Engagement for a Culture Change**
 - Moved away from top-down review to an inclusive, cross-departmental approach for all roles and areas of care to the patient
- Began with improving process compliance and transformed into optimizing outcomes using a global approach for EBP**
 - Pre-surgery optimization clinic (PSOC) aligns providers while optimizing & educating patient
 - EBP in antibiotic prophylaxis, glycemic control, normothermia and environment of care
 - Real-time appropriate PATOS documentation
 - Postoperative EBP and discharge follow-up

Limitations

- Resource time of clinicians
- Availability of leadership, providers & clinicians to make needed changes

2026 Strategy:



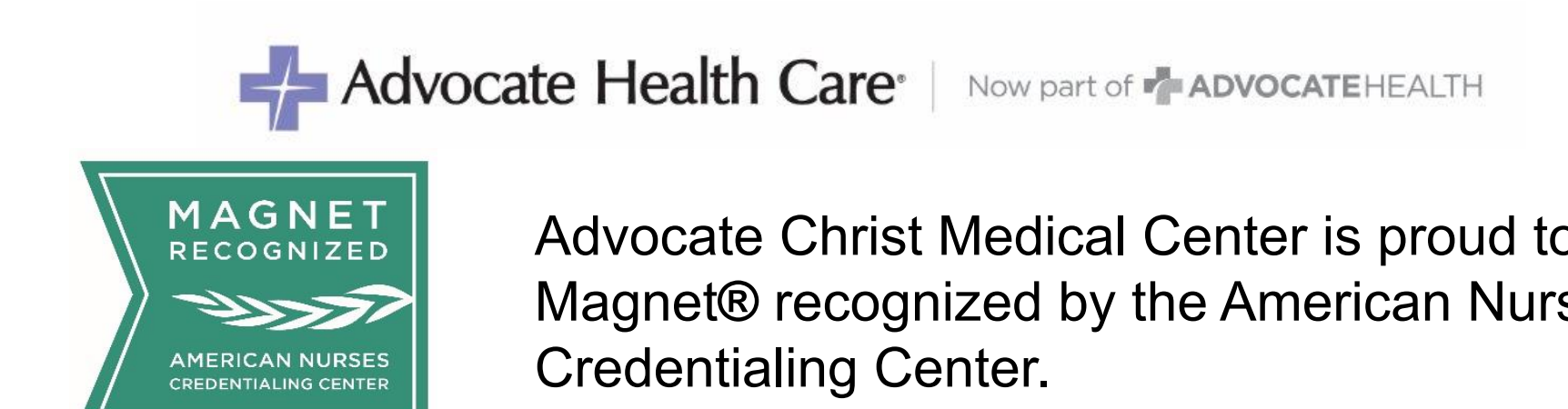
Implications for Practice

- Key Takeaway:** Improving outcomes and reducing SSIs involves an aligned, collaborative, interdisciplinary approach
- Proactive Approach:** Integrate all involved areas with an on-going review for opportunities and actionable items
- Global Approach:** Optimize the patient with all involved areas and align efforts
- Patient Journey:** Educate and inform the patient for their best outcome
- Collaboration:** Continue to break down silos and communicate to align all areas
- Engagement:** Promote a culture change of partnership to align EBP standards
- Next Steps:** Enhance education to the surgical patient / all involved clinicians

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