Caesarean Section Surgical Site Infections: From Policies and Procedures Into Action: A Multidisciplinary Team Approach Is Critical To Facilitate Compliance To Prevention Bundle

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*Nothing to disclose

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ISSUE/BACKGROUND

Surgical Site Infections (SSIs) are the most costly healthcare associated infections (HAI) among patients undergoing surgical procedures. Up to 60% of SSIs are considered preventable with evidence-based strategies. A subset of SSIs occur after Caesarean section (C-section), which is one of the most frequently performed obstetric surgical procedure and is associated with 5 to 20 fold rise in maternal morbidity and postpartum mortality. An active surveillance program to monitor C-section SSIs has been implemented at Humber River Hospital for over 5 years. During the peak of COVID-19 pandemic (2021-2022), our facility observed an increase in the number of C-section SSIs: 4 cases in 2 consecutive months compared to 0-1 cases per year previously.

> As a result of this observation, a nultidisciplinary team was put in place to identify the causes for this increased incidence.



PROJECT

In 2022, four C-section SSI cases were identified over a two month period. These cases were identified on readmission to the facility.

Once cases were identified by the Infection Prevention and Control (IPAC) team, the Medical Director for the Maternal Child Program (MCP) reviewed and confirmed them as true SSI cases.

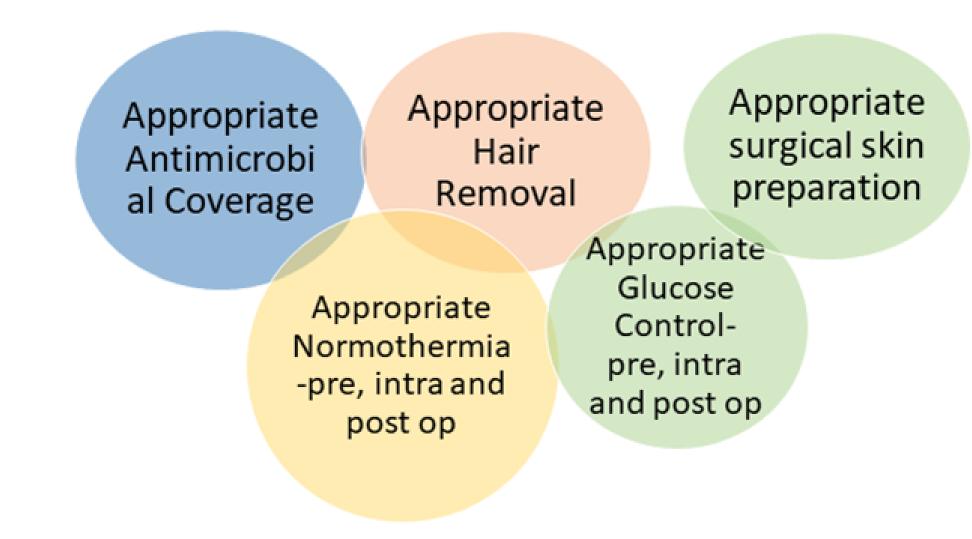
Cases were then reviewed with MCP leadership using standardized 'Case Review Form'.

Monthly meetings were initiated with the MCP managers, practice leader, Medical Director and IPAG team to discuss gaps and recommendations to prevent future cases

A 'C-Section SSI evention checklist' w reviewed with the MCP

PROJECT

'C-Section SSI prevention checklist' focused on these process indicators



This project followed the framework of **four 'E'** implementation strategies (The Society of Healthcare Epidemiology of America).



 Program leadership was engaged to discuss the issue and implementation of SSI prevention bundle.



 IPAC team reviewed the best practice guidelines, followed by collaboration with program to ensure the facility's SSI prevention protocols were aligned with endorsed guidelines. Staff huddles were scheduled on Routine practices (Hand Hygiene, Risk assessment) and the SSI prevention bundle.



 Throughout there was a focus on consistent communication and refining practices from identified gaps. Monthly reporting was initiated for SSI rates in the facility's monthly IPAC meetings



• Follow-up meetings were scheduled for process improvements through auditing of Routine practices

LESSONS LEARNED

A multidisciplinary approach is paramount in addressing and improving HAIs. Ongoing adherence and monitoring of best practices helps to reduce the incidence of HAIs. Having an SSI prevention interest group would be beneficial for training and education across regions.

- Humber River Hospital procedure: Surgical Site Infections Surveillance (SSI) Caesarean Section Procedure
- Prevent Surgical Site Infections; Getting started Kit: Saferhealthcare Now
- Stretegies to prevent surgical site infections in acute care; 2014. SHEA

RESULTS

The collaboration between MCP and IPAC improved awareness and compliance to SSI prevention bundle through implementation of these interventions:



products and

technique

Discharge Summary Review of 'Patient Education '

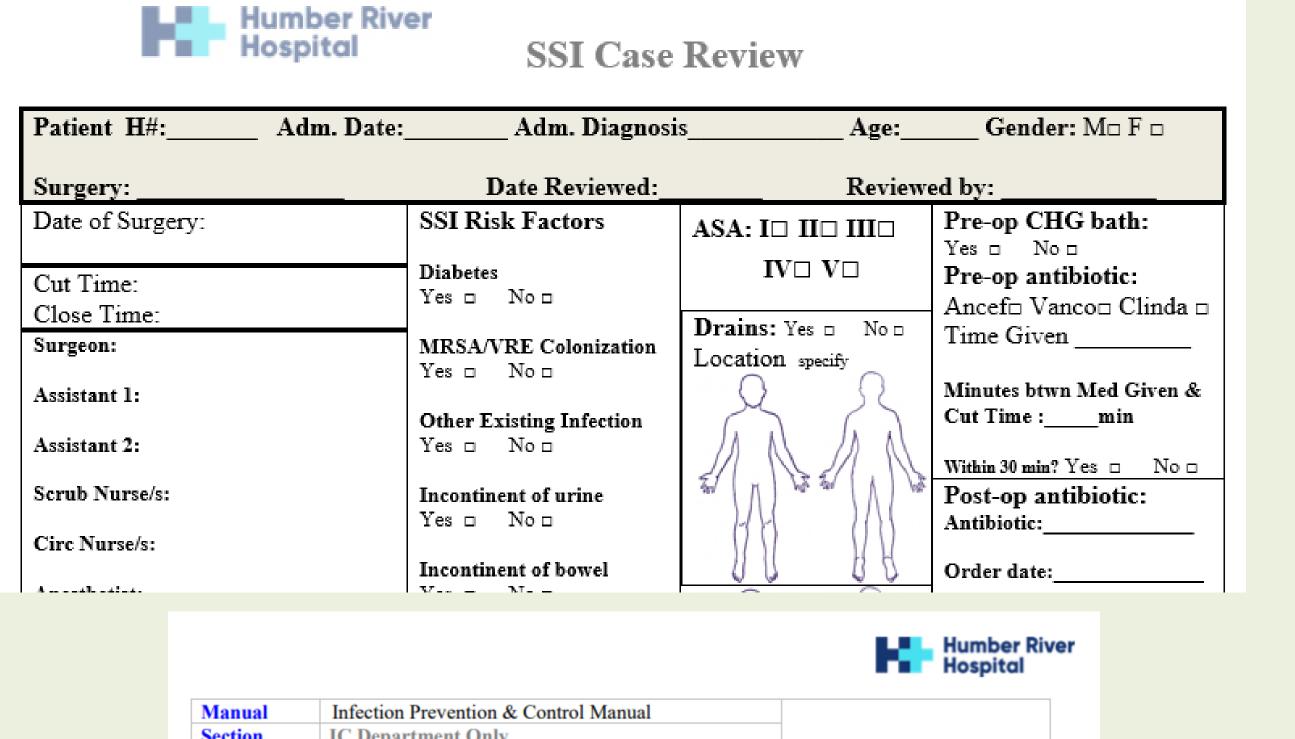
discharge teaching



Wall clocks outside and inside OR's to observe adequate Hand hygiene



Quarterly reporting of C Sec SSI cases in facility's monthly IPAC committee meetings



DIRECTOR, INFECTION PREVENTION & **PROCEDURE** DIRECTOR, INFECTION PREVENTION & Version Number: Reference #: 9073 This is a CONTROLLED document. Any documents appearing in PAPER FORM should be checked against the electronic document SURGICAL SITE INFECTIONS SURVEILLANCE (SSI) CAESAREAN SECTION -PROCEDURE Procedure Statement To effectively prevent surgical site infections (SSI), Infection Prevention and Control (IPAC) participates through an interdisciplinary approach for conducting Caesarean Section - surgical site infection (SSI) surveillance and reporting at Humber River Hospital (HRH). This document outlines the procedure Infection Prevention and Control (IPAC) undertakes as part of active SSI surveillance. The following surveillance activities are based on Canadian best practice recommendations (Safer Health Care Now).

An 'Issues to action' document was developed to monitor adherence to best practices.



Issues to Action: C. Sec SSI identified Unit: Birthing Unit/Mother Baby Unit Date initiated: Oct 14, 2022- now

Status Legend for Templates		Status Summary	
-√	Process completed		
\leftrightarrow	Process is in place and ongoing		
1	Process completion is underway		
×	Process not yet underway		
OD	Overdue		

- 4 new C. Sec SSI's identified on post C. Sec patients'; Q2 (2-Aug, 2-Sep)
- Charts were reviewed for these patients while readmitted to HRH-Surgery or ER visits and met criteria for NHSN definition of SSI.
- Maternal Child program stakeholders notified and follow up meetings scheduled.

Root Cause

 To identify using 'Case review template' comparing against SSI prevention checklist recommendations (Safer health Care Now)