

Reducing Cesarean Section Infections

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Purpose

Norton Women's and Children's Hospital (NWC) and Norton Hospital (NH) experienced a steady increase of surgical site infections (SSI) in cesarean section patients.

2016	Norton Women's & Children's	Norton Hospital
Total Cases	1790	1007
Infections	36	30
Infection Rate	2.01%	3.1%

Background

The following evidenced-based bundle elements were adopted:

- 1) Chlorhexidine 2% wipe to abdominal area on admission to labor and delivery.
- 2) Prophylactic antibiotic start within 60 minutes prior to cut. Weight-based antibiotic dosing for patients with weight of 264 pounds or greater.
- 3) Vaginal vault prep, if ruptured membranes with betadine solution.
- 4) Chlorhexidine pre-op skin prep in operating room.

In 2018 re-focus was placed on the bundle elements. Implementation of a Reaching for Zero program with emphasis on safety strategies, such as 200% accountability, facilitated a culture of safety and goal to eliminate preventable infections.

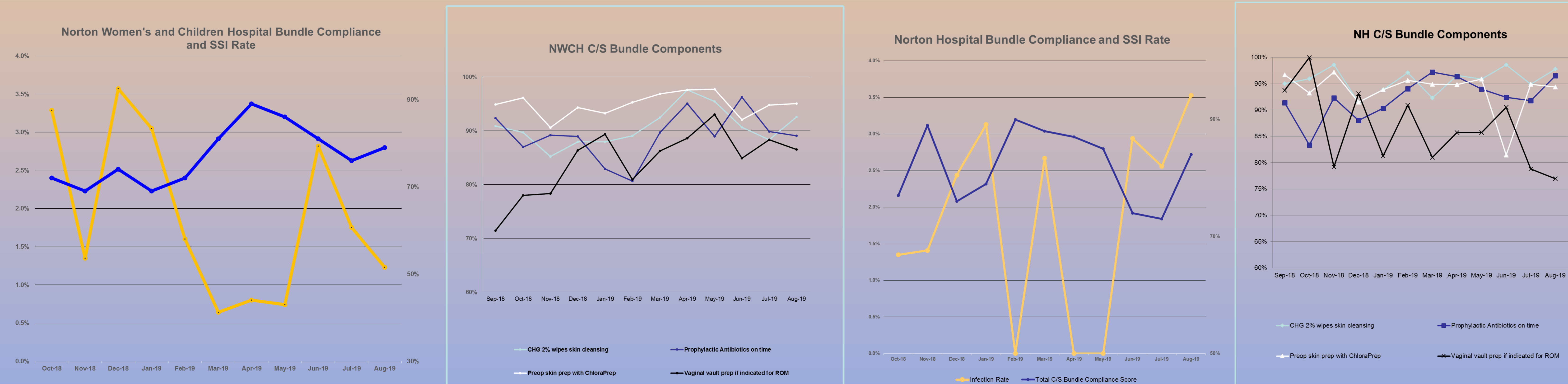
Acknowledgements

Thanks to all the efforts of the women's services staff and physicians in reducing preventable infections.

Action Items

- 1) Established a culture of accountability. Providing immediate feedback to nurses and physicians on elements that are missed. Utilize the SAFE Behavior Decision Tree as required.
- 2) Developed a standardized C-Section wound care instruction reviewed by the discharging nurse with patients and families.
- 3) Components of the appropriate elements of the bundle, such as timely antibiotics, were included in the Time-out and Sign-out processes in the operating room.
- 4) EPIC chart was enhanced to allow the nurse to document reasons for delay in C-Section to assist in the identification of opportunities for improvement.
- 5) Conduct apparent cause analysis on each surgical site infection with team members involved in the care, when possible.

Results



Discussion

Many factors contribute to development of a SSI. Obesity, diabetes, opioid use, are out of the control of the healthcare worker. Compliance with bundle elements facilitate the healthcare worker to reduce the risk of infection and improve patient safety.

When bundle compliance improved above 90%, a decrease in surgical site infections was noted. This was especially evident with the deep and organ space infections.

NWC experienced a record number increase in deliveries for July and August, 2019. There was a slight reduction in bundle compliance and an increase in SSI rates. However, process appears stable based on the data trend.

YTD 2019	Norton Women's & Children's	Norton Hospital
Total Cases	1149	335
Infections	19	4
Infection Rate	1.65% (-0.36)	1.19% (-1.81)

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