



Improving Adherence to SSI Bowel Bundle Protocol and Audit Collection

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Background

- Surgical site infections (SSI) are the most common and costly of all hospital-acquired infections.
- SSIs account for 20% of all hospital-acquired infections.
- On my high-volume colorectal surgery unit, the current initiative includes:
 - SSI audits are collected after every bowel surgical case
 - Standardized SSI bowel bundle protocol practices
- There have been a decrease in SSI bowel audit completions
- The unit's targeted metric for SSI rate is $\leq 3.5\%$ and our baseline is 5.5%.
- Goal:** to improve adherence to SSI bowel bundle protocol and increase SSI audit collection to help decrease bowel SSIs on my surgical unit.

Description of Team

- Project leader/developer: Megan Piñon, BSN, RN. Delegated SSI champion and full-time nurse.
- Unit staff: 25 staff member participants. A mixture of nurses and surgical techs.

Preparation and Planning

- A short anonymous survey was developed and dispersed during the weekly morning meeting to the unit's surgical techs and nurses.
- The survey was focused on:
 - The staff's personal opinions on why SSI audit submissions are down
 - Barriers to adhering to the SSI bowel protocol.
- A small token of thanks was handed out upon completing the survey.

Bowel SSI Audit: A short anonymous survey

Best response reference to SSI bowel bundle protocol and increasing SSI audit collection

1. How often do you observe a full 3-min Chloraprep drying time?

2. How often do you observe a full 3-min Chloraprep drying time?

3. How often are supplies changed after bowel anastomosis?

4. How often is the 'bowel closing pack' utilized during closure?

5. Do you feel that completing the SSI audits helps staff to better follow bowel SSI protocol?

6. Do you find the new Bowel SSI QR code user-friendly?

7. What has been the biggest deterrent in adhering to SSI bowel protocol?

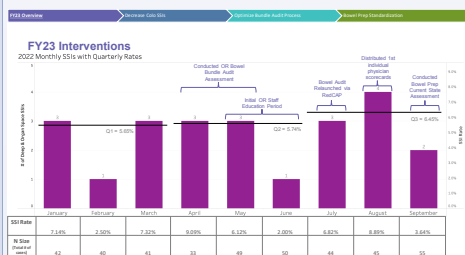
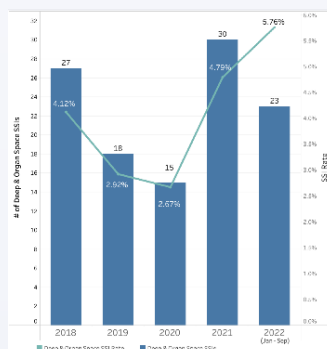
8. What has been the biggest barrier to completing SSI Audits in the past?

9. Do you agree, when faced with the biggest deterrent in adhering to SSI bowel protocol, you would be willing to take extra time/precautions to ensure SSI audit completion?

10. Do you agree, when faced with the biggest barrier to completing SSI Audits in the past, you would be willing to take extra time/precautions to ensure SSI audit completion?

Assessment and Implementation

- The volume of completed bowel SSI audits has significantly decreased over time.
- During the height of the pandemic the shifting priorities, staff turnover with new leadership, and decreased ongoing education all have led to a decrease in audit completion.
- Data from the completed bowel SSI audits show that most of the metric categories have not met our benchmark goal of 90% compliance for the July-September 2022 timeframe.
- The baseline bowel infection rate for my unit is 5.5% for July 21'-March 22' with a goal of $\leq 3.5\%$.



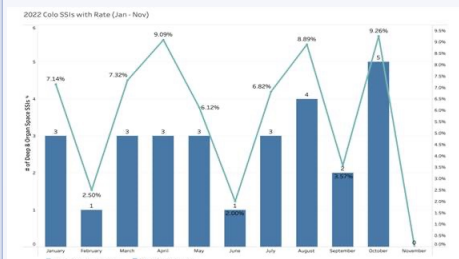
Outcome

- The results of the anonymous survey show that the biggest deterrent to following SSI Bowel protocol are:
 - attitudes/pushback (50%)
 - communication between team members (36%)
 - gap in staff education in bowel SSI protocol (28%)
- However, 60% of staff felt the audits helped them to better follow the SSI protocol and were mostly user-friendly.
- The biggest barrier to completing SSI audits are:
 - a gap in communication/ reminders that SSI audits are still being collected (66%)
 - forms were not readily available to them in the past (34%).

Question	No/Never	Sometimes	Yes/Always
How often do you observe the initial antibiotics administration time noted on the white board?	0%	28%	72%
How often do you observe a full 3-min Chloraprep drying time?	92%	8%	0%
How often are supplies changed after bowel anastomosis?	48%	52%	0%
How often is the 'bowel closing pack' utilized during closure?	28%	72%	0%
Do you feel that completing the SSI audits helps staff to better follow bowel SSI protocol?	4.3%	34.8%	60.9%
Do you find the new Bowel SSI QR code user-friendly?	12.5%	n/a	87.5%
What has been the biggest deterrent in adhering to SSI bowel protocol?	Gap in staff (including surgeon) education in bowel SSI protocol 19.4%	Not enough time/trauma 13.9%	Barrier in communication between surgical team members 25%
What has been the biggest barrier to completing SSI Audits in the past?	Gap in communication/reminders that SSI Audits were still being collected 66.7%	Forms were not readily supplied and available 33.3%	

Implications for Perioperative Nursing

- The anonymous survey shows that there has been a drift in practice on the test unit.
 - Mainly with reports of "drift in aseptic technique," "pushback" and bowel closure packs not being utilized.
- Reinforcement of the SSI audits need to be given as most staff report they help them to better follow protocol.
- The results of the survey was given to management and the next steps include:
 - Teaching staff proper SSI protocol during huddles
 - Consistent reminders of SSI audits completions
- Currently there have been **ZERO SSI** infections from when staff started consistently completing SSI audits in November
- The anonymous survey was helpful to getting an accurate assessment of the drift in practices.



References

- Ban, Kristen A. MDa,b; Minei, Joseph P. MD, FACSd; Laronga, Christine MD, FACSf; Harbrecht, Brian G. MD, FACSg; Jensen, Eric H. MD, FACS; Fry, Donald E. MD, FACS; Itani, Kamal M.F. MD, FACS; Dellinger, Patchen E MD, FACS; Ko, Clifford Y. MD, MS, MSHS, FACSa,k; Duane, Therese M. MD, MBA, FACS*, American College of Surgeons and Surgical Infection Society: Surgical Site Infection Guidelines, 2016 Update. *Journal of the American College of Surgeons*: January 2017 - Volume 224 - Issue 1 - p 59-74
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