

Surgical Site Infections (SSI) from Colon Surgery

NQF #: 0752

Developer: American College of Surgeons (ACS); Centers for Disease Control and Prevention (CDC)

Data Source: Leapfrog Hospital Survey; CMS

Description: Standardized Infection Ratio (SIR) of deep incisional and organ/space Surgical Site Infections (SSI) during the 30-day postoperative period at the primary incision site among adult patients aged ≥ 18 years who have undergone colon surgery.

Rationale: SSIs are estimated to account for 20% of all HAIs. It is estimated that there are 290,485 estimated SSIs per year. There are an estimated 8,205 deaths associated with SSIs each year. An estimated 11% of all deaths occurring in intensive care units are associated with SSIs. The medical cost to manage each SSI is \$34,670, resulting in a total of over \$10 billion attributable to SSIs in U.S. each year.

Evidence for Rationale:

- Klevens RM, Edwards JR, et al. Estimating healthcare-associated infection and deaths in U.S. hospitals, 2002. Public Health Reports. 2007; 122:160- 166.
- Scott, RD. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. http://www.cdc.gov/ncidod/dhqp/pdf/Scott_CostPaper.pdf accessed April 12, 2010.

Impact:

- Estimated to account for 20% of all HAIs
- 290,485 estimated SSIs/yr
- Estimated 8,205 deaths associated with SSIs each year
- Estimated 11% of all deaths occurring in intensive care units are associated with SSIs
- \$34,670 medical cost/SSI
- Total $>$ \$10 billion attributable to SSI in U.S. each year

Citations for Impact:

- Klevens RM, Edwards JR, et al. Estimating healthcare-associated infection and deaths in U.S. hospitals, 2002. Public Health Reports; 2007; 122:160-166.
- Scott, RD. The Direct Medical Costs of Healthcare-Associated Infections in U.S. Hospitals and the Benefits of Prevention. http://www.cdc.gov/ncidod/dhqp/pdf/Scott_CostPaper.pdf accessed April 12, 2010.

Opportunity:

- Opportunity for improvement exists, based on the coefficient of variation for the measure.

Evidence:

- Expert opinion, systematic synthesis of research

Citations for Evidence:

- Arrowsmith, V.A., et al., Removal of nail polish and finger rings to prevent surgical infection. Cochrane Database Syst Rev, 2001(4): p. CD003325.
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prevent surgical site infection. Cochrane Database Syst Rev, 2007(2): p. CD004985.