216: A Wound Prevalence Observational Study for the Prevention of Surgical Site Infections

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ABSTRACT

Background: In June, 2014 an acute care hospital system conducted a Wound Closure Point Prevalence program to prevent post-op surgical site infection (SSI). The program monitored compliance with the Joint Commission NPSG 07.05.01. The prevalence program evaluated the adoption of antibacterial sutures (AS) and topical skin adhesives (TSA) as part of a corporate 75 bundle that was implemented in 2012 to reduce SSI. 10 hospitals participated out of the 25 hospitals in the system.

Method: The team consisted of trained nurse clinical specialists with operating room experience. Individual surgeons were in-serviced on the proper use of AS and TSA products. Observations also included some in L&D and ambulatory surgery. Other factors in wound closure observed were the use of staples, non-absorbable sutures, steri-strips, surgical drains and post-op dressing material.

In addition, a lecture on the prevention of surgical site infections was presented to the surgical staff and administration to enlist artist commitment to teamwork in the reduction of SSIs.

Results: A total of 330 wound closure observations across 162 surgical procedures were observed. Surgical staple usage was highest among OB/GYN and Ortho. Topical skin adhesives (TSA) usage had a wide variation in application techniques, applying more layers than required. Topical skin adhesive was often covered with unnecessary dressings. Evaluation of hip, knee, more layers than required. Topical skin adhesive was often covered with unnecessary dressings. Evaluation of hip, knee, and shoulder surgeries was observed as a result of individual training with colon and hysterectomy rates in 2015 showed a 37.5% reduction covered with unnecessary dressings. Evaluation of hip, knee, and shoulder surgeries was observed as a result of individual training with colon and hysterectomy rates in 2015 showed a 37.5% reduction.

Conclusion: A direct observation program provided in-service on proper staple and closure technique. Reduction in excess TSA and biologic dressings was observed as a result of individual training with surgeons, physician assistants and residents. Results also revealed a high inappropriate use of surgical drains and a need for drain site protocols. Hospital established SSI teams to continue work in implementing the corporate 75 Bundle program to reduce SSIs. www.7abundie.com.

PROGRAM OBJECTIVE

Evaluate adoption of wound closure technologies that are a part of UHS’s 75 Bundle

• Identify risk factors for surgical site infection that can be addressed during wound closure

INNOVATIVE APPROACH

Risk assessments to identify gaps in compliance

Staff training to reduce variation in practices

Patient education to engage patients in care

BROAD IMPACT

For patients...

Protect against known risks for infection

FOR UHS...

Standardize practices across facilities

Ensure appropriate utilization of devices

Demonstrate “Elements of Performance” for Joint Commission’s NPSG

METHODS

Ten (10) facilities were selected for the wound prevalence study based on their standardized infection ratio for surgical site infections. Any facility with a SIR >1 were requested to participate in the observational study in the operating room to evaluate closure technique, the use of staples, drains, incisional adhesives and antimicrobial sutures.

Experienced OR Clinical Specialists conducted onsite observations and collected information. They also provided in-service education to surgeons and other surgical staff. The observations occurred over 2.3 days in the 10 facilities.

REFERENCE

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AORN Surgical Conference & Expo 2016
Session Name: 6024: Clinical Improvement/Innovation Pocket Session