Joint Commission Resources

DECREASING & PREVENTING Surgical Site Infections:

Best Practices from JCR's HEN

Hospitals participating in JCR's Partnership for Patients Hospital Engagement Network (HEN) are well on their way to reducing Surgical Site Infections (SSI). The national goal set by CMS as part of its Partnership for Patients Initiative is to decrease the preventable hospital-acquired condition of SSI by 40% from baseline. The aggregate rate of reduction for 31 of 37 (83%) JCR HEN hospitals for colorectal surgery SSI is 46%. The aggregate reduction rate for JCR HEN hospitals for abdominal hysterectomy SSI is 36%, meeting the goals of the PfP campaign.

How did they do it?

One of JCR's HEN hospital's success story began with an all day "workout" including JCR consultants and an interdisciplinary team made up of individuals from surgical nursing, infection control, pre-anesthesia testing and PACU. Together, they did an analysis of the hospital's Strengths, Weaknesses, Opportunities, and Threats (SWOT) and its Suppliers, Inputs, Processes, Outputs, and Customers (SIPOC).

Tracer findings and data were reviewed and a High Level Flow Diagram with risk points was developed, along with a Cause and Effect Diagram. The hospital team left the workout with an implementation plan of Who, What, and When (WWW Deployment Plan).

As part of the plan, the team:

- Secured leadership commitment and involvement
- Implemented Best Practice Solutions for S.S.I. reduction
- Scheduled weekly project team meetings
- Used Plan-Do-Check-Act and small tests of change for each initiative conducted on the various pilot units

- Used its Surgical Governance structure to implement recommendations throughout the surgical continuum

The result?
The hospital achieved zero defects for Colorectal Surgery SSI over a sustainable period of eight months.

The road to success has many challenges and barriers, however. Overcoming them takes hard work and dedication, which JCR HEN hospitals have committed to and are making progress.

Some of the challenges and barriers they face include:

- Not enough equipment to prevent immediate use sterilization (flashing)
- Operating room cleanliness
- Old physical plants
- Availability of data
- Staffing for efficiency and effectiveness
- Ongoing education of staff
- Need for M.D. champions in specialty areas
- Managing change

During monthly calls with the HEN hospitals, JCR consultants have been reviewing SSI data and information, providing tools and guidelines, and encouraging hospitals to share their best practice stories.

"We're pleased with the SSI reductions within the JCR HEN," said Susan McLean Whitehurst, MSN, RN, MBB, Senior Consultant and Project Manager, Joint Commission Resources. "Team members are extremely engaged, have provided positive feedback about education and resources that have been offered, and are very motivated to see the continuing results of preventable SSI reduction."

Some of the strategies JCR has recommended to the SSI reduction teams are:

- Consistently provide case specific feedback to surgeons through surgical Continuous Quality Improvement meetings, surgical governance, and one on one meetings
- Have senior leadership and physicians participate in OR Steering SSI reduction team meetings
- Involve the chief financial officer in cost per case analysis and instrument purchase justification

JCR's work with its HEN hospitals is ongoing. But to sustain improvements, the work will not be over when the Partnership for Patients project ends.

"Making care safer is an ongoing effort," said Whitehurst. "At JCR, we will continue to offer consulting services and products to help hospitals reduce hospital-acquired conditions and provide more reliable, less costly care."

What is an SSI?

By definition, a SSI is an infection that develops within 30 days after an operation or within one year of implant placement and the infection appears to be related to the surgery (CDC). The National Healthcare Safety Network data estimates 1 million SSIs within 27 million surgical procedures, with procedure related risk factors including shaving off the site, lack of timely antibiotic prophylaxis, inadequate skin preparation, poor surgical technique, or breaks in the sterile processes.

The patient with a SSI is 15 times more likely to be readmitted within 30 days after discharge with an extended length of stay of 6-10 days and a hospitalization minimum cost of $3,000 more per stay. Even more alarming is that 80% of deaths in patients with a SSI are attributable to the infection."