Q & A With Infection Preventionists

Surgical Products sought the insight of professional infection preventionists on the main challenges medical facilities face in infection control, and the key practices and products these infection control clinicians use in their own facilities to prevent infection. While the prevention measures against infection may seem basic, infection control, specifically surgical site infection, remains a leading concern for hospitals.

According to the Institute for Healthcare Improvement [1], an estimated 2.6 percent of nearly 30 million operations are complicated by surgical site infections (SSIs) each year. For certain types of surgeries, infection rates are reported up to 11 percent. As a result, each infection is estimated to increase a hospital stay by an average of seven days and add over $3,000 in charges (1992 data). Overall, approximately one in ten hospitalized patients will acquire an infection after admission, an article available from the CDC [2] reports.

Meet The Experts Connie Nowakowski, RN, BSN is responsible for monitoring all Class 1 and 2 surgical site infections at Aurora St. Luke's Medical Center and St. Luke's South Shore in Milwaukee, WI. She has worked in Infection Control for seven years and specializes in emergency preparedness and informatics. In the past, she attended c-section deliveries as a newborn nursery nurse. She is also a co-organizer of the Wisconsin APIC Seminar. Gayle Land, RN, BSN, CIC and Mary Luzinski, RN, BSN, MS, CIC are Infection Control Coordinators at Wheaton Franciscan Healthcare - St. Joseph in Milwaukee, WI. Gayle is also a co-organizer of the Wisconsin APIC Seminar. Previous to working in Infection Control, Mary worked in surgery. **1. Currently, what are some of the leading causes of infection in surgical patients? Connie:** Surgical technique is the number one cause of surgical site infections—failure to follow accepted practice guidelines or lapse in practice. Other infections that can develop in surgical patients are pneumonia and urinary tract infections. **Gayle & Mary:** There are several causes causes of surgical infections to be concerned with, including:

- Pre-existing patient conditions (i.e. diabetes).
- Trauma.
- Prior infection.
- Shaving.
- Uncontrolled glucose.
- Patient smokes.
- Improper skin prep.
- Pre-op shower not being done with antiseptic soap.
- Surgeons or operating room staff performing improper pre-procedure hand scrub.
- Less than 15 air exchanges in the OR.

- Increased and/or unnecessary traffic in the OR.
- Non-sterile instruments.
- Unnecessary tissue handling.
- Improper wearing of PPE.
- Sharps injuries.

2. What are the main challenges a hospital faces in preventing infection: Connie: Staff time constraints to follow evidence-based practices and hand hygiene. Staff are “too busy” to get the patient up to the bathroom so they leave the foley in, or “too busy” to use the hand sanitizer as frequently as they should. **Gayle & Mary:** Hand hygiene compliance. **3. What are the products and technological solutions used to prevent infection at your facility? Connie:** Chloraprep is used for the surgical site on most surgical procedures. The Bard IC foley is used to help prevent catheter-associated UTI’s. ETOH-based hand sanitizers are used for hand hygiene and surgical hand scrub. **Gayle & Mary:** Key products include CHG skin preps, prophylactic antibiotics, Bair Huggers (warming devices) and skin clippers. **4. What are the key practices surgical and other healthcare professionals can make it in their day-to-day performance ensure infections are prevented? Gayle & Mary:** Hand hygiene and following SCIP measures--the Institute of Healthcare Improvement Initiative. **Connie:** Hand hygiene! **5. Have you ever witnessed a patient or staff member contract an infection in the hospital—can you briefly discuss how it occurred and how it was handled? Connie:** I have seen infections develop but have never been able to identify the one event that caused the infection. It is usually a series of events over time that cause the infection. **6. What are the potential consequences for a patient or staff member who has contracted an infection? Connie:** Consequences can range from minor inconveniences (i.e. need to take antibiotics for a week) to death. **Gayle & Mary:** Severe complications can arise, such as multi-organ system failure, osteomyelitis, repeat surgery (i.e. hardware needing removal), mechanical ventilation and death. **7. What are the potential consequences for the hospital if an infection occurs in a patient? Connie:** The consequences for the hospital range as well. Some infections are impossible to prevent—the patient may be severely immunocompromised and develop an infection from their own body flora—and had nothing to do with hospital error. Or the patient may develop a severe bloodstream infection, leading to a lawsuit. **Gayle & Mary:** Consequences include poor patient outcome, poor public relations, legal issues and poor patient satisfaction. *The Wisconsin APIC Seminar took place April 30-May 1, 2009 in Pewaukee, WI.*

Sources: Graves N. Economics and preventing hospital-acquired infection. Emerg Infect Dis [serial online] 2004 Apr [date cited]. Available from: http://www.cdc.gov/ncidod/EID/vol10no4/02-0754.htm *[2]*

Institute For Healthcare Improvement: http://www.ihi.org/IHI/Topics/PatientSafety/SurgicalSiteInfections/ *[1]*

http://www.surgicalproductsmag.com/news/2009/05/q-infection-preventionists?qt-digital_editions=0

Links:
[1] http://www.ihi.org/IHI/Topics/PatientSafety/SurgicalSiteInfections/
[2] http://www.cdc.gov/ncidod/EID/vol10no4/02-0754.htm