

Automated surgical site infection surveillance technology allows St. Elizabeth Healthcare to improve scrutiny while reducing staff time

St. Elizabeth Healthcare, an integrated, world-class health system serving Northern Kentucky and Greater Cincinnati, is the first Greater Cincinnati/Northern Kentucky hospital to achieve Magnet™ status.

SITUATION

Surgical site infections contribute significantly to morbidity and mortality and impose tremendous burdens on the healthcare system. Most are diagnosed after discharge. With 24,000 procedures a year, manual surveillance methods were resource intensive and, at times, yielded poor results.

SOLUTION

- Expand automated infection surveillance technology with SafetySurveillor™ to include surgical event monitoring.
- Surgical histories, procedure details included.
- Special notification alerts (to e-mail and/or electronic work page) of post-procedure events – 30 days for non-implant, 365 for implants – if there is a readmission, an outpatient visit, a new culture order or a positive microbiological culture result.

RESULTS

- Surgical surveillance by Infection Control Professionals (ICPs) decreased an average of three hours per day.
- Focus of ICPs shifted to prevention
 - 29 percent increase in educational offerings
 - Accomplished with fewer recorded work hours
- Additional time for ICPs to develop new strategies to reduce surgical site infections and to implement new screening protocols and other infection control projects

SafetySurveillor™ Lead Surgeon vs. NHSN SSI Rate Comparison By Procedure Group and Risk Index Category						
12/01/2008 - 12/31/2008						
Risk Index Category	SSI Rate %		Number of	Number of SSI		p-value
	NHSN	Surgeon	Procedures	Expected	Actual	
DEMO1, SURGEON						
APPY - Appendectomy						
0-Yes	0.7	0.0	1	0.0	0	0.93
CHOL - Cholecystectomy						
M	0.4	0.0	5	0.0	0	0.88
1	1.8	0.0	1	0.0	0	0.89
HER - Herniorrhaphy						
0	0.8	0.0	5	0.0	0	0.84
1	2.1	0.0	1	0.0	0	0.88
2,3	4.5	0.0	1	0.0	0	0.83
MAST - Mastectomy						
0	1.7	0.0	4	0.1	0	0.79
1	2.2	0.0	1	0.0	0	0.88
THOR - Thoracic						
2,3	2.5	0.0	1	0.0	0	0.88
DEMO2, SURGEON						
COLO - Colon						
1	5.7	0.0	1	0.1	0	0.81
2	8.5	0.0	2	0.2	0	0.88
M,0	4.0	0.0	1	0.0	0	0.84
HER - Herniorrhaphy						
2,3	4.5	0.0	1	0.0	0	0.83
DEMO3, SURGEON						
CRAN - Craniotomy						
1	1.7	0.0	2	0.0	0	0.85
FUSN - Spinal fusion						

"I've been doing Infection Control since the late 1970s. SafetySurveillor has made the biggest difference in my practice during that time. It totally changed the way we do what we do. It let us get back to our primary focus – prevention. Before SafetySurveillor, so much of our day was gobbled up by paper, copying things down and transferring it from one list to another. SafetySurveillor is definitely one of the most important changes we have made."

Patricia Burns, BSN, R.N. CIC
Infection Control Coordinator, St. Elizabeth Healthcare

FOR MORE INFORMATION:

Contact the Informatics Solution Center at 800.805.4608 or InformaticsSolutionCenter@premierinc.com.

