A Standardized Hand-Off during the Transition between PACU and the Postoperative Unit Improves Antibiotics being Discontinued 24-Hours after the Completion of Surgery
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Problem
Medicare and Medicaid Services (CMS) and the Centers for Disease Control and Prevention (CDC) implemented the Surgical Infection Prevention (SIP) project in August 2002. A panel of experts developed three measures for national surveillance and quality improvement: (1) prophylactic antibiotic received within one hour before surgical incision, (2) prophylactic antibiotic is consistent with currently published guidelines, and (3) prophylactic antibiotic is discontinued within 24 hours after the end of surgery. The goal of the SIP project was to reduce morbidity and mortality from postoperative surgical site infections (SSIs), which account for 14 to 16% of all hospital-acquired infections.1

Evidence
Timing of the antibiotics has been problematic for many hospitals. The discontinuation within 24 hours after the end of surgery requires coordination between the Perianesthesia, Post Anesthesia Care unit (PACU), and surgical unit staff. According to Clancy, collaboratives such as the Surgical Care Improvement project provide a natural opportunity for shared learning which may accelerate the pace of improvement and innovation.2

Strategy
The Surgical Unit compliance with antibiotics being discontinued within 24 hours of after the end of surgery was 95%. Upon review of the 5% of the outliers, a team comprised of the PACU and surgical unit staff, identified that the communication of the dosage times were not being communicated during the transition of care between the two units. The nurses had to interpret the Medication Administration Record.

Practice Change
In order to remedy this, the staff devised an standardized verbal report between the PACU and using the TeamSTEPPS methodology of I PASS THE BATON which addresses when the next dose of antibiotic is due.3

Recommendations/Lessons Learned
Teamwork climates have post-operative sepsis rates half that of the AHRQ-reported national average for the National Quality Indicator rate for post-operative sepsis.4 Introducing a teamwork approach that crosses patient care units can also be successful in discontinuing antibiotics. The nurses developed a collaborative relationship and developed trust in the information provided through a standardized format for hand-off.

Evaluation/Results
The rate of success of the discontinuation of antibiotics with 24 hours after the surgery is completed increased to 99-100% on the surgical unit. The standardized hand-off is being implemented throughout the hospital.
Bibliography: