Surgical Site Infections (SSI) following Colon Surgery and Abdominal Hysterectomy have been included as Value-Based Purchasing (VBP) outcomes measure as of FY 2019, and performance on these measures will impact hospital reimbursement from Medicare.

What is Value-Based Purchasing?

- VBP is one of the hospital pay-for-performance (P4P) programs under the Affordable Care Act.
- VBP program is a Centers of Medicare and Medicaid Services (CMS) initiative that withholds a portion of Medicare reimbursement, which may be earned back by performing well on a set of quality metrics.
- VBP uses a number of performance measures to create a single Total Performance Score (TPS) for the institution.
- TPS affects 2% in FY 2019, of the Base Operating DRG Payment for Medicare cases.
- Hospitals that score on the higher end of the TPS will recoup the withheld amount, with an opportunity to realize up to a 2% gain.
- Hospitals that score on the lower end of the TPS will lose a percentage of their withheld payment up to 2%.
VALUE-BASED PURCHASING MEASURES AFFECTING FY 2019 PAYMENT

25% SAFETY
- Catheter-associated urinary tract infection
- Central line-associated blood stream infection
- Clostridium difficile infection (C. difficile)
- Methicillin-resistant staphylococcus aureus bacteremia
- Elective delivery prior to 39 completed weeks gestation
- Surgical site infection (SSI):
  - Colon
  - Abdominal hysterectomy

25% PERSON AND COMMUNITY ENGAGEMENT
- Communication with nurses
- Communication with doctors
- Responsiveness of hospital staff
- Communication about medicines
- Hospital cleanliness and quietness
- Discharge information
- 3-Item care transition
- Overall rating of hospital

25% CLINICAL CARE
- Acute myocardial infarction (AMI) 30-day mortality rate
- Heart failure (HF) 30-day mortality rate
- Pneumonia (PN) 30-day mortality rate
- Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA) complication rate

25% EFFICIENCY AND COST REDUCTION
Medicare spending per beneficiary

Total Performance Score (TPS)
Evidence in peer reviewed clinical journals supports the use of Minimally Invasive Surgery (MIS) vs. open surgery for Hysterectomy

- Predictors of superficial incisional SSI were obesity, American Society of Anesthesiologists (ASA) score >2, preoperative anemia, laparotomy, smoking, and intraoperative transfusion.
- Predictors of organ/space SSI were older age, smoking, preoperative glucose >110 mg/dL, prior infection, vascular disease, blood loss, and lymphadenectomy or bowel resection.
- SSI resulted in a $5447 median increase in 30-day cost.
- Total Laparoscopic Hysterectomy is associated with less frequent use of epidural, lower post-operative opioid requirements and better pain scores than Total Abdominal Hysterectomy (TAH).
- Laparoscopic hysterectomy reduced the overall odds of acquiring nosocomial infections by more than 50% and significantly fewer readmissions with nosocomial infections as compared to open surgery.
- A novel program involving education and training, timely feedback, comparison to peers and encouragement to refer clearly had a significant impact on lowering the TAH rate.
Evidence in peer reviewed clinical journals supports the use of (MIS) vs. open surgery for Colon Resection

- Six perioperative care measures when followed (appropriate antibiotics, postoperative normothermia, oral antibiotics with bowel preparation, perioperative glycemic control, MIS, and short operative duration) attained a very low, risk-adjusted SSI rate of 2.0%.
- Patients undergoing laparoscopic colectomy had a lower likelihood of developing any adverse event compared to open colectomy (14.6% vs. 21.7%; p<0.0001), specifically surgical site infections, urinary tract infections, and pneumonias.
- Laparoscopic approach is independently associated with a reduced SSI when compared with open surgery and should, when feasible, be considered for colon and rectal conditions.
- Compared to open surgery, laparoscopic surgery independently decreased mortality, postoperative anastomotic leak, urinary tract infection, ileus or obstruction, pneumonia, respiratory failure, and wound infection.
- Readmission after colorectal surgery is associated with a cost of approximately $9000 per readmission. Nationwide this accounts for $300 million in readmission costs annually for colorectal surgery alone.

Surgical skills and technologies that support MIS for colon and abdominal hysterectomy procedures result in improved outcomes, specifically reduced surgical site infection, which has a direct positive impact on hospital reimbursement under evolving insurance payment models, specifically in value-based purchasing.


