**01 Relationship between patient safety indicator events and hospital location for inpatient hysterectomy**

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**OBJECTIVES:** To determine if there is a difference in patient safety indicator (PSI) events between rural and urban hospitals for inpatient hysterectomy.  

**MATERIALS AND METHODS:** Using the National Inpatient Sample database from the Agency of Healthcare Research and Quality (AHRQ), we identified patients who underwent benign hysterectomy for non-prolapse indications between 2012 and 2016 using ICD9 and ICD10 codes. Patients were stratified by hospital location into either rural or urban non-teaching; urban teaching hospitals were used as the referent group. Additional variables of interest included age, race, urbanization level of county of residence, hospital size, median household income, insurance type, hospital ownership, mode of hysterectomy, pre-existing conditions, and the Charlson Comorbidity Index. The primary outcome was the rate of PSI, which are outcomes used to indicate quality of inpatient care per the AHRQ. PSI were identified using ICD9 and ICD10 codes, and included accidental puncture, metabolic derangement, hemorrhage, and venous thromboembolism. Secondary outcomes included rates of perioperative transfusion, urinary (GU) tract injury, and hemorrhage. Uni- and multivariate Poisson regression was performed to measure the risk of the primary and secondary outcomes for surgery performed at rural hospitals.  

**RESULTS:** During the study period, 154,810 underwent benign hysterectomy for non-prolapse indication. At all hospital locations, abdominal hysterectomy accounted for over 60% of all hysterectomies, followed by laparoscopic approaches, with vaginal hysterectomy being the least common approach. The cumulative rate of PSI was 11.9% at rural hospitals, 13.9% at urban non-teaching hospitals, and 16.9% at urban teaching hospitals, \(P < 0.001\). The most common PSI at all hospital types were post-operative metabolic derangement, hemorrhage, and accidental puncture. The rate of transfusion was highest in urban teaching hospitals (6.7%) and similar for rural (5.1%) and urban non-teaching hospitals (5.5%), \(P < 0.001\). The rate of GU tract injury was between 1.4 and 1.6%, and similar across sites, \(P = 0.89\). After adjusting for confounders, surgery performed at rural hospitals was associated with a reduced risk of at least one PSI occurrence compared to urban hospitals (aRR = 0.84, 95% CI = 0.74-0.94). The risk of transfusion was also lower if hysterectomy was performed at a rural location (aRR = 0.87, 95% CI = 0.80-0.92).  

**CONCLUSION:** Hysterectomy performed at rural hospitals, typically thought of as having low surgical volume compared to urban hospitals, is associated with an overall lower risk of PSI occurrences and transfusion. Hospital location was not related to rates of perioperative hemorrhage or GU tract injury.  

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**02 Incidence and predictors of persistent pelvic pain following hysterectomy in women with chronic pelvic pain**

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**OBJECTIVES:** To describe the incidence and risk factors for persistent pelvic pain 6 months following hysterectomy in women with chronic pelvic pain.  

**MATERIALS AND METHODS:** We conducted a prospective, observational cohort study of women undergoing hysterectomy for a benign indication at an academic tertiary care center. Patients with chronic pelvic pain, defined as average pelvic pain \(\geq 3\) on a 0-10 numeric rating scale for >3 months, were included in this analysis. Patients completed validated assessments of pain, anxiety, depression, and centralized pain (using the 2011 Fibromyalgia Survey Criteria, 0-31 points) preoperatively and 6-months after hysterectomy. Demographic information, surgical history, intraoperative findings, and

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*Table 3: Unadjusted and Adjusted Relative Risk for Factors Associated with Occurrence of Adverse Outcomes*