excluded. Univariate logistic regression and chi-square tests were used to compare antibiotic utilization for operative factors, demographics and comorbidities.

Results. The analysis included 174,202 fusion procedures, with 51.5% of surgeries involving the cervical spine, 81.3% involving 1–2 vertebral levels, and 53.05% using an anterior approach. The median patient age was 52 years and 55.3% were female. Post-discharge prophylactic antibiotics were used in 13,611 (7.8%) of surgeries, with cephalexin (39.2%) and levofloxacin (10.5%) the most commonly prescribed. Post-discharge antibiotic use decreased significantly from 2010 to 2015 (8.3% of procedures in 2010 vs. 7.7% in 2015; $P < 0.001$; Cochran-Armitage test), was higher in rural areas (8.8% of rural vs. 7.6% of urban/suburban patients; $P < 0.001$), and differed by U.S. region (8.5% South, 8.1% West, 6.9% North Central, 6.6% Northeast; $P < 0.001$). Patients prescribed prophylactic post-discharge antibiotics had more comorbidities including obesity, diabetes, pulmonary disease, hypertension, and psychoses (all $P < 0.001$). Post-discharge antibiotic use varied by surgical approach (9.6% anterior/posterior, 9.2% posterior only, 6.8% anterior only; $P < 0.001$) and spine region (9.4% lumbar, 6.7% cervical, 6.7% multiple regions, 6.1% thoracic; $P < 0.001$), and was more common when >2 vertebral levels were involved ($P < 0.001$).

Conclusion. Post-discharge antibiotic prophylaxis following spinal fusion surgery was associated with geographic, operative and patient factors.

Disclosures. **All authors:** No reported disclosures.

2130. Impact of Sarcopenic Obesity on Surgical Site Infection After Gastric Cancer Surgery: A Retrospective Study of 1,038 Patients

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Background. Recent studies have shown that body composition is an important factor affecting surgical outcomes. In this study, we investigate the effect of sarcopenic obesity on surgical site infection (SSI) after gastric cancer surgery.

Methods. We performed a retrospective cohort study of 1,038 patients who underwent gastric cancer surgery between January 2015 and December 2015 at tertiary care hospital in Seoul, Korea. Visceral fat area (VFA) and total abdominal muscle area (TAMA) were assessed at preoperative staging computed tomography scan. Sarcopenic obesity was defined as high VFA/TAMA ratio and receiver operating characteristic (ROC) curves were used to determine the threshold of VFA/TAMA ratio to predict SSI after gastric cancer surgery. Multivariate logistic regression analysis was used to identify independent risk factors for SSI.

Results. Of the 1,038 eligible patients, 58 patients (5.6%) developed SSI. The average value of VFA/TAMA is 2.69 ± 1.43 in non-SSI group and 3.38 ± 1.34 in SSI group ($P < 0.001$). By using ROC curve, the cut-off value of VFA/TAMA to predict SSI is 3 (AUC 0.653; sensitivity 67%, specificity 61%). Multivariate analysis indicated that smoking (odds ratio (OR), 1.99; 95% confidence interval (CI), 1.1–3.62; $P = 0.024$), total gastrectomy (OR, 2.45; 95% CI, 1.36–4.42; $P = 0.003$), stage III, IV cancer (OR, 2.58; 95% CI, 1.44–4.63; $P = 0.001$) and sarcopenic obesity (OR, 2.85; 95% CI, 1.6–5.06; $P < 0.001$) were independent risk factors for SSI after gastric cancer surgery. In sarcopenic obesity patients, the incidence rate of Clavien–Dindo score IIIa or higher postoperative complication (7.1% vs. 4%; $P = 0.028$), mean days of postoperative hospital stay (8.42 ± 7.93 vs. 7.12 ± 3.54; $P < 0.001$), and the incidence rate of delayed complications requiring re-admission within 30 days (6.1% vs. 2.7%; $P = 0.007$) were statistically significantly higher than those of the nonsarcopenic obesity patients.

Conclusion. Sarcopenic obesity is an independent risk factor for the development of SSI after gastric cancer surgery. In addition, sarcopenic obesity is associated with high incidence of postoperative complication, prolongation of postoperative hospital stay and an increase of re-admission rate within 30 days.

Disclosures. **All authors:** No reported disclosures.

2131. A Pre-operative Nursing Implemented Methicillin-resistant *Staphylococcus aureus* Decolonization Protocol to Decrease Surgical Site Infections

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Background. Surgical site infections (SSIs) are the most common and expensive healthcare-acquired infection. Implementation of processes to prevent SSI can be difficult due to coordination of patients, providers, pharmacists, and nurses in ensuring all steps are completed before surgery. Thus, the objective of this nurse-driven process improvement project at a veterans affairs (VA) hospital, which averages 6,000 simple to complex surgeries per year, was to implement a cost-effective and practical decolonization protocol to decrease methicillin resistant *Staphylococcus aureus* (MRSA) SSIs across all surgical case types.

Methods. Starting May 15, 2017 a new MRSA decolonization protocol was initiated for ALL surgery cases except eye. Pre-operative clinic nurses complete MRSA nasal screening and provide detailed pre-operative showering instructions which include a focus on preventing recontamination of the skin after showers. Before surgery, nurses provide intranasal Povidone-Iodine treatment. The surgery pharmacist ensures MRSA postive patients receive pre-operative vancomycin and cefazolin if antibiotics are indicated for the surgery.

Results. For fiscal years (FY) 2012–2016 prior to protocol implementation, annual MRSA SSI rates ranged from 0.24–0.11 SSIs per 100 surgery cases; the average SSI rate for this time period 0.17. After protocol implementation there were zero MRSA SSIs in FY17 quarter 3 lowering the FY17 SSI rate to 0.09 SSIs per 100 surgery cases (see Figure 1.) Since implementation only 1 MRSA SSI has been identified making the last 4 quarter SSI rate 0.04 per 100 surgery cases (see Figure 2). This represents a 76% improvement in the 1 year MRSA SSI rate (0.04) compared with the previous 5 years MRSA SSI rate average.

Conclusion. Initial protocol results suggest that practical nursing interventions should be considered for implementation to decrease MRSA surgical site infections.

Figure 1

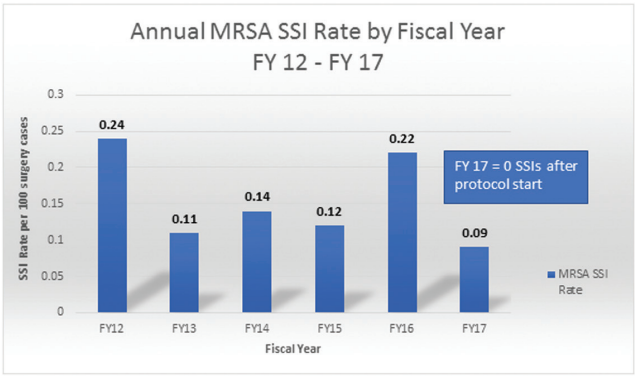
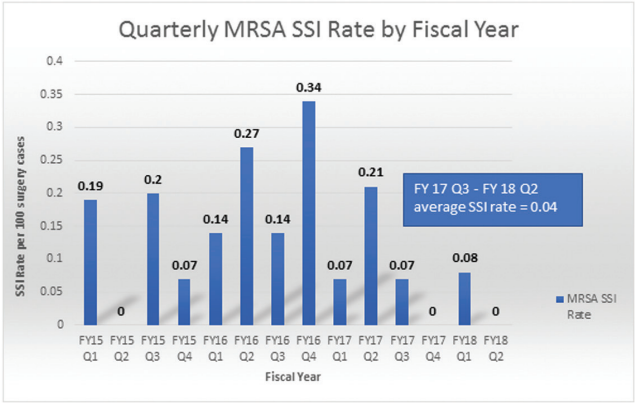


Figure 2



Disclosures. **All authors:** No reported disclosures.

2132. Infections After Pediatric Ambulatory Surgery: Incidence and Risk Factors

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