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applied procoagulant product and use was determined by charge codes. Subjects, hospital characteristics, and costs were recorded.

**RESULTS:** There were 116,529 benign outpatient hysterectomies were identified for the study period of which 23,773 (20%) were associated with an HA charge. HA use varied by hysterectomy approach (Vaginal 4%, Laparoscopic 22%, Laparoscopic-Assisted Vaginal 22%, Robotic 21%, and Abdominal 26%). Type of HA varied as well (Collagen Hemostat 0.8%, Oxidized Cellulose 25%, Absorbable Gelatin 42%, and Hemostatic Sealant 44%). Overall HA use increased by 4% during the study period; however, trends in use varied by hysterectomy approach (Figure 1). Trends in HA use also varied by type of HA (Figure 2). Hemostatic agent use during hysterectomy significantly increased care costs (mean [SD] (\$5,417 [2,567] vs. \$4,541 [2,085],  $P < 0.001$ ). In bivariate analysis, HA use was associated with younger women ( $P < 0.001$ ), a history of endometriosis ( $P < 0.001$ ), commercial insurance ( $P < 0.001$ ), and care in the western and northeast regions ( $P < 0.001$ ). Additionally, HA use was associated with non-teaching hospital status ( $P < 0.001$ ), hospitals with  $< 250$  beds ( $P < 0.001$ ), and rural settings ( $P < 0.001$ ). Gynecologic subspecialties were less likely to use HA relative to non-subspecialists ( $P < 0.001$ ). Surrogate markers for increased intra-operative blood loss were also associated with HA use: additional antibiotic dosing on day of surgery ( $P < 0.001$ ) and peri-operative blood transfusion ( $P = 0.001$ ).

**CONCLUSION:** HA use during benign outpatient hysterectomy is increasing and associated with higher encounter costs. Directed interventions toward modifiable factors associated with HA use can help improve high-value, evidence-based utilization of these products.

Figure 1. Hemostatic Agent Use by Hysterectomy Approach from 2015-2019

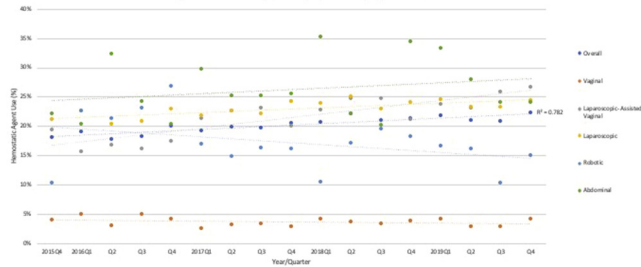
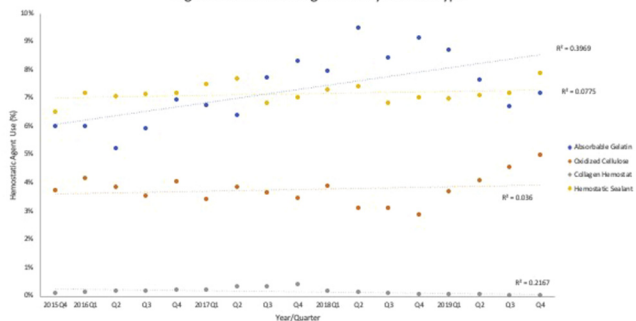


Figure 2. Hemostatic Agent Use By Product Type



**DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** Anne M. Stachowicz: Nothing to disclose; Joshua W. Lambert: Nothing to disclose; Samuel F. Hohmann: Nothing to disclose; James L. Whiteside: Nothing to disclose.

### 31 Patient-initiated telephone calls before and after introduction of an enhanced recovery after surgery (ERAS) protocol for female pelvic reconstructive surgery



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**OBJECTIVES:** To compare the volume of phone calls related to the perioperative care pre- and post-implementation of Enhanced Recovery after Surgery (ERAS).

**MATERIALS AND METHODS:** This is a retrospective chart review of women undergoing surgery by fellowship-trained urogynecologists at a single tertiary-care center where Enhanced Recovery after Surgery (ERAS) was implemented in January 2018. Patients who underwent surgery with overnight stay were identified prior to the implementation ("pre-ERAS," January 1 to June 30, 2017, inclusive) and compared to the same period of time after implementation ("post-ERAS," January 1 to June 30, 2019.) Preoperative and postoperative phone calls were reviewed and categorized by reason for call. Differences between the two groups were compared with a Student's t-test, if normally distributed, or with a Mann-Whitney U test if not. Categorical outcomes were reported with a percentage and compared with a chi square test with an alpha level of 0.05.

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**CONCLUSION:** Our study found no difference in pre- or post-operative calls with the implementation of ERAS. Despite patient education being an essential component of ERAS and patients being provided detailed written and verbal instructions, our study demonstrates a high volume of phone calls in our practice and identifies opportunities for improving preoperative counseling. Additionally, despite the high volume of calls regarding pain management, the majority of patients in our practice are satisfied with the pain management and require few, if any, narcotics post-operatively. By focusing on common concerns, we may be able to improve patients' surgical experience and reduce the burden of office phone calls.

**DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** Amanda V. O'Meara: Nothing to disclose; Christine LaSala: Nothing to disclose; Aparna Ramaseshan: Nothing to disclose; David O'Sullivan: Nothing to disclose; Elena Tunitsky-Bitton: Nothing to disclose.

### 32 Patient satisfaction with urogynecology telemedicine office visits during the COVID-19 pandemic



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**OBJECTIVES:** During the COVID-19 pandemic, telemedicine is increasingly utilized for healthcare delivery in the urogynecology world. The primary aim of this study is to evaluate patient satisfaction with telemedicine visits in an academic urogynecology practice. We sought to determine the extent to which patients had their questions and concerns addressed during both new and return patient visits. We hypothesized that patients would show high rates of satisfaction with the technology given current concerns surrounding in-person care.

**MATERIALS AND METHODS:** In this cross-sectional study, we contacted patients who used a single health system's telemedicine platform to attend a urogynecology office visit from April 1, 2020, to May 31, 2020. All patients were seen by a board certified FPMRS physician or urogynecologic physician assistant. To survey the patients, a modified telehealth patient satisfaction questionnaire was reviewed with the patient over the phone within 1 week following their telemedicine encounter using a 5-point Likert scale from strongly disagree to strongly agree. The medical chart was queried for additional office visits or telephone contact following their telemedicine encounter. Descriptive statistics and Fisher's Exact tests were used for analyses (JMP Pro 14.2.0).

**RESULTS:** In total, 94 subjects were included with mean age 56.2 (SD 16.1), majority white race ( $n = 87$ , 92.6%), and mean BMI = 28.0 (SD = 6.8). The subjects had a variety of chief complaints: 26 (28.0%) for prolapse, 20 (21.5%) for urinary incontinence, 16 (17.2%) for routine follow-up, 13 (14.0%) for post-operative care, 8 (8.6%) for voiding difficulty, 6 (6.5%) for pelvic pain, 3 (3.2%) for urinary tract infections, and 1 (1.1%) for mesh complications. The majority of patients answered either "agree" or "strongly agree" with the statement "All of my questions and concerns were addressed to my satisfaction during my video visit" ( $n = 89$ , 94.7%) Table 1. Despite the majority of patients agreeing or strongly agreeing with the positive aspects of their telemedicine visits (Questionnaire 1-3, 5, and 6) Table 1, a majority preferred to see the specialist in person, despite travel inconveniences, at their next visit ( $n = 66$ , 70.2%). Neither satisfaction (Q6) nor desire for in-person visit (Q4) were associated with a specific chief complaint. Desire for in-person visit was significantly associated with new patient visit as compared with follow up visits ( $P = 0.03$ ).

**CONCLUSION:** Urogynecology patients are satisfied with their care received via telemedicine, but still may prefer in person visits. This preference may be related to specific visit types. Further studies are needed to determine ways to improve the telemedicine experience for urogynecology patients and determine which patient groups would be best served by this technology.

**Table 1. Administered Satisfaction Questionnaire**

Question/Statement	Strongly Agreed or Agreed
1. I was able to communicate adequately with the specialist.	92 (97.9%)
2. My privacy and confidentiality were respected and protected during the consultation	94 (100%)
3. Telehealth made it easier to get healthcare	80 (85.1%)
4. Next time I would prefer to see the specialist "in person" despite the possible travel inconveniences	66 (70.2%)
5. I achieved my goals for care during my video visit	86 (91.5%)
6. All of my questions and concerns were addressed to my satisfaction during my video visit.	89 (94.7%)
Additional comments or concerns	free text responses

**DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** Stephanie Glass Clark: Nothing to disclose; Megan Bradley: Nothing to disclose.

### 33 Perioperative complications, readmissions, and hospital costs in conventional versus robotic-assisted laparoscopic hysterectomy with concurrent sacrocolpopexy

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**OBJECTIVES:** Despite increasing use of robotic surgery, evidence on the "value" of these costly procedures remains inconclusive and prior studies often relied on data from selected institutions. This study aimed to compare differences in patient outcomes and hospital costs between conventional and robotic-assisted laparoscopic hysterectomy with sacrocolpopexy using a large national database.

**MATERIALS AND METHODS:** We used the Nationwide Readmissions Database (NRD) to identify women who had undergone conventional or robotic-assisted laparoscopic hysterectomy with sacrocolpopexy from 2009 to 2015. Surgical route was determined using International Classification of Diseases (ICD) procedure codes. We identified in-hospital perioperative complications using ICD diagnosis and procedure codes and measured 30-day readmissions based on patient linkage across hospitalizations. Hospital charges and cost-to-charge ratios were used to estimate cost of surgery and all costs were inflation adjusted to 2015 U.S. dollars. We used chi-square and Kruskal-Wallis tests for bivariate analysis. Multivariable regression models were used to examine the association between surgical route and perioperative complications, 30-day readmissions and hospital costs, while adjusting for patient and hospital characteristics. All analyses accounted for weight, cluster, and strata of the NRD design to generate nationally representative estimates.

**RESULTS:** Our sample included a total of 7,675 patients (weighted sample size); 2,077 (27%) underwent conventional laparoscopic procedures and 5,598 (73%) underwent robotic-assisted laparoscopic procedures. Major perioperative complications were identified in 11.2% of conventional and 6.7% of robotic-assisted laparoscopic procedures ( $P < 0.001$ ). The major complications that drove this difference were accidental laceration, vessel injury, urinary tract injury, and reoperation. After adjusting for patient and hospital characteristics, patients who underwent robotic-assisted laparoscopic procedures had a significantly lower risk for major complications, compared to those who underwent a conventional laparoscopic procedure (OR = 0.69, 95% CI = 0.51-0.93,  $P = 0.02$ ). Hospital costs were higher in robotic-assisted (median = \$16,367, IQR = 12,365-21,879) than conventional (median = \$13,898, IQR = 10,275-17,986) procedures ( $P < 0.001$ ). In a regression model adjusting for patient and hospital characteristics, robotic-assisted procedures were 24% costlier than conventional procedures (cost ratio = 1.24, 95% CI = 1.17-1.31,  $P < 0.001$ ). The 30-day readmission rates were similar between conventional (2.9%) and robotic-assisted (2.2%) laparoscopic procedures (adjusted OR = 0.89, 95% CI = 0.51-1.54,  $P = 0.67$ ).

**CONCLUSION:** Robotic-assisted laparoscopic hysterectomy with concurrent sacrocolpopexy was associated with a lower risk of perioperative complications compared to conventional laparoscopic procedures. However, robotic-assisted procedures were associated with higher hospital costs.

