POSTERS OF DISTINCTION

P-001
30-Day Readmission After Ileal Pouch Anal Anastomosis Surgery: A Report From ACS-NSQIP Database

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BACKGROUND: Ideal pouch and anastomosis (IPA) is the preferred surgical option in patients with medically refractory ulcerative colitis (UC) to preserve gastrointestinal continuity. This study aimed to describe 30-day readmission rates, as well as predictive factors for it from a national dataset.

METHODS: Patients who underwent IPA surgery for UC between 2012 and 2015 were identified from the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) database using current procedural terminology codes. Demographic, preoperative, and operative variables were collected. Patients were grouped according to the presence of 30-day readmission: (+)(-).

RESULTS: Query identified 1882 patients, mean age was 40.8±13.9 years, mean length of stay was 7.2±5 days and postoperative 30-day morbidity rate was 28% (n=530). Most common complications in the group were: anastomotic leakage (7.5%), organ space infection at the site of surgery (3.5%), medical complication (3%) and superficial SSI (2%). Twenty-two percent (n=416) were readmitted within 30 days of surgery. Reasons for readmission were: surgical site infection (n=88), dehydration (n=77), small bowel obstruction/ileus (n=348) and abdominal pain (n=392). Ninety-seven patients had second readmission and 4 had a third readmission within 30-days of surgery. Multivariable analysis showed an ASA score of 4 (OR: 14.4 [2.93-7.0]), POE and age>40 (OR: 1.3 [1.08-1.7], P=0.006) were associated with 30-day readmission. Preoperative albumin level of <3.5 was associated with a second readmission (OR:1.1 [1.1-1.2], P=0.02).

CONCLUSION(S): IPA surgery for UC has high morbidity. One fifth of patients were readmitted within 30 days from IPA surgery for UC and one third of them had a second readmission. This study brings the possibility and consideration for national health care initiative in surgical management of patients with UC, undergoing IPA surgery.

P-002
United States Claims Database Analysis Comparing Safety, Medical Resource Utilization, and Treatment Costs Associated with Management of Inflammatory Bowel Disease

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BACKGROUND: Pharmacologic options commonly used to control disease and alleviate symptoms to patients with inflammatory bowel disease (IBD) have limited effectiveness. Only a third of patients with IBD treated with commonly used options achieve clinical remission at 1 year, and most experience drug-related adverse events (AEs). Herein we characterized the clinical and economic burden of IBD treatments in terms of AEs of interest, medical resource utilization (MRU), and associated costs.

METHODS: Records in the IMS PharMetrics insurance claims database included in this analysis were for patients aged ≥18 years who had ≥2 medical claims (≥7 days apart), a diagnosis of ulcerative colitis (ICD-9-CM: 556.x) or Crohn’s disease (ICD-9-CM: 555.x), and with >1 qualifyer. Drug class exposure was characterized using drug claims data, and aTNF, IS, IS + OCS (Crohn’s: HR, 2.38 [1.72-3.31]; UC: HR, 2.36 [1.75-3.18]) and OCS (Crohn’s: HR, 2.09 [1.65-2.66]; UC: HR, 1.92 [1.57-2.34]). Compared with patients receiving other therapies, patients with UC or Crohn’s receiving OCS or IS + OCS were more likely to have emergency department visits, IBD-related hospitalization, visits, or procedures, and gastrointestinal surgery. Annualized total medical costs were greatest for aTNF + IS or TNF therapy in both Crohn’s and UC. However, annualized medical service costs (that exclude IBD drug costs) were highest for patients initiating OCS-containing therapies (Crohn’s: OCS, $27 041 and OCS + IS, $23 332 [P<0.001]; UC: OCS, $19 659 [P<0.001]) followed by other index therapies (index therapies: ASA, $10 823, and aTNF + IS, $19 151 [P<0.001]; ASA, $7980, and aTNF + IS, $19 151 [P<0.001])

CONCLUSION(S): Chronic OCS use was associated with increased risk of severe infection, bone complications, and serious health events compared with other therapies. Consistent with an increased AE risk, OCS regimens were associated with higher rates of MRU and medical service costs compared with other therapies. Accordingly, treatment decisions should consider alternate options which may provide more favorable long-term benefits.

P-003
Improved Quality of Care for IBD Patients Using HealthPROMISE App: A Randomized, Control Trial

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BACKGROUND: Inflammatory bowel disease (“IBD”) is a chronic condition affecting over one million people in the United States (1). The recurrent and potentially debilitating nature of IBD elevates patients’ risk for adverse health outcomes. IBD patients and providers report rushed visits, impersonal communications, and constrained resources as barriers to quality care (2). IBD patients are an ideal population to assess the therapeutic potential of a digital intervention used in conjunction with clinical tools for long-term IBD management. HealthPROMISE is an innovative software platform, developed by Sinai Applab, comprising a patient mobile application linked to a cloud-based decision support dashboard designed to improve health outcomes and enhance quality of care (“QOC”) by increasing patient engagement, self-management skills, and communication transparency (3,4).

METHODS: Recruited patients provided informed consent during in-person office visits and were randomized into intervention (HealthPROMISE or control) and patient. Completed patients entered an intake questionnaire assessing health literacy, disease severity, general health status, and demographic information. The primary endpoint is QOC data based on American Gastroenterological Association’s QOC indicator checklist, which was verified against and conformed to EPIC records. Secondary endpoints include decrease in IBD-related emergency visits and hospitalizations; change in quality of life (“QOL”) score from baseline, and proportion of patients reporting controlled disease status per group. In the app, HealthPROMISE patients update their information and receive a disease summary of QOC metrics and IBD-specific QOL trends (PAM-13) delivered via email. The HealthPROMISE dashboard communicated with the care team and patients as needed. Ongoing collection of follow-up survey data captures overall mobile app user experience, system usability scale (SUS), SBQoL, patient activation measures (PAM-13), and general health status (EQ-5D).

RESULTS: Of note, approximately 50% of patients who underwent bowel surgery after March 2015 were placed on a “colon surgery pathway”, which is an order set dedicated to strategies that decrease length of stay and post-operative complications. Key features include early feeding, optimized analgesia, and medication timing (3). An average surgery follow-up of 495±135 days, QOC improved among all patients (78% vs. 59% control), with a more significant increase since baseline observed among HealthPROMISE users (+28% vs. +9%, P<0.01). After a second follow-up of 575±135 days, QOC continued improved (84% vs. 65% control, P<0.001) with significant change from baseline observed among HealthPROMISE users (+34% vs. +15%, P<0.001) (4). After 375 days, Screening Colonoscopy was the most met QOC indicator (92% met) while Smoking Compliance decreasing with the least documented (27%).

CONCLUSION(S): A significant improvement in QOC was observed among patients using HealthPROMISE. IBD patients engaging with HealthPROMISE reported more equitable participation in their care decision-making process, and showed improved health outcomes compared to patients not using HealthPROMISE. Digital health interventions and IBD remote monitoring can address gaps in QOC, increase patient engagement, and improve health outcomes.

P-004
The Use of Alvimopan as Prophylaxis against Post-Operative Ileus After Bowel Resection in Patients With Inflammatory Bowel Disease

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BACKGROUND: Postoperative ileus (POI) is a temporary delayed condition of intestinal peristalsis following major abdominal surgery, leading to significant symptoms such as nausea, vomiting, abdominal pain, prolonged hospitalization, nosocomial complications, and physical deconditioning. The use of opioids for postoperative pain control further exacerbates the problem. Opioids bind to the mu receptors in the intestinal tract, leading to gut hypomotility. Alvimopan, an oral, peripherally acting mu-opioid receptor antagonist, was FDA approved in 2008 for use before and after bowel resection to help prevent postoperative ileus following bowel resection. Of note, approximately 50% of patients who underwent bowel surgery after March 2015 were placed on a “colon surgery pathway”, which is an order set dedicated to strategies that decrease length of stay and post-operative complications. Key features include early feeding, optimized analgesia, and medication timing (3). An average surgery follow-up of 495±135 days, QOC improved among all patients (78% vs. 59% control), with a more significant increase since baseline observed among HealthPROMISE users (+28% vs. +9%, P<0.01). After a second follow-up of 575±135 days, QOC continued improved (84% vs. 65% control, P<0.001) with significant change from baseline observed among HealthPROMISE users (+34% vs. +15%, P<0.001) (4). After 375 days, Screening Colonoscopy was the most met QOC indicator (92% met) while Smoking Compliance decreasing with the least documented (27%).

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ABSTRACTS

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