

Appendix 1

Full Definitions or Variables

Supplemental Digital Content Table 1. Diagnoses included within reported readmission diagnosis categories.

Readmission diagnosis	Diagnoses included within readmission diagnosis category
Wound complication	wound infection/complication, surgical site infection, seroma, wound dehiscence of deep wound infection, and minor amputation/wound debridement
Infectious	infection, fever, abscess (not related to the wound), anastomotic leak, and pelvic sepsis/infection
Gastrointestinal complications	gastrointestinal/digestive system complications, peptic ulcer disease, enterocutaneous fistula, retained common bile duct stone, obstructive jaundice, nausea and vomiting, and gastrointestinal bleeding
Gastrointestinal obstruction	gastrointestinal obstruction and ileus
Pain-related	abdominal pain, benign abdominal pain, pain with no clinical finding, and non-specific abdominal pain
Surgical technical complications	technical complications, gastrostomy tube-related complications, reoperation, operative complications, reintervention for operative complication, AAA or graft-related, mechanical complications of vascular device, graft-related, device/aneurysm-related, and additional procedure needed in index leg
Fluid and Electrolytes related	dehydration and dyselectrolytemia
Cardiac	cardiovascular and cardiac complications
Other	nonvascular reasons, unrelated medical/surgical, rehabilitation services, other causes, and miscellaneous
Pulmonary	respiratory and pneumonia
Failure to thrive	malnutrition and malaise
Hematological/oncological	hematological and neoplasms

Supplemental Digital Content Table 2. Variables included within reported multivariate predictor category

Multivariate Predictor	Variables included within multivariate predictor category
Postoperative complication	in-hospital complications, postoperative complications, and postoperative complications not otherwise specified
Medication related	total number of medications, >30 medications ordered and dispensed, diuretics, medications on discharge, and steroid use
Comorbidity score	comorbidity score, comorbidities, Charlson Comorbidity Score, and Hierarchical conditions category score
Procedure type	extent of colectomy, 2-stage vs. 3-stage ileal anal pouch anastomosis, pancreatectomy vs. other general surgery procedures, select vascular procedures, and primary rectal procedure vs. nonrectal procedure
Transfusion	transfusion during index admission, transfusion during operation, and transfusion postoperatively
Surgical approach	open vs. laparoscopic and open vs. endovascular
Renal comorbidity	history of renal failure, renal comorbidity, and dialysis
Respiratory complications	respiratory or pulmonary failure, pneumonia/respiratory failure, respiratory complication, and pneumonia
Cancer characteristics	benign diagnosis, cancer stage, history of cancer, lymphoma, metastatic cancer, solid tumor without metastasis, and tumor grade
Diagnosis on Index Admission	certain vascular diagnoses, benign or malignant colorectal diagnoses, colon cancer or diverticulitis or inflammatory bowel disease, inflammatory bowel disease or rectal cancer or other diagnoses
Cardiovascular comorbidity	ischemic heart disease, peripheral vascular disease, coronary artery disease, congestive heart failure, hypertension, pulmonary circulation disease, valvular disease, and prior lower extremity bypass
Neurological comorbidity	depression, pseudotumor cerebri, neurological disease, paralysis, and other neurological disorders
Hematological comorbidity	anemia, chronic blood loss anemia, deficiency anemia, coagulation disorder, deficiency anemia, and history of DVT/PE
Gastrointestinal comorbidity	cholelithiasis, extraintestinal ulcerative colitis manifestations, intestinal obstruction on admission, intestinal perforation on admission, liver disease, enterocutaneous fistula, prior abdominal surgery, and peptic ulcer disease

Emergent/Urgent operation	elective procedure, emergent/urgent operation, and non-elective repair.
Pulmonary comorbidity	chronic pulmonary disease and COPD
Obesity	obesity and BMI