



Patient Safety Indicator 14 (PSI 14) Postoperative Wound Dehiscence Rate

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Provider-Level Indicator

Type of Score: Rate

Prepared by:

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DESCRIPTION

Postoperative reclosures of the abdominal wall per 1,000 abdominopelvic surgery discharges for patients ages 18 years and older. Excludes cases in which the abdominal wall reclosure occurs on or before the day of the first abdominopelvic surgery, cases with an immunocompromised state, cases with stays less than two (2) days, and obstetric cases.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

NUMERATOR

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any-listed ICD-9-CM procedure codes for reclosure of postoperative disruption of the abdominal wall.

Reclosure of postoperative disruption of the abdominal wall procedure codes: (RECLOIP)

5461 Reclosure of postoperative disruption of
 abdominal wall

DENOMINATOR

Discharges, for patients ages 18 years and older, with any-listed ICD-9-CM procedure codes for abdominopelvic surgery.

Abdominopelvic surgery procedure codes: (ABDOMI4IP)

031	Division of intraspinal nerve root	5139	Other bile duct anastomosis
0529	Sympathectomy, other sympathectomy and ganglionectomy	5141	Common duct exploration for removal of calculus
0581	Repair of sympathetic nerve or ganglion	5142	Common duct exploration for relief of other obstruction
1731	Lap mul seg res lg intes	5143	Insertion of choledochohepatic tube for decompression
1732	Laparoscopic cecectomy	5149	Incision of other bile ducts for relief of obstruction
1733	Lap right hemicolectomy	5151	Exploration of common duct
1734	Lap res transverse colon	5159	Incision of other bile duct
1735	Lap left hemicolectomy	5161	Excision of cystic duct remnant
1736	Lap sigmoidectomy	5162	Excision of ampulla of vater with reimplantation of common duct
1739	Lap pt ex lrg intest nec	5163	Other excision of common duct
3804	Incision of aorta	5169	Excision of other bile duct
3806	Incision of abdominal arteries	5171	Simple suture of common bile duct
3807	Incision of abdominal veins	5172	Choledochoplasty
3814	Endarterectomy of aorta	5179	Repair of other bile ducts
3816	Endarterectomy of abdominal arteries	5181	Dilation of sphincter of oddi
3834	Resection of aorta with anastomosis	5182	Pancreatic sphincterotomy
3836	Resection of abdominal arteries with anastomosis	5183	Pancreatic sphincteroplasty
3837	Resection of abdominal veins with anastomosis	5189	Other operations on sphincter of oddi
3844	Resection of aorta, abdominal with replacement	5192	Closure of cholecystostomy
3846	Resection of abdominal arteries with replacement	5193	Closure of other biliary fistula
3847	Resection of abdominal veins with replacement	5194	Revision of anastomosis of biliary tract
3857	Ligation and stripping of varicose veins, abdomincal veins	5195	Removal of prosthetic device from bile duct
3864	Other excision of aorta, abdominal	5199	Other operations on biliary tract
3866	Other excision of abdominal arteries	5201	Drainage of pancreatic cyst by catheter
3867	Other excision of abdominal veins	5209	Other pancreatotomy
3884	Other surgical occlusion of aorta, abdominal	5212	Open biopsy of pancreas
3886	Other surgical occlusion of abdominal arteries	5222	Other excision or destruction of lesion or tissue of pancreas or pancreatic duct

3887	Other surgical occlusion of abdominal veins	523	Gingival and periodontal diseases
391	Intra-abdominal venous shunt	524	Internal drainage of pancreatic cyst
3924	Aorta-renal bypass	5251	Proximal pancreatectomy
3925	Aorta-iliac-femoral bypass	5252	Distal pancreatectomy
3926	Other intra-abdominal vascular shunt or bypass	5253	Radial subtotal pancreatectomy
4052	Radical excision of periaortic lymph nodes	5259	Other partial pancreatectomy
4053	Radical excision of iliac lymph nodes	526	Total pancreatectomy
412	Splenotomy	527	Radical pancreaticoduodenectomy
4133	Open biopsy of spleen	5280	Pancreatic transplant, nos
4141	Marsupialization of splenic cyst	5281	Reimplantation
4142	Excision of lesion or tissue of spleen	5282	Homotransplant of pancreas
4143	Partial splenectomy	5283	Heterotransplant of pancreas
415	Total splenectomy	5292	Cannulation of pancreatic duct
4193	Excision of accessory spleen	5295	Other repair of pancreas
4194	Transplantation of spleen	5296	Anastomosis of pancreas
4195	Repair and plastic operations on spleen	5299	Other operations on pancreas
4199	Other operations on spleen	5300	Unilateral repair of inguinal hernia, nos
4240	Esophagectomy, nos	5301	Repair of direct inguinal hernia
4241	Partial esophagectomy	5302	Repair of indirect inguinal hernia
4242	Total esophagectomy	5303	Repair of direct inguinal hernia with graft or prosthesis
4253	Intrathoracic esophageal anastomosis with interposition of small bowel	5304	Repair of indirect inguinal hernia with graft or prosthesis
4254	Other intrathoracic esophagoenterostomy	5305	Repair of inguinal hernia with graft or prosthesis, nos
4255	Intrathoracic esophageal anastomosis with interposition of colon	5310	Bilateral repair of inguinal hernia, nos
4256	Other intrathoracic esophagocolostomy	5311	Bilateral repair of direct inguinal hernia
4263	Antesternal esophageal anastomosis with interposition of small bowel	5312	Bilateral repair of indirect inguinal hernia
4264	Other antesternal esophagoenterostomy	5313	Bilateral repair of inguinal hernia, one direct and one indirect
4265	Antesternal esophageal anastomosis with interposition of colon	5314	Bilateral repair of direct inguinal hernia with graft or prosthesis
4266	Other antesternal esophagocolostomy	5315	Bilateral repair of indirect inguinal hernia with graft or prosthesis
4291	Ligation of esophageal varices	5316	Bilateral repair of inguinal hernia, one direct and one indirect, with graft or prosthesis
430	Gastrostomy	5317	Bilateral inguinal hernia repair with graft or prosthesis, nos
433	Pyloromyotomy	5321	Unilateral repair of femoral hernia
4342	Local excision of other lesion or tissue of stomach	5329	Other unilateral femoral herniorrhaphy
4349	Other destruction of lesion or tissue of stomach	5331	Bilateral repair of femoral hernia with graft or prosthesis

435	Partial gastrectomy with anastomosis to esophagus	5339	Other bilateral femoral herniorrhaphy
436	Partial gastrectomy with anastomosis to duodenum	5341	Repair of umbilical hernia with prosthesis
437	Partial gastrectomy with anastomosis to jejunum	5349	Other umbilical herniorrhaphy
4381	Partial gastrectomy with jejuna transposition	5351	Incisional hernia repair
4382	Laparoscopic vertical sleeve gastrectomy	5359	Repair of other hernia of anterior abdominal wall
4389	Other partial gastrectomy	5361	Incisional hernia repair with prosthesis
4391	Total gastrectomy with intestinal interposition	5369	Repair of other hernia of anterior abdominal wall with prosthesis
4399	Other total gastrectomy	537	Repair of diaphragmatic hernia, abdominal approach
4400	Vagotomy, nos	5375	Abd rep-diaphr hern nos
4401	Truncal vagotomy	540	Incision of abdominal wall
4402	Highly selective vagotomy	5411	Exploratory laparotomy
4403	Other selective vagotomy	5419	Other laparotomy
4411	Transabdominal gastroscopy	5422	Biopsy of abdominal wall or umbilicus
4415	Open biopsy of stomach	5423	Biopsy of abdominal wall or umbilicus
4421	Dilation of pylorus by incision	543	Excision or destruction of lesion or tissue of abdominal wall or umbilicus
4429	Other pyloroplasty	544	Excision or destruction of peritoneal tissue
4431	High gastric bypass	5459	Other lysis of peritoneal adhesions
4439	Other gastroenterostomy	5463	Other suture of abdominal wall
4440	Suture of peptic ulcer, nos	5464	Suture of peritoneum
4441	Suture of gastric ulcer site	5471	Repair of gastroschisis
4442	Suture of duodenal ulcer site	5472	Other repair of abdominal walls
445	Revision of gastric anastomosis	5473	Other repair of peritoneum
4461	Suture of laceration of stomach	5474	Other repair of omentum
4463	Closure of other gastric fistula	5475	Other repair of mesentery
4464	Gastropexy	5492	Removal of foreign body from peritoneal cavity
4465	Esophagogastroplasty	5493	Creation of cutaneoperitoneal fistula
4466	Other procedures for creation of esophagogastric sphincteric competence	5494	Creation of peritoneovascular shunt
4469	Other repair of stomach	5495	Incision of peritoneum
4491	Ligation of gastric varices	5532	Opn abltn renal les/tiss
4492	Intraoperative manipulation of stomach	5535	Abltn renal les/tiss nec
4499	Gastric operation nec	5551	Nephroureterectomy
4500	Incision of intestine, nos	5552	Nephrectomy of remaining kidney
4501	Incision of duodenum	5553	Removal of transplanted or rejected kidney
4502	Other incision of small intestine	5554	Bilateral nephrectomy
4503	Incision of large intestine	5561	Renal autotransplantation
4531	Other local excision of lesion of duodenum	5569	Ulcerative colitis, unspecified

4532	Other destruction of lesion of duodenum	557	Nephropexy
4533	Local excision of lesion or tissue of small intestine, except duodenum	5583	Closure of other fistula of kidney
4534	Other destruction of lesion of small intestine, except duodenum	5584	Reduction of torsion of renal
4541	Excision of lesion or tissue of large intestine	5585	Symphysiotomy for horeshoe kidney
4549	Other destruction of lesion of large intestine	5586	Anastomosis of kidney
4550	Isolation of intestinal segment, nos	5587	Correction of ureteropelvic junction
4551	Isolation of segment of small intestine	5591	Decapsulation of kidney
4552	Isolation of segment of large intestine	5597	Implantation or replacement of mechanical kidney
4561	Multiple segmental resection of small intestine	5598	Removal of mechanical kidney
4562	Other partial resection of small intestine	5651	Formation of cutaneous ureteroileostomy
4563	Total removal of small intestine	5652	Revision of cutaneous ureter oileostomy
4571	Multiple segmental resection of large intestine	5661	Formation of other cutaneous ureterostomy
4572	Cesectomy	5662	Revision of other cutaneous ureterostomy
4573	Right hemicolectomy	5671	Urinary diversion to intestine
4574	Resection of transverse colon	5672	Revision of ureterointestinal anastomosis
4575	Left hemicolectomy	5673	Nephrocystanastomosis, no
4576	Sigmoidectomy	5674	Ureteroneoxystostomy
4579	Other partial excision of large intestine	5675	Transureteroureterostomy
458	Total intra-abdominal colectomy	5683	Closure of ureterostomy
4581	Lap tot intr-ab colectmy	5684	Closure of other fistula of ureter
4582	Op tot intr-abd colectmy	5685	Ureteropexy
4583	Tot abd colectmy nec/nos	5686	Removal of ligature form ureter
4590	Intestinal anastomosis, nos	5689	Other repair of ureter
4591	Small-to-small intestinal anastomosis	5695	Ligation of ureter
4592	Anastomosis of small intestine to rectal stump	5771	Radical cystectomy
4593	Other small-to-large intestinal anastomosis	5779	Other total cystectomy
4594	Large-to-large intestinal anastomosis	5782	Closure of cystostomy
4595	Anastomosis to anus	5787	Reconstruction of urinary bladder
4601	Exteriorization of small intestine	5900	Retroperitoneal dissection, nos
4603	Exteriorization of large intestine	5902	Other lysis of perirenal or periureteral adhesions
4610	Colostomy, nos	5909	Other incision of perirenal or periureteral tissue
4611	Temporary colostomy	6012	Open biopsy of prostate
4613	Permanent colostomy	6014	Open biopsy of seminal vesicles
4620	Ileostomy, nos	6015	Biopsy of periprostatic tissue
4621	Temporary ileostomy	603	Suprapubic prostatectomy
4622	Continent ileostomy	604	Retropubic prostatectomy
4623	Other permanent ileostomy	605	Radical prostatectomy

4640	Revision of intestina stoma, nos	6061	Local excision of lesion of prostate
4641	Revision of stoma of small intestine	6072	Incision of seminal vesicle
4642	Repair of pericostomy hernia	6073	Excision of seminal vesicle
4643	Other revision of stoma of large intestine	6079	Other operations on seminal vesicles
4650	Closure of intestinal stoma, nos	6093	Repair of prostate
4651	Closure of stoma of small intestine	6509	Other oophorectomy
4652	Closure of stoma of large intestine	6512	Other biopsy of ovary
4660	Fixation of intestine, nos	6521	Marsupialization of ovarian cyst
4661	Fixation of small intestine to abdominal wall	6522	Wedge resection of ovary
4662	Other fixation of small intestine	6529	Other local excision or destruction of ovary
4663	Fixation of large intestine to abdominal wall	6539	Other unilateral oophorectomy
4664	Other fixation of large intestine	6549	Other unliateral salpingoophorectomy
4672	Closure of fistula of duodenum	6551	Other removal of both ovaries at same operative episode
4674	Closure of fistula of small intestine, except duodenum	6552	Other removal of remaining ovary
4676	Closure of fistula of large intestine	6561	Other removal of both ovaries and tubes at same operative episode
4680	Intra-abdominal manipulation of intestine, nos	6562	Other removal of remaining ovary and tube
4681	Intra-abdominal manipulation of small intestine	6571	Other simple suture of ovary
4682	Intra-abdominal manipulation of large intestine	6572	Other reimplantation of ovary
4691	Myotomy of sigmoid colon	6573	Other salpingo oophoroplasty
4692	Myotomy of other parts of colon	6579	Other repair of ovary
4693	Revision of anastomosis of small intestine	6589	Other lysis of adhesions of avary and fallopian tube
4694	Revision of anastomosis of large intestine	6592	Transplantation of ovary
4699	Other operations on intestines	6593	Manual rupture of ovarian cyst
4709	Other appendectomy	6594	Ovarian denervation
4719	Other incidental appendectomy	6595	Release of torsion of ovary
472	Drainage of appendiceal abscess	6599	Other operations on ovary
4791	Appendectomy	6601	Salpingotomy
4792	Closure of appendiceal fistula	6602	Salpingostomy
4799	Other	6631	Other bilateral ligation and crushing of fallopian tubes
4840	Pull-thru res rectum nos	6632	Other bilateral ligation and division of fallopian tubes
4841	Submucosal resection of rectum	6639	Other bilateral destruction or occlusion of fallopian tubes
4843	Opn pull-thru res rectum	664	Total unilateral salpingectomy
4849	Other pull-through resection of rectum	6651	Removal of both fallopian tubes at same operative episode
485	Abdominoperineal resection of rectum	6652	Removal of remaining fallopian tube

4850	Abdperneal res rectm nos	6661	Excision or destruction of lesion of fallopian tube
4852	Opn abdperneal resc rec	6662	Salpingectomy with removal of tubal pregnancy
4859	Abdperneal resc rect nec	6663	Bilateral partial salpingectomy, nos
4875	Abdominal proctopexy	6669	Other partial salpingectomy
500	Hepatotomy	6671	Simple suture of fallopian tube
5012	Open biopsy of liver	6672	Salpingo-oophorostomy
5021	Marsupialization of lesion of liver	6673	Salpingo-salpingostomy
5022	Partial hepatectomy	6674	Salpingo-uterostomy
5023	Opn abltm liver les/tiss	6679	Other repair of fallopian tube
5026	Abltn liver les/tiss nec	6692	Unilateral destruction or occlusion of fallopian tube
5029	Other destruction of lesion of liver	6697	Burying of fimbriae in uterine wall
503	Lobectomy of liver	680	Other incision and excision of uterus
504	Total hepatectomy	6813	Open biopsy of uterus
5051	Auxiliary liver transplant	6814	Open biopsy of uterine ligaments
5059	Other transplant of liver	683	Subtotal abdominal hysterectomy
5069	Other repair of liver	6839	Oth subtot abd hysterect
5103	Other cholecystostomy	684	Total abdominal hysterectomy
5104	Other cholecystotomy	6841	Lap total abdominal hyst
5113	Open biopsy of gallbladder or bile ducts	6849	Total abd hyst nec/nos
5121	Other partial cholecystectomy	686	Radical abdominal hysterectomy
5122	Cholecystectomy	6861	Lap radical abdomnl hyst
5124	Laparoscopic partial cholecystectomy	6869	Radical abd hyst nec/nos
5131	Anastomosis of gallbladder to hepatic ducts	688	Pelvic evisceration
5132	Anastomosis of gallbladder to intestine	6922	Other uterine suspension
5133	Anastomosis of gallbladder to pancreas	693	Paracervical uterine denervation
5134	Anastomosis of gallbladder to stomach	6941	Suture of laceration of uterus
5135	Other gallbladder anastomosis	6942	Closure of fistula of uterus
5136	Choledochenterostomy	6949	Other repair of uterus
5137	Anastomosis of hepatic duct to gastrointestinal tract		

DENOMINATOR EXCLUSIONS

Exclude cases:

- where the procedure for abdominal wall reclosure (see below) occurs on or before the day of the first abdominopelvic surgery procedure (see below)¹
- with any-listed ICD-9-CM diagnosis codes or any-listed ICD-9-CM procedure codes for immunocompromised state
- with an ICD-9-CM principal or secondary diagnosis code present on admission for disruption of internal operation wound
- with length of stay less than two (2) days
- MDC 14 (pregnancy, childbirth, and puerperium).
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

¹ If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available.

[Appendix I - Immunocompromised State Diagnosis and Procedure Codes](#)

Disruption of internal operation (surgical) wound procedure codes: (ABWALLCD)

99831 Distruption of internal operation wound