

## Appendix

Disease/procedure	ICD-10-CM codes
Non-variceal upper gastrointestinal bleeding	K20-81 Other esophagitis with bleeding K20-91 Esophagitis, unspecified with bleeding K21-01 Gastro-esophageal reflux disease with esophagitis, with bleeding K22-11 Ulcer of esophagus with bleeding K25-0 Acute gastric ulcer with hemorrhage K25-2 Acute gastric ulcer with both hemorrhage and perforation K25-4 Chronic or unspecified gastric ulcer with hemorrhage K25-6 Chronic or unspecified gastric ulcer with both hemorrhage and perforation K26-0 Acute duodenal ulcer with hemorrhage K26-2 Acute duodenal ulcer with both hemorrhage and perforation K26-4 Chronic or unspecified duodenal ulcer with hemorrhage K26-6 Chronic or unspecified duodenal ulcer with both hemorrhage and perforation K27-0 Acute peptic ulcer, site unspecified, with hemorrhage K27-2 Acute peptic ulcer, site unspecified, with both hemorrhage and perforation K27-4 Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage K27-6 Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation K28-0 Acute gastrojejunal ulcer with hemorrhage K28-2 Acute gastrojejunal ulcer with both hemorrhage and perforation K28-4 Chronic or unspecified gastrojejunal ulcer with hemorrhage K28-6 Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation K29-01 Acute gastritis with bleeding K29-21 Alcoholic gastritis with bleeding K29-31 Chronic superficial gastritis with bleeding K29-41 Chronic atrophic gastritis with bleeding K29-51 Unspecified chronic gastritis with bleeding K29-61 Other gastritis with bleeding K29-71 Gastritis, unspecified, with bleeding K29-81 Duodenitis with bleeding K29-91 Gastroduodenitis, unspecified, with bleeding K31-811 Angiodysplasia of stomach and duodenum with bleeding K31-82 Dieulafoy lesion (hemorrhagic) of stomach and duodenum K92-0 Hematemesis K92-1 Melena K92-2 Gastrointestinal hemorrhage, unspecified
Heart assist device	Z95811, O2HAOQZ
Atrial flutter	I48.3 Typical atrial flutter I48.4 Atypical atrial flutter I48.92 Unspecified atrial flutter
Atrial fibrillation	I48.0 Paroxysmal atrial fibrillation I48.11 Longstanding persistent atrial fibrillation I48.19 Other persistent atrial fibrillation I48.20 Chronic atrial fibrillation, unspecified I48.21 Permanent atrial fibrillation I48.91 Unspecified atrial fibrillation
Prosthetic heart valve	Z952 Presence of prosthetic heart valve Z953 Presence of xenogenic heart valve
Percutaneous coronary intervention	Z955 Presence of coronary angioplasty implant and graft
Alcohol use disorder	F10 Alcohol related disorders
Malnutrition	E44-1 Mild protein-calorie malnutrition E44-0 Moderate protein-calorie malnutrition E46 Unspecified protein-calorie malnutrition
Acute kidney injury	N17-0 Acute kidney failure with tubular necrosis N17-1 Acute kidney failure with acute cortical necrosis N17-2 Acute kidney failure with medullary necrosis N17-8 Other acute kidney failure N17-9 Acute kidney failure, unspecified

**Appendix. Cont.**

<b>Disease/procedure</b>	<b>ICD-10-CM codes</b>
Hypertension	I10 Essential (primary) hypertension
Hyperlipidemia	E785 Hyperlipidemia, unspecified
Abnormal INR	R79-1 Abnormal coagulation profile
Thrombocytopenia	D69-6 Thrombocytopenia, unspecified D69-59 Other secondary thrombocytopenia
Major depressive disorder	F32 Depressive episode F33 Major depressive disorder, recurrent
Renal dialysis	5A1D60Z, 5A1D00Z, 3E1M39Z
Vasopressors	3E043XZ, 3E040XZ, 3E033XZ, 3E030XZ
Endotracheal intubation	0BH18EZ, 0BH17EZ
Blood transfusion	30233N1, 30233P1, 30243N1, 30243P1, 30243H1, 30233H1
Obesity	E66 Overweight and obesity
Cardiac arrest	I46 Cardiac arrest
Chronic kidney disease	N18 Chronic kidney disease
Cerebrovascular accident	I63 Cerebral infarction
Gastrointestinal endoscopy – inspection	0DJ08ZZ, 0DJ68ZZ, 0DB18ZX, 0DB18ZZ, 0DB28ZX, 0DB28ZZ, 0DB38ZX, 0DB38ZZ, 0DB48ZX, 0DB48ZZ, 0DB58ZX, 0DB58ZZ, 0DB68ZX, 0DB68ZZ, 0DB78ZX, 0DB78ZZ, 0DB88ZX, 0DB88ZZ, 0DB98ZX, 0DB98ZZ
Gastrointestinal endoscopy – intervention	0D518ZZ, 0D528ZZ, 0D538ZZ, 0D548ZZ, 0D558ZZ, 0D568ZZ, 0D578ZZ, 0D598ZZ, 0DQ18ZZ, 0DQ28ZZ, 0DQ38ZZ, 0DQ48ZZ, 0DQ58ZZ, 0DQ68ZZ, 0DQ78ZZ, 0DQ98ZZ, 0W3P8ZZ, 3E0G8TZ, 06L38CZ
Arterial embolization	04L13DZ, 04L23DZ, 04L43DZ, 04L53DZ
Enteroscopy	0DJ07ZZ, 0D598ZZ, 0D588ZZ, 0D5A8ZZ, 0D5B8ZZ, XW0G886, 0W3P8ZZ, 0DB88ZX, 0DBA8ZX, 0DBB8ZX
Hypovolemic shock	R.571 Hypovolemic shock
Parenteral nutrition	3E0G36Z, 3E0G76Z, 3E0436Z, 3E0336Z