



<b>CLINICAL MEDICAL POLICY</b>	
<b>Policy Name:</b>	Upper Gastrointestinal Endoscopy (EGD-esophagogastroduodenoscopy)
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<b>Responsible Department(s):</b>	Medical Management
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<b>Application:</b>	All participating hospitals and providers
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**DISCLAIMER**

**Highmark Health Options medical policy is intended to serve only as a general reference resource regarding coverage for the services described. This policy does not constitute medical advice and is not intended to govern or otherwise influence medical decisions.**

**POLICY STATEMENT**

Highmark Health Options may provide coverage under the medical-surgical benefits of the Company's Medicaid products for medically necessary esophagogastroduodenoscopy.

This policy is designed to address medical necessity guidelines that are appropriate for the majority of individuals with a particular disease, illness or condition. Each person's unique clinical circumstances warrant individual consideration, based upon review of applicable medical records.

The qualifications of the policy will meet the standards of the National Committee for Quality Assurance (NCQA) and the Delaware Department of Health and Social Services (DHSS) and all applicable state and federal regulations.

## **DEFINITIONS**

**Barrett's Esophagus (BE)** – A metaplastic change of the esophageal epithelium from normal stratified squamous to columnar with goblet cells, resulting from chronic inflammation and repair. The presence of metaplastic epithelium increases risk for esophageal dysplasia and cancer.

**Dysphagia** – Difficulty or discomfort in swallowing

**Odynophagia** – Painful swallowing

**Esophagogastroduodenoscopy (EGD)/Upper Endoscopy** – A procedure that uses a long, flexible fiberoptic tube-like scope with a light and camera to examine mucosal surfaces of the upper GI tract. The scope is passed from the patient's mouth into the upper gastrointestinal tract and allows direct visualization of the entire esophagus, stomach, and up to the second portion of the duodenum and jejunum as appropriate. The procedure is performed for screening, diagnostic, and/or therapeutic purposes.

**Endoscopic Retrograde Cholangiopancreatography (ERCP)** – A procedure that combines upper gastrointestinal (GI) endoscopy and x-rays to treat problems of the bile and pancreatic ducts.

**Endoscopic Ultrasound (EUS)** – A minimally invasive procedure to assess digestive (gastrointestinal) and lung diseases. It uses high-frequency sound waves to produce detailed images of the lining and walls of the digestive tract and chest, nearby organs such as the pancreas and liver, and lymph nodes.

**Familial Adenomatous Polyposis (FAP)** – An inherited disorder characterized by cancer of the colon. People with the classic type of familial adenomatous polyposis may begin to develop multiple noncancerous (benign) growths (polyps) in the colon as early as their teenage years. Unless the colon is removed, these polyps will become malignant (cancerous). The average age at which an individual develops colon cancer in classic familial adenomatous polyposis is 39 years. Some people have a variant of the disorder, called attenuated familial adenomatous polyposis, in which polyp growth is delayed. The average age of colorectal cancer onset for attenuated familial adenomatous polyposis is 55 years. Mutations in the APC gene cause both classic and attenuated familial adenomatous polyposis. The syndrome carries a 4% to 12% lifetime risk for cancer of the duodenum, and a 50% risk for duodenal polyps.

**Gastroesophageal Reflux Disease (GERD)** – A condition in which stomach contents, including gastric acid, reflux into the esophagus causing troublesome symptoms, complications, or both.

## **PROCEDURES**

1. A **diagnostic EGD** may be considered medically necessary for ONE of the following conditions:
  - A. Upper abdominal signs or symptoms:
    - 1) Upper abdominal symptoms (e.g., pain, heartburn, non-cardiac chest pain, etc.) that persist despite an appropriate trial of therapy (e.g., acid suppression with proton-pump inhibitors [PPI]); OR
    - 2) GERD symptoms which are persistent or recurrent despite appropriate therapy; OR
    - 3) Upper abdominal symptoms associated with symptoms and/or signs suggesting serious organic disease (e.g., prolonged anorexia and weight loss) or in patients greater than 45 years of age; OR

- 4) Patients with signs or symptoms of loco-regional recurrence after resection of esophageal cancer; OR
  - 5) Other systemic diseases in which the presence of upper GI pathology might modify other planned management, including but not limited to:
    - a. Patients with a history of GI bleeding scheduled for organ transplantation; OR
    - b. Patients with a history of long-term anticoagulation; OR
    - c. Patients with chronic non-steroidal therapy for arthritis; OR
  - 6) Persistent vomiting of unknown cause for at least 7 days; OR
  - 7) Dysphagia or odynophagia; OR
  - 8) The presence of gastrointestinal bleeding:
    - a. In patients with recent or active bleeding; OR
    - b. When surgical therapy is contemplated; OR
    - c. When re-bleeding occurs after acute self-limited blood loss or after endoscopic therapy; OR
    - d. In patients with suspected chronic blood loss (e.g., iron deficiency anemia when the clinical situation suggests an upper gastrointestinal source, or colonoscopy is inconclusive or negative); OR
    - e. In patients with suspected portal hypertension or aorto-enteric fistula; OR
  - B. Intraoperative EGD when necessary to clarify location or pathology of a lesion; OR
  - C. Confirmation and specific histological diagnosis of radiologically (X-ray) demonstrated lesions, including but not limited to:
    - 1) Suspected neoplastic lesion; OR
    - 2) Gastric or esophageal ulcer; OR
    - 3) Evidence of upper gastrointestinal tract stricture or obstruction; OR
  - D. A patient has cirrhosis with documentation of esophageal varices; OR
  - E. To assess acute injury after caustic ingestion; OR
  - F. When sampling of duodenal or jejunal tissue or fluid is indicated; OR
  - G. To identify upper gastrointestinal etiology of lower gastrointestinal symptoms in patients suspected of having small-bowel disease (e.g., celiac disease OR Crohn's Disease).
2. A **therapeutic EGD** may be considered medically necessary for ONE of the following conditions:
- A. Treatment of bleeding from lesions such as ulcers, tumors, and vascular abnormalities (e.g., electrocoagulation, heater probe, laser photocoagulation, or injection therapy); OR
  - B. For esophageal varices using endoscopic variceal ligation:
    - 1) Sclerotherapy for bleeding from esophageal or proximal gastric varices; AND/OR
    - 2) Band ligation for bleeding from esophageal or proximal gastric varices; OR
    - 3) Banding of varices; OR
  - C. Removal of foreign bodies; OR
  - D. Removal of selected polypoid; OR
  - E. Placement of feeding or drainage tubes (oral, peroral, trans-nasal, percutaneous endoscopic gastrostomy, percutaneous endoscopic jejunostomy); OR
  - F. Dilation of stenotic lesions (e.g., with trans-endoscopic balloon dilators or dilation systems using guide wires); OR
  - G. Management of achalasia by means of botulinum toxin or balloon dilation; OR
  - H. Palliative treatment for stenosis lesions for neoplasm (e.g., laser, bipolar electrocoagulation, stent placement); OR
  - I. Management of operative complications (e.g., dilation of anastomotic strictures, stenting of anastomotic disruption, fistula, or leak in selected circumstances).

3. A **sequential or periodic diagnostic EGD** may be considered medically necessary for ANY of the following active or symptomatic conditions:
  - A. In patients with Barrett's esophagus in *any* of the following scenarios:
    - 1) Without dysplasia after two (2) consecutive examinations within one (1) year, EGD surveillance should take place at three (3) to five (5) year intervals; OR
    - 2) With confirmed low-grade dysplasia (LGD), one EGD may be performed every six (6) to twelve (12) months. If three (3) sequential biopsies show no dysplasia, then acceptable EGD surveillance should take place at three (3) to five (5) year intervals; OR
    - 3) With confirmed high-grade dysplasia (HGD), one EGD may be performed every three (3) to six (6) months for one (1) year. After one (1) year of no dysplastic changes and no cancer detection on two (2) subsequent EGDs, the EGD surveillance should be lengthened to three (3) to six (6) month intervals; OR
    - 4) For follow-up of patients with dysplastic BE after ablative therapy every three (3) to six (6) months for one (1) year; OR
  - B. For follow-up for adequacy of prior sclerotherapy and/or band ligation of esophageal varices every six (6) to twenty-four (24) months after the initial sclerotherapy/banding sessions are completed; OR
  - C. For follow-up of esophageal, gastric, or stomal ulcers to demonstrate healing in patients with continued symptoms despite adequate PPI therapy trial in two (2) to four (4) months; OR
  - D. For follow-up in patients with prior adenomatous gastric polyps in one (1) to four (4) years after resection (occasional patients after resection of sessile and dysplastic polyps requiring six (6) months); OR
  - E. For follow-up in patients with familial adenomatous polyposis (FAP) (approximate frequency of follow-up EGDs would be every two (2) to four (4) years, but might be more frequent, such as every six (6) to (12) twelve months if gastric adenomas or adenomas of the duodenum were demonstrated); OR
  - F. For follow-up of recurrence of adenomatous polyps in synchronous and metachronous sites at three (3) to five (5) year intervals; OR
  - G. For follow-up of patients with hereditary non-polyposis colorectal cancer or gastric cancer (Lynch syndrome) every three (3) to five (5) years.
4. An **Endoscopic Retrograde Cholangiopancreatography (ERCP)** may be considered medically necessary for high-risk screening for ANY of the following conditions:
  - A. Traumatic pancreatitis to accurately localize the injury and provide endoscopic drainage; OR
  - B. Pancreatic duct stricture evaluation; OR
  - C. The extraction of bile duct stones in severe gallstone-induced pancreatitis; OR
  - D. In detecting pancreatic ductal changes in chronic pancreatitis and also the presence of calcified stones in the ductal system. A pancreatogram may be performed and is likely to be abnormal in chronic alcoholic pancreatitis but less so in non-alcoholic induced types; OR
  - E. In detecting gallstones in symptomatic patients whose oral cholecystogram and gallbladder ultrasonograms are normal; AND
  - F. In patients with radiologic imaging suggestive of common bile duct stones or other potential pathology.

**NOTE:** An ERCP is considered complete if one (1) or more of the ductal system(s), (pancreatic/biliary) is/are visualized. To report ERCP attempted but with unsuccessful cannulation of any ductal system, see procedure codes 43235-43259, 43266, and 43270.

5. An **Endoscopic Ultrasound (EUS)** may be considered medically necessary for high-risk screening for one of the following conditions:
- A. Staging tumors of the gastrointestinal tract, pancreas, and bile ducts; OR
  - B. Evaluation abnormalities of the gastrointestinal tract wall or adjacent structures; OR
  - C. Tissue sampling of lesions within, or adjacent to, the wall of the gastrointestinal tract; OR
  - D. Evaluation abnormalities of the pancreas, including masses, pseudocysts, and chronic pancreatitis; OR
  - E. Evaluation of abnormalities of the biliary tree; OR
  - F. Providing endoscopic therapy of the gastrointestinal tract under ultrasonographic guidance; OR
  - G. Staging of tumors shown to be metastatic only when the results are the basis for therapeutic decision.
6. When an **EGD** is not covered
- For conditions other than those listed above, scientific evidence has not been established. Examples include but are not limited to:
- A. **Diagnostic EGD**
    - 1) In the presence of typical GERD symptoms; OR
    - 2) Uncomplicated heartburn responding to medical therapy; OR
    - 3) Distress which is chronic, non-progressive, atypical for known organic disease, and is considered functional in origin (there are occasional exceptions in which an endoscopic examination may be done once to rule out organic disease, especially if symptoms are unresponsive to therapy); OR
    - 4) Metastatic adenocarcinoma of unknown primary site when the results will not alter management; OR
    - 5) X-ray findings of:
      - a. Asymptomatic or uncomplicated sliding hiatus hernia; OR
      - b. Uncomplicated duodenal bulb ulcer which has responded to therapy; OR
      - c. Deformed duodenal bulb when symptoms are absent or respond adequately to ulcer therapy; OR
    - 6) Patients without current gastrointestinal symptoms about to undergo elective surgery for non-upper gastrointestinal disease; OR
    - 7) When lower GI endoscopy reveals the cause of symptoms, abnormal signs, or abnormal laboratory tests (e.g., colonic neoplasm with iron deficiency anemia); OR
    - 8) To screen for *Helicobacter pylori* infection in GERD; OR
    - 9) Routine screening before a bariatric surgery in asymptomatic patients.
  - B. **Therapeutic EGD**
    - 1) Routine biopsies from the distal esophagus to diagnose GERD; OR
    - 2) HPV-related cancer in esophageal condyloma biopsies.
  - C. **Sequential or periodic diagnostic EGD**
    - 1) Surveillance for malignancy in patients with gastric atrophy, pernicious anemia, treated achalasia, or prior gastric operation; OR
    - 2) Surveillance of healed benign disease such as esophagitis, gastric or duodenal ulcer; OR
    - 3) Surveillance during chronic repeated dilations of benign strictures unless there is a change in status; OR
    - 4) Routine screening of the upper gastrointestinal tract.

7. When **ERCP** is not covered

For conditions other than those listed above, scientific evidence has not been established. Examples include but are not limited to:

- A. For the diagnosis of pancreatitis without gallstone involvement; OR
- B. For the initial and early stages of patients with acute biliary pancreatitis without clinical evidence of bile duct stones or biliary obstruction; OR
- C. For treatment of malignant biliary obstruction in jaundiced patients who are candidates for curative surgery unless they require preoperative treatment of the obstructed duct; OR
- D. For treatment of patients with abdominal pain and suspected sphincter of Oddi dysfunction without specific anatomic or biochemical abnormalities referable to bile duct stones or the pancreas; OR
- E. For preoperative treatment of patients who are undergoing cholecystectomy for gallstones and who have a low probability of bile duct stones; OR
- F. For treatment of gallbladder disease without evidence of bile duct disease; OR
- G. For stenting of malignant pancreatobiliary obstruction in patients who are possible candidates for curative surgery, since stent insertion may complicate surgical resection.

8. When **EUS** is not covered

For conditions other than those listed above, scientific evidence has not been established. Examples include but are not limited to:

- A. Diagnosis of esophageal varices; OR
- B. EUS-elastography (for differentiation of benign and malignant pancreatic masses; differential diagnosis of malignant lymph nodes; for adrenal glands, hepatobiliary/gastrointestinal tract pathology (including anal canal), lung, mediastinum, and urogenital tract); OR
- C. Staging of tumors shown to be metastatic by other imaging methods (unless the results are the basis for therapeutic decisions); OR
- D. When the results will not alter care of the patient.

9. Contraindications

**ERCP**

- A. Uncooperative or unstable patient;
- B. A perforated viscus; OR
- C. Anatomical impediments (e.g., newly created GI anastomosis).

*There are concerns regarding the safety of ERCP in these patient populations.*

10. Post-payment Audit Statement

The medical record must include documentation that reflects the medical necessity criteria and is subject to audit by Highmark Health Options at any time pursuant to the terms of your provider agreement.

11. Place of Service

This medical policy will be applied on a post-service prepayment basis for both professional and facility claims.

## **GOVERNING BODIES APPROVAL**

### **Food and Drug Administration (FDA)**

Endoscopic retrograde cholangiopancreatography (ERCP) involves the use of various devices such as catheters, endoscopes, stents, sphincterotomes, retrieval baskets, and x-ray equipment, which are marketed by numerous manufacturers. The generic names of the devices and their product codes in the classification database of the FDA's Center for Devices and Radiological Health (CDRH) are listed below.

All have received 510(k) approval, and all but 2 are Class II devices (FDA, 2008):

- Brush, cytology, for endoscope (*Product code: FDX*)
- Catheter, biliary, diagnostic (includes biliary stent) (*Product code: FGE*)
- Catheter, biliary, surgical (*Product code: GCA*)
- Catheter, irrigation and aspiration (*Product code: KDH*)
- Catheter, multilumen (Class I) (*Product code: GBP*)
- Choledochoscope, flexible or rigid (*Product code: FBN*)
- Dislodger, stone, biliary (*Product code: LQR*)
- Disposable guidewire (*Product code: KOG*)
- Duodenoscope (*Product code: FDT*)
- Endoscope, direct vision (*Product code: GCR*)
- Endoscope, fiber optic (*Product code: GDB*)
- Endoscope, flexible (*Product code: GCQ*)
- Lithotripter, shockwave (for treating gallbladder stones) (Class III) (*Product code: NCV*)
- System, x-ray, fluoroscopic, image-intensified (*Product code: JAA*)
- Tube, single lumen with mercury weight balloon (*Product code: FEF*)
- Unit, electrosurgical, endoscopic (including sphincterotomes) (*Product code: KNS*)

Endoscopic ultrasound (EUS) for diagnosis of pancreatic tumors is a procedure and therefore is not subject to FDA regulation. However, the equipment used to perform EUS is subject to FDA regulation.

Radial endoscopes or related endoscopic ultrasound equipment that have received FDA 510(k) approval for use in the endoscopic ultrasound imaging of the pancreatic ducts include but are not limited to the following devices (CDRH, 2011):

- GF-UM2/EU-M2 fiber optic endoscope (Olympus Corp.; K872027; approved August 17, 1987)
- GF-UM3/EU-M3 fiber optic endoscope (Olympus Corp.; K882061; approved November 15, 1988)
- GF-UM130 ultrasound gastrovideoscope (Olympus America Inc.; K971660, approved July 25, 1997)
- EU-M60 EUS Exera Endoscopic Ultrasound Center with the EUS Exera Ultrasonic Gastrovideoscope GFUM160 (Olympus America Inc.; K011886; approved August 27, 2001)

Linear endoscopes or related equipment that have received FDA 510(k) approval for use in the endoscopic ultrasound imaging of the pancreatic ducts include but are not limited to the following (CDRH, 2011):

- Olympus GF Type UC-140P-DO5 Ultrasonic Gastrovideoscope and Olympus GF Type UC-30P Ultrasonic Gastrofiberscope (Olympus America Inc.; K021886; approved June 19, 2002)
- FG-36UX Fiber Ultrasound Gastroscopy (Pentax Precision Instrument Corp.; K041396; approved June 9, 2004)

## **COVERAGE DETERMINATIONS**

The Center for Medicare & Medicaid Services (CMS) has established a generic National Coverage Determination (NCD) regarding Endoscopy diagnostic procedures (100.2). There are no National Coverage Determination policies that indicate coverage indications specifically related to Esophagogastroduodenoscopy (EGD), Endoscopic Ultrasound (EUS), or Endoscopic Retrograde Cholangiopancreatography (ERCP).

NCD: Endoscopy (100.2)

<https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=81&ncdver=1&bc=AAAAQAAAAAA&>

There are Local Coverage Determinations (LCD) that were identified from two contractors, including Palmetto GBA and Novitas Solutions, Inc. Both of LCDs indicate coverage indications specifically related to Upper Gastrointestinal Endoscopy (Diagnostic and Therapeutic).

Novitas Solutions, Inc. LCD: Upper Gastrointestinal Endoscopy (Diagnostic and Therapeutic) (L35350):

<https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=35350&ver=36&DocType=All&bc=AAIAAAAAAAAA&>

Palmetto GBA LCD: Upper Gastrointestinal Endoscopy and Visualization (L34434):

[https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=34434&ContrId=381&ver=37&ContrVer=1&CntrctrSelected=381\\*1&Cntrctr=381&LCntrctr=391\\*1%7c394\\*1%7c392\\*1%7c395\\*1%7c393\\*1%7c396\\*1%7c373\\*1%7c227\\*1%7c374\\*1%7c226\\*1%7c378\\*1%7c234\\*1%7c375\\*1%7c379\\*1%7c376\\*1%7c380\\*1%7c377\\*1%7c381\\*1&DocType=Active&bc=AAACAAQAAAA&](https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=34434&ContrId=381&ver=37&ContrVer=1&CntrctrSelected=381*1&Cntrctr=381&LCntrctr=391*1%7c394*1%7c392*1%7c395*1%7c393*1%7c396*1%7c373*1%7c227*1%7c374*1%7c226*1%7c378*1%7c234*1%7c375*1%7c379*1%7c376*1%7c380*1%7c377*1%7c381*1&DocType=Active&bc=AAACAAQAAAA&)

## **CODING REQUIREMENTS**

### Procedure Codes

CPT Codes	Description
<b>Diagnostic, Therapeutic and Sequential EGDs</b>	
43180	Esophagoscopy, rigid, transoral with diverticulectomy of hypopharynx or cervical esophagus (e.g., Zenker's diverticulum), with cricopharyngeal myotomy, includes use of telescope or operating microscope and repair, when performed
43191	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure)
43192	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure), with directed submucosal injection(s), any substance
43193	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure), with biopsy, single or multiple
43194	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure), with removal of foreign body
43195	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure), with balloon dilation (less than 30 mm diameter)

43196	Esophagoscopy, rigid, transoral; diagnostic, including collection of specimen(s) by brushing or washing when performed (separate procedure), with insertion of guide wire followed by dilation over guide wire
43197	Esophagoscopy, flexible, transnasal; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)
43198	Esophagoscopy, flexible, transnasal; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with biopsy, single or multiple
43200	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)
43201	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with directed submucosal injection(s), any substance
43202	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with biopsy, single or multiple
43204	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with injection sclerosis of esophageal varices
43205	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with band ligation of esophageal varices
43206	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with optical endomicroscopy
43210	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with esophagogastric fundoplasty, partial or complete, includes duodenoscopy when performed
43211	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with endoscopic mucosal resection
43212	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)
43213	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with dilation of esophagus, by balloon or dilator, retrograde (includes fluoroscopic guidance, when performed)
43214	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with dilation of esophagus with balloon (30 mm diameter or larger) (includes fluoroscopic guidance, when performed)
43215	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal of foreign body(s)
43216	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
43217	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal of tumor(s), polyp(s), or other lesion(s) by snare technique
43220	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with transendoscopic balloon dilation (less than 30 mm diameter)
43226	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with insertion of guide wire followed by passage of dilator(s) over guide wire
43227	Esophagoscopy, flexible, transoral; diagnostic, including collection of

	specimen(s) by brushing or washing, when performed (separate procedure), with control of bleeding, any method
43229	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with ablation of tumor(s), polyp(s), or other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)
43233	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with dilation of esophagus with balloon (30 mm diameter or larger) (includes fluoroscopic guidance, when performed)
43235	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure)
43236	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with directed submucosal injection(s), any substance
43239	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with biopsy, single or multiple
43241	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with insertion of intraluminal tube or catheter
43243	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with injection sclerosis of esophageal/gastric varices
43244	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with band ligation of esophageal/gastric varices
43245	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with dilation of gastric/duodenal stricture(s) (e.g., balloon bougie)
43246	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with directed placement of percutaneous gastrostomy tube
43247	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with removal of foreign body(s)
43248	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with insertion of guide wire followed by passage of dilator(s) through esophagus over guide wire
43249	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with transendoscopic balloon dilation of esophagus (less than 30 mm diameter)
43250	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with removal of tumor(s), polyp(s), or other lesion(s) by hot biopsy forceps
43251	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with removal of tumor(s), polyp(s), or other lesion(s) by snare technique
43252	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with optical endomicroscopy
43254	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with endoscopic mucosal resection
43255	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with control of bleeding, any method

43257	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with delivery of thermal energy to the muscle of lower esophageal sphincter and/or gastric cardia, for treatment of gastroesophageal reflux disease
43266	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with placement of endoscopic stent (includes pre- and post-dilation and guide wire passage, when performed)
43270	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with ablation of tumor(s), polyp(s), other lesion(s) (includes pre- and post-dilation and guide wire passage, when performed)
<b>ERCP</b>	
43260	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)
43261	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with biopsy, single or multiple
43262	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with sphincterotomy/papillotomy
43263	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with pressure measurement of sphincter of Oddi
43264	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal of calculi/debris from biliary/pancreatic duct(s)
43265	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with destruction of calculi, any method (e.g., mechanical, electrohydraulic, lithotripsy)
43274	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with placement of endoscopic stent into biliary or pancreatic duct, including sphincterotomy, when performed, each stent
43275	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal of foreign body(s) or stent(s) from biliary/pancreatic duct(s)
43276	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with removal and exchange and exchange of stent(s), biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent exchanged
43277	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with trans-endoscopic balloon dilation of biliary/pancreatic duct(s) or of ampulla (sphincteroplasty), including sphincterotomy, when performed, each duct
43278	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with ablation of tumor(s), polyp(s), or other lesion(s), including pre- and post-dilation and guide wire passage, when performed
<b>EUS</b>	
43231	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with endoscopic ultrasound examination

43232	Esophagoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s)
43237	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with endoscopic ultrasound examination limited to the esophagus, stomach or duodenum, and adjacent structures
43238	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s), (includes endoscopic ultrasound examination limited to esophagus, stomach or duodenum, and adjacent structures)
43240	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with transmural drainage of pseudocyst (includes placement of transmural drainage catheter[s]/stent[s], when performed, and endoscopic ultrasound, when performed)
43242	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s) (includes endoscopic ultrasound examination of the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis)
43253	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with transendoscopic ultrasound-guided transmural injection of diagnostic or therapeutic substance(s) (e.g., anesthetic, neurolytic agent) or fiducial marker(s) (includes endoscopic ultrasound examination of the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis)
43259	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(S) by brushing or washing, when performed (separate procedure), with endoscopic ultrasound examination, including the esophagus, stomach, and either the duodenum or a surgically altered stomach where the jejunum is examined distal to the anastomosis

#### Diagnosis Codes

ICD-10 Codes	Description
<b>Diagnostic EGD</b>	
B37.81	Candidal esophagitis
C12	Malignant neoplasm of pyriform sinus
C13.0	Malignant neoplasm of postcricoid region
C13.1	Malignant neoplasm of aryepiglottic fold, hypopharyngeal aspect
C13.2	Malignant neoplasm of posterior wall of hypopharynx
C13.8	Malignant neoplasm of overlapping sites of hypopharynx
C13.9	Malignant neoplasm of hypopharynx
C15.3	Malignant neoplasm of upper third of esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C15.9	Malignant neoplasm of esophagus, unspecified
C16.0	Malignant neoplasm of cardia
C16.1	Malignant neoplasm of fundus of stomach

C16.2	Malignant neoplasm of body of stomach
C16.3	Malignant neoplasm of pyloric antrum
C16.4	Malignant neoplasm of pylorus
C16.5	Malignant neoplasm of lesser curvature of stomach, unspecified
C16.6	Malignant neoplasm of greater curvature of stomach, unspecified
C16.8	Malignant neoplasm of overlapping sites of stomach
C16.9	Malignant neoplasm of stomach, unspecified
C17.0	Malignant neoplasm of duodenum
C25.0	Malignant neoplasm of head of pancreas
C25.1	Malignant neoplasm of body of pancreas
C25.2	Malignant neoplasm of tail of pancreas
C25.3	Malignant neoplasm of pancreatic duct
C25.4	Malignant neoplasm of endocrine pancreas
C25.7	Malignant neoplasm of other parts of pancreas
C25.8	Malignant neoplasm of overlapping sites of pancreas
C25.9	Malignant neoplasm of pancreas, unspecified
C78.4	Secondary malignant neoplasm of small intestine
D00.1	Carcinoma in situ of esophagus
D00.2	Carcinoma in situ of stomach
D01.7	Carcinoma in situ of other specified digestive organs
D01.9	Carcinoma in situ of digestive organ, unspecified
D13.0	Benign neoplasm of esophagus
D13.1	Benign neoplasm of stomach
D13.2	Benign neoplasm of duodenum
D13.30	Benign neoplasm of unspecified part of small intestine
D13.39	Benign neoplasm of other parts of small intestine
D37.1	Neoplasm of uncertain behavior of stomach
D37.2	Neoplasm of uncertain behavior of small intestine
D37.3	Neoplasm of uncertain behavior of appendix
D37.4	Neoplasm of uncertain behavior of colon
D37.5	Neoplasm of uncertain behavior of rectum
D49.0	Neoplasm of unspecified behavior of digestive system
D50.0	Iron deficiency anemia secondary to blood loss (chronic)
D62	Acute posthemorrhagic anemia
E41	Nutritional marasmus
E43*	Unspecified severe protein-calorie malnutrition
E44.0	Moderate Protein-Calorie Malnutrition
E46	Unspecified Protein-calorie malnutrition
E64.0	Sequelae of Protein-calorie malnutrition
I69.091	Dysphagia following nontraumatic subarachnoid hemorrhage
I69.191	Dysphagia following nontraumatic intracerebral hemorrhage
I69.291	Dysphagia following other nontraumatic intracranial hemorrhage
I69.391	Dysphagia following cerebral infarction

I69.891	Dysphagia following other cerebrovascular disease
I69.991	Dysphagia following unspecified cerebrovascular disease
I77.2	Rupture of artery
I85.00	Esophageal varices without bleeding
I85.01	Esophageal varices with bleeding
I85.10	Secondary esophageal varices without bleeding
I85.11	Secondary esophageal varices with bleeding
I86.4	Gastric varices
J86.0	Pyothorax with fistula
K20.0	Eosinophilic esophagitis
K20.8	Other esophagitis
K20.9	Esophagitis, unspecified
K22.0	Achalasia of cardia
K22.10	Ulcer of esophagus without bleeding
K22.11	Ulcer of esophagus with bleeding
K22.2	Esophageal obstruction
K22.3	Perforation of esophagus
K22.4	Dyskinesia of esophagus
K22.5	Diverticulum of esophagus, acquired
K22.6	Gastro-esophageal laceration-hemorrhage syndrome
K22.70	Barrett's esophagus without dysplasia
K22.710	Barrett's esophagus with low grade dysplasia
K22.711	Barrett's esophagus with high grade dysplasia
K22.719	Barrett's esophagus with dysplasia, unspecified
K22.8	Other specified diseases of esophagus
K23	Disorders of esophagus in diseases classified elsewhere
K25.0	Acute gastric ulcer with hemorrhage
K25.1	Acute gastric ulcer with perforation
K25.2	Acute gastric ulcer with both hemorrhage and perforation
K25.3	Acute gastric ulcer without hemorrhage or perforation
K25.4	Chronic or unspecified gastric ulcer with hemorrhage
K25.5	Chronic or unspecified gastric ulcer with perforation
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation
K25.7	Chronic gastric ulcer without hemorrhage or perforation
K25.9	Gastric ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K26.0	Acute duodenal ulcer with hemorrhage
K26.1	Acute duodenal ulcer with perforation
K26.2	Acute duodenal ulcer with both hemorrhage and perforation
K26.3	Acute duodenal ulcer without hemorrhage or perforation
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage
K26.5	Chronic or unspecified duodenal ulcer with perforation
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation
K26.7	Chronic duodenal ulcer without hemorrhage or perforation

K26.9	Duodenal ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
K27.1	Acute peptic ulcer, site unspecified, with perforation
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.3	Acute peptic ulcer, site unspecified, without hemorrhage or perforation
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.7	Chronic peptic ulcer, site unspecified, without hemorrhage or perforation
K27.9	Peptic ulcer, site unspecified, unspecified as acute or chronic, without hemorrhage or perforation
K28.0	Acute gastrojejunal ulcer with hemorrhage
K28.1	Acute gastrojejunal ulcer with perforation
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation
K28.3	Acute gastrojejunal ulcer without hemorrhage or perforation
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation
K28.7	Chronic gastrojejunal ulcer without hemorrhage or perforation
K28.9	Gastrojejunal ulcer, unspecified as acute or chronic, without hemorrhage or perforation
K29.00	Acute gastritis without bleeding
K29.01	Acute gastritis with bleeding
K29.20	Alcoholic gastritis without bleeding
K29.21	Alcoholic gastritis with bleeding
K29.30	Chronic superficial gastritis without bleeding
K29.31	Chronic superficial gastritis with bleeding
K29.40	Chronic atrophic gastritis without bleeding
K29.41	Chronic atrophic gastritis with bleeding
K29.50	Unspecified chronic gastritis without bleeding
K29.51	Unspecified chronic gastritis with bleeding
K29.60	Other gastritis without bleeding
K29.61	Other gastritis with bleeding
K29.70	Gastritis, unspecified, without bleeding
K29.71	Gastritis, unspecified, with bleeding
K29.80	Duodenitis without bleeding
K29.81	Duodenitis with bleeding
K29.90	Gastroduodenitis, unspecified, without bleeding
K29.91	Gastroduodenitis, unspecified, with bleeding
K30	Functional Dyspepsia
K31.0	Acute Dilation of Stomach
K31.1	Adult hypertrophic pyloric stenosis
K31.2	Hourglass stricture and stenosis of stomach
K31.3	Pylorospasm, not elsewhere classified
K31.4	Gastric diverticulum

K31.5	Obstruction of duodenum
K31.6	Fistula of stomach and duodenum
K31.7	Polyp of stomach and duodenum
K31.811	Angiodysplasia of stomach and duodenum with bleeding
K31.819	Angiodysplasia of stomach and duodenum without bleeding
K31.82	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
K31.89	Other diseases of stomach and duodenum
K44.0	Diaphragmatic hernia with obstruction, without gangrene
K50.011	Crohn's disease of small intestine with rectal bleeding
K50.012	Crohn's disease of small intestine with intestinal obstruction
K50.013	Crohn's disease of small intestine with fistula
K50.014	Crohn's disease of small intestine with abscess
K50.018	Crohn's disease of small intestine with other complication
K50.019	Crohn's disease of small intestine with unspecified complications
K50.111	Crohn's disease of large intestine with rectal bleeding
K50.112	Crohn's disease of large intestine with intestinal obstruction
K50.113	Crohn's disease of large intestine with fistula
K50.114	Crohn's disease of large intestine with abscess
K50.118	Crohn's disease of large intestine with other complication
K50.119	Crohn's disease of large intestine with unspecified complications
K50.811	Crohn's disease of both small and large intestine with rectal bleeding
K50.812	Crohn's disease of both small and large intestine with intestinal obstruction
K50.813	Crohn's disease of both small and large intestine with fistula
K50.814	Crohn's disease of both small and large intestine with abscess
K50.818	Crohn's disease of both small and large intestine with other complication
K50.819	Crohn's disease of both small and large intestine with unspecified complications
K52.9	Noninfective gastroenteritis and colitis, unspecified
K55.011	Focal (segmental) acute (reversible) ischemia of small intestine
K55.012	Diffuse acute (reversible) ischemia of small intestine
K55.019	Acute (reversible) ischemia of small intestine, extent unspecified
K55.021	Focal (segmental) acute infarction of small intestine
K55.022	Diffuse acute infarction of small intestine
K55.029	Acute infarction of small intestine, extent unspecified
K70.30	Alcoholic cirrhosis of liver without ascites
K70.31	Alcoholic cirrhosis of liver with ascites
K71.7	Toxic liver disease with fibrosis and cirrhosis of liver
K74.3	Primary biliary cirrhosis
K74.4	Secondary biliary cirrhosis
K74.5	Biliary cirrhosis, unspecified
K74.60	Unspecified cirrhosis of liver
K74.69	Other cirrhosis of liver
K76.6	Portal hypertension
K80.00	Calculus of gallbladder with acute cholecystitis without obstruction

K80.01	Calculus of gallbladder with acute cholecystitis with obstruction
K80.10	Calculus of gallbladder with chronic cholecystitis without obstruction
K80.11	Calculus of gallbladder with chronic cholecystitis with obstruction
K80.12	Calculus of gallbladder with acute and chronic cholecystitis without obstruction
K80.13	Calculus of gallbladder with acute and chronic cholecystitis with obstruction
K80.18	Calculus of gallbladder with other cholecystitis without obstruction
K80.19	Calculus of gallbladder with other cholecystitis with obstruction
K80.20	Calculus of gallbladder without cholecystitis without obstruction
K80.21	Calculus of gallbladder without cholecystitis with obstruction
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction
K80.32	Calculus of bile duct with acute cholangitis without obstruction
K80.33	Calculus of bile duct with acute cholangitis with obstruction
K80.34	Calculus of bile duct with chronic cholangitis without obstruction
K80.35	Calculus of bile duct with chronic cholangitis with obstruction
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction
K80.40	Calculus of bile duct with cholecystitis, unspecified, without obstruction
K80.41	Calculus of bile duct with cholecystitis, unspecified, with obstruction
K80.42	Calculus of bile duct with acute cholecystitis without obstruction
K80.43	Calculus of bile duct with acute cholecystitis with obstruction
K80.44	Calculus of bile duct with chronic cholecystitis without obstruction
K80.45	Calculus of bile duct with chronic cholecystitis with obstruction
K80.46	Calculus of bile duct with acute and chronic cholecystitis without obstruction
K80.47	Calculus of bile duct with acute and chronic cholecystitis with obstruction
K80.50	Calculus of bile duct without cholangitis or cholecystitis without obstruction
K80.51	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K80.60	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K80.61	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction
K80.63	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K80.64	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction
K80.65	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction
K80.66	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction
K80.67	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction
K80.70	Calculus of gallbladder and bile duct without cholecystitis without obstruction
K80.71	Calculus of gallbladder and bile duct without cholecystitis with obstruction
K80.80	Other cholelithiasis without obstruction
K80.81	Other cholelithiasis with obstruction
K83.0	Cholangitis
K83.1	Obstruction of bile duct
K83.2	Perforation of bile duct
K83.3	Fistula of bile duct
K83.4	Spasm of sphincter of Oddi

K83.5	Biliary cyst
K83.8	Other specified diseases of biliary tract
K83.9	Disease of biliary tract, unspecified
K85.00	Idiopathic acute pancreatitis without necrosis or infection
K85.01	Idiopathic acute pancreatitis with uninfected necrosis
K85.02	Idiopathic acute pancreatitis with infected necrosis
K85.10	Biliary acute pancreatitis without necrosis or infection
K85.11	Biliary acute pancreatitis with uninfected necrosis
K85.12	Biliary acute pancreatitis with infected necrosis
K85.20	Alcohol induced acute pancreatitis without necrosis or infection
K85.21	Alcohol induced acute pancreatitis with uninfected necrosis
K85.22	Alcohol induced acute pancreatitis with infected necrosis
K85.30	Drug induced acute pancreatitis without necrosis or infection
K85.31	Drug induced acute pancreatitis with uninfected necrosis
K85.32	Drug induced acute pancreatitis with infected necrosis
K85.80	Other acute pancreatitis without necrosis or infection
K85.81	Other acute pancreatitis with uninfected necrosis
K85.82	Other acute pancreatitis with infected necrosis
K85.90	Acute pancreatitis without necrosis or infection, unspecified
K85.91	Acute pancreatitis with uninfected necrosis, unspecified
K85.92	Acute pancreatitis with infected necrosis, unspecified
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K86.2	Cyst of pancreas
K86.3	Pseudocyst of pancreas
K86.81	Exocrine pancreatic insufficiency
K86.89	Other specified diseases of pancreas
K87	Disorders of gallbladder, biliary tract and pancreas in diseases classified elsewhere
K90.0	Celiac Disease
K90.81	Whipple's Disease
K91.30	Postprocedural intestinal obstruction, unspecified as to partial versus complete
K91.31	Postprocedural partial intestinal obstruction
K91.32	Postprocedural complete intestinal obstruction
K91.61	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating a digestive system procedure
K91.62	Intraoperative hemorrhage and hematoma of a digestive system organ or structure complicating other procedure
K91.71	Accidental puncture and laceration of a digestive system organ or structure during a digestive system procedure
K91.72	Accidental puncture and laceration of a digestive system organ or structure during other procedure
K91.81	Other intraoperative complications of digestive system
K91.840	Postprocedural hemorrhage of a digestive system organ or structure following a digestive system procedure
K91.841	Postprocedural hemorrhage of a digestive system organ or structure following other procedure

K91.870	Postprocedural hematoma of a digestive system organ or structure following a digestive system procedure
K91.871	Postprocedural hematoma of a digestive system organ or structure following other procedure
K91.872	Postprocedural seroma of a digestive system organ or structure following a digestive system procedure
K91.873	Postprocedural seroma of a digestive system organ or structure following other procedure
K91.89	Other postprocedural complications and disorders of digestive system
K92.0	Hematemesis
K92.1	Melena
K92.2	Gastrointestinal hemorrhage, unspecified
K92.81	Gastrointestinal mucositis (ulcerative)
K94.23	Gastrostomy malfunction
K94.30	Esophagostomy complications, unspecified
K94.31	Esophagostomy hemorrhage
K94.32	Esophagostomy infection
K94.33	Esophagostomy malfunction
K94.39	Other complications of esophagostomy
Q26.5	Anomalous portal venous connection
Q26.6	Portal vein-hepatic artery fistula
Q27.33	Arteriovenous malformation of digestive system vessel
Q39.0	Atresia of esophagus without fistula
Q39.1	Atresia of esophagus with tracheo-esophageal fistula
Q39.2	Congenital tracheo-esophageal fistula without atresia
Q39.3	Congenital stenosis and stricture of esophagus
Q39.4	Esophageal web
Q39.5	Congenital dilatation of esophagus
Q39.6	Congenital diverticulum of esophagus
Q39.8	Other congenital malformations of esophagus
Q39.9	Congenital malformation of esophagus, unspecified
Q40.2	Other specified congenital malformations of stomach
Q40.3	Congenital malformation of stomach, unspecified
Q40.8	Other specified congenital malformations of upper alimentary tract
Q40.9	Congenital malformation of upper alimentary tract, unspecified
P78.83	Newborn esophageal reflux
R07.9	Chest pain, unspecified
R10.11	Right upper quadrant pain
R10.12	Left upper quadrant pain
R10.13	Epigastric pain
R10.33	Periumbilical pain
R11.0	Nausea
R11.10	Vomiting, unspecified
R11.11	Vomiting without nausea
R11.12	Projectile vomiting
R11.2	Nausea with vomiting, unspecified

R12	Heartburn
R13.0	Aphagia
R13.10	Dysphagia, unspecified
R13.11	Dysphagia, oral phase
R13.12	Dysphagia, oropharyngeal phase
R13.13	Dysphagia, pharyngeal phase
R13.14	Dysphagia, pharyngoesophageal phase
R13.19	Other dysphagia
R93.3	Abnormal findings on diagnostic imaging of other parts of digestive tract
T28.0XXA	Burn of mouth and pharynx, initial encounter
T28.0XXD	Burn of mouth and pharynx, subsequent encounter
T28.0XXS	Burn of mouth and pharynx, sequela
T28.1XXA	Burn of esophagus, initial encounter
T28.1XXD	Burn of esophagus, subsequent encounter
T28.1XXS	Burn of esophagus, sequela
T28.2XXA	Burn of other parts of alimentary tract, initial encounter
T28.2XXD	Burn of other parts of alimentary tract, subsequent encounter
T28.2XXS	Burn of other parts of alimentary tract, sequela
T28.5XXA	Corrosion of mouth and pharynx, initial encounter
T28.5XXD	Corrosion of mouth and pharynx, subsequent encounter
T28.5XXS	Corrosion of mouth and pharynx, sequela
T28.6XXA	Corrosion of esophagus, initial encounter
T28.6XXD	Corrosion of esophagus, subsequent encounter
T28.6XXS	Corrosion of esophagus, sequela
T28.7XXA	Corrosion of other parts of alimentary tract, initial encounter
T28.7XXD	Corrosion of other parts of alimentary tract, subsequent encounter
T28.7XXS	Corrosion of other parts of alimentary tract, sequela
T54.0X1A	Toxic effect of phenol and phenol homologues, accidental (unintentional), initial encounter
T54.0X1D	Toxic effect of phenol and phenol homologues, accidental (unintentional), subsequent encounter
T54.0X1S	Toxic effect of phenol and phenol homologues, accidental (unintentional), sequela
T54.0X2A	Toxic effect of phenol and phenol homologues, intentional self-harm, initial encounter
T54.0X2D	Toxic effect of phenol and phenol homologues, intentional self-harm, subsequent encounter
T54.0X2S	Toxic effect of phenol and phenol homologues, intentional self-harm, sequela
T54.0X3A	Toxic effect of phenol and phenol homologues, assault, initial encounter
T54.0X3D	Toxic effect of phenol and phenol homologues, assault, subsequent encounter
T54.0X3S	Toxic effect of phenol and phenol homologues, assault, sequela
T54.0X4A	Toxic effect of phenol and phenol homologues, undetermined, initial encounter
T54.0X4D	Toxic effect of phenol and phenol homologues, undetermined, subsequent encounter
T54.0X4S	Toxic effect of phenol and phenol homologues, undetermined, sequela
T54.1X1A	Toxic effect of other corrosive organic compounds, accidental (unintentional), initial encounter
T54.1X1D	Toxic effect of other corrosive organic compounds, accidental (unintentional), subsequent encounter
T54.1X1S	Toxic effect of other corrosive organic compounds, accidental (unintentional), sequela
T54.1X2A	Toxic effect of other corrosive organic compounds, intentional self-harm, initial encounter
T54.1X2D	Toxic effect of other corrosive organic compounds, intentional self-harm, subsequent encounter
T54.1X2S	Toxic effect of other corrosive organic compounds, intentional self-harm, sequela
T54.1X3A	Toxic effect of other corrosive organic compounds, assault, initial encounter
T54.1X3D	Toxic effect of other corrosive organic compounds, assault, subsequent encounter
T54.1X3S	Toxic effect of other corrosive organic compounds, assault, sequela
T54.1X4A	Toxic effect of other corrosive organic compounds, undetermined, initial encounter

T54.1X4D	Toxic effect of other corrosive organic compounds, undetermined, subsequent encounter
T54.1X4S	Toxic effect of other corrosive organic compounds, undetermined, sequela
T54.2X1A	Toxic effect of corrosive acids and acid-like substances, accidental (unintentional), initial encounter
T54.2X1D	Toxic effect of corrosive acids and acid-like substances, accidental (unintentional), subsequent encounter
T54.2X1S	Toxic effect of corrosive acids and acid-like substances, accidental (unintentional), sequela
T54.2X2A	Toxic effect of corrosive acids and acid-like substances, intentional self-harm, initial encounter
T54.2X2D	Toxic effect of corrosive acids and acid-like substances, intentional self-harm, subsequent encounter
T54.2X2S	Toxic effect of corrosive acids and acid-like substances, intentional self-harm, sequela
T54.2X3A	Toxic effect of corrosive acids and acid-like substances, assault, initial encounter
T54.2X3D	Toxic effect of corrosive acids and acid-like substances, assault, subsequent encounter
T54.2X3S	Toxic effect of corrosive acids and acid-like substances, assault, sequela
T54.2X4A	Toxic effect of corrosive acids and acid-like substances, undetermined, initial encounter
T54.2X4D	Toxic effect of corrosive acids and acid-like substances, undetermined, subsequent encounter
T54.2X4S	Toxic effect of corrosive acids and acid-like substances, undetermined, sequela
T54.3X1A	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), initial encounter
T54.3X1D	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), subsequent encounter
T54.3X1S	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), sequela
T54.3X2A	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, initial encounter
T54.3X2D	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, subsequent encounter
T54.3X2S	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, sequela
T54.3X3A	Toxic effect of corrosive alkalis and alkali-like substances, assault, initial encounter
T54.3X3D	Toxic effect of corrosive alkalis and alkali-like substances, assault, subsequent encounter
T54.3X3S	Toxic effect of corrosive alkalis and alkali-like substances, assault, sequela
T54.3X4A	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, initial encounter
T54.3X4D	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, subsequent encounter
T54.3X4S	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, sequela
T54.91XA	Toxic effect of unspecified corrosive substance, accidental (unintentional), initial encounter
T54.91XD	Toxic effect of unspecified corrosive substance, accidental (unintentional), subsequent encounter
T54.91XS	Toxic effect of unspecified corrosive substance, accidental (unintentional), sequela
T54.92XA	Toxic effect of unspecified corrosive substance, intentional self-harm, initial encounter
T54.92XD	Toxic effect of unspecified corrosive substance, intentional self-harm, subsequent encounter
T54.92XS	Toxic effect of unspecified corrosive substance, intentional self-harm, sequela
T54.93XA	Toxic effect of unspecified corrosive substance, assault, initial encounter
T54.93XD	Toxic effect of unspecified corrosive substance, assault, subsequent encounter
T54.93XS	Toxic effect of unspecified corrosive substance, assault, sequela
T54.94XA	Toxic effect of unspecified corrosive substance, undetermined, initial encounter
T54.94XD	Toxic effect of unspecified corrosive substance, undetermined, subsequent encounter
T54.94XS	Toxic effect of unspecified corrosive substance, undetermined, sequela
T57.1X1A	Toxic effect of phosphorus and its compounds, accidental (unintentional), initial encounter
T57.1X1D	Toxic effect of phosphorus and its compounds, accidental (unintentional), subsequent encounter
T57.1X1S	Toxic effect of phosphorus and its compounds, accidental (unintentional), sequela
T57.1X2A	Toxic effect of phosphorus and its compounds, intentional self-harm, initial encounter
T57.1X2D	Toxic effect of phosphorus and its compounds, intentional self-harm, subsequent encounter
T57.1X2S	Toxic effect of phosphorus and its compounds, intentional self-harm, sequela
T57.1X3A	Toxic effect of phosphorus and its compounds, assault, initial encounter
T57.1X3D	Toxic effect of phosphorus and its compounds, assault, subsequent encounter

T57.1X3S	Toxic effect of phosphorus and its compounds, assault, sequela
T57.1X4A	Toxic effect of phosphorus and its compounds, undetermined, initial encounter
T57.1X4D	Toxic effect of phosphorus and its compounds, undetermined, subsequent encounter
T57.1X4S	Toxic effect of phosphorus and its compounds, undetermined, sequela
<b>Therapeutic EGD</b>	
C15.3	Malignant Neoplasm of Upper Third of Esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C16.0	Malignant neoplasm of cardia
C16.1	Malignant neoplasm of fundus of stomach
C16.2	Malignant neoplasm of body of stomach
C16.3	Malignant neoplasm of pyloric antrum
C16.4	Malignant neoplasm of pylorus
C16.5	Malignant neoplasm of lesser curvature of stomach, unspecified
C16.6	Malignant neoplasm of greater curvature of stomach, unspecified
C16.8	Malignant neoplasm of overlapping sites of stomach
C16.9	Malignant neoplasm of stomach, unspecified
C17.0	Malignant neoplasm of duodenum
C17.8	Malignant neoplasm of overlapping sites of small intestine
C49.A1	Gastrointestinal stromal tumor of esophagus
C7A.010	Malignant carcinoid tumor of the duodenum
C7A.092	Malignant carcinoid tumor of the stomach
C78.4	Secondary malignant neoplasm of small intestine
D00.1	Carcinoma in situ of esophagus
D00.2	Carcinoma in situ of stomach
D01.49	Carcinoma in situ of other parts of intestine
D13.0	Benign neoplasm of esophagus
D13.1	Benign neoplasm of stomach
D13.2	Benign neoplasm of duodenum
D37.8	Neoplasm of uncertain behavior of other specified digestive organs
D3A.010	Benign carcinoid tumor of the duodenum
D3A.092	Benign carcinoid tumor of the stomach
I85.00	Esophageal varices without bleeding
I85.01	Esophageal varices with bleeding
I85.10	Secondary esophageal varices without bleeding
I85.11	Secondary esophageal varices with bleeding
I86.4	Gastric varices
J86.0	Pyothorax with fistula
K20.0	Eosinophilic esophagitis
K20.8	Other Esophagitis
K21.0	Gastro-esophageal reflux disease with esophagitis
K21.9	Gastro-esophageal reflux disease without esophagitis
K22.0	Achalasia of cardia
K22.11	Ulcer of esophagus with bleeding
K22.2	Esophageal obstruction
K22.3	Perforation of esophagus

K22.4	Dyskinesia of esophagus
K22.5	Diverticulum of esophagus, acquired
K22.6	Gastro-esophageal laceration-hemorrhage syndrome
K22.70	Barrett's esophagus without dysplasia
K22.710	Barrett's esophagus with low grade dysplasia
K22.711	Barrett's esophagus with high grade dysplasia
K22.719	Barrett's esophagus with dysplasia, unspecified
K22.8	Other specified diseases of esophagus
K25.0	Acute gastric ulcer with hemorrhage
K25.1	Acute gastric ulcer with perforation
K25.2	Acute gastric ulcer with both hemorrhage and perforation
K25.4	Chronic or unspecified gastric ulcer with hemorrhage
K25.5	Chronic or unspecified gastric ulcer with perforation
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation
K26.0	Acute duodenal ulcer with hemorrhage
K26.1	Acute duodenal ulcer with perforation
K26.2	Acute duodenal ulcer with both hemorrhage and perforation
K26.4	Chronic or unspecified duodenal ulcer with hemorrhage
K26.5	Chronic or unspecified duodenal ulcer with perforation
K26.6	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
K27.1	Acute peptic ulcer, site unspecified, with perforation
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation
K28.0	Acute gastrojejunal ulcer with hemorrhage
K28.1	Acute gastrojejunal ulcer with perforation
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
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
K31.1	Adult hypertrophic pyloric stenosis
K31.2	Hourglass stricture and stenosis of stomach

K31.3	Pylorospasm, not elsewhere classified
K31.4	Gastric diverticulum
K31.5	Obstruction of duodenum
K31.6	Fistula of stomach and duodenum
K31.7	Polyp of stomach and duodenum
K31.811	Angiodysplasia of stomach and duodenum with bleeding
K31.819	Angiodysplasia of stomach and duodenum without bleeding
K31.82	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
K31.89	Other diseases of stomach and duodenum
K44.0	Diaphragmatic hernia with obstruction, without gangrene
K92.2	Gastrointestinal hemorrhage, unspecified
K92.81	Gastrointestinal mucositis (ulcerative)
K94.20	Gastrostomy complication, unspecified
K94.21	Gastrostomy hemorrhage
K94.22	Gastrostomy infection
K94.31	Esophagostomy hemorrhage
K94.32	Esophagostomy infection
K94.33	Esophagostomy malfunction
K94.39	Other complications of esophagostomy
Q26.5	Anomalous portal venous connection
Q26.6	Portal vein-hepatic artery fistula
Q27.33	Arteriovenous malformation of digestive system vessel
Q39.0	Atresia of esophagus without fistula
Q39.1	Atresia of esophagus with tracheo-esophageal fistula
Q39.2	Congenital tracheo-esophageal fistula without atresia
Q39.3	Congenital stenosis and stricture of esophagus
Q39.4	Esophageal web
Q39.5	Congenital dilatation of esophagus
Q39.6	Congenital diverticulum of esophagus
Q39.8	Other congenital malformations of esophagus
Q39.9	Congenital malformation of esophagus, unspecified
Q40.2	Other specified congenital malformations of stomach
Q40.3	Congenital malformation of stomach, unspecified
R13.0	Aphagia
R13.11	Dysphagia, oral phase
R13.12	Dysphagia, oropharyngeal phase
R13.13	Dysphagia, pharyngeal phase
R13.14	Dysphagia, pharyngoesophageal phase
R13.19	Other dysphagia
S27.812A	Contusion of esophagus (thoracic part), initial encounter
S27.812D	Contusion of esophagus (thoracic part), subsequent encounter
S27.812S	Contusion of esophagus (thoracic part), sequela
S27.813A	Laceration of esophagus (thoracic part), initial encounter
S27.813D	Laceration of esophagus (thoracic part), subsequent encounter

S27.813S	Laceration of esophagus (thoracic part), sequela
S27.818A	Other injury of esophagus (thoracic part), initial encounter
S27.818D	Other injury of esophagus (thoracic part), subsequent encounter
S27.818S	Other injury of esophagus (thoracic part), sequela
S27.819A	Unspecified injury of esophagus (thoracic part), initial encounter
S27.819D	Unspecified injury of esophagus (thoracic part), subsequent encounter
S27.819S	Unspecified injury of esophagus (thoracic part), sequela
T18.2XXA	Foreign body in stomach, initial encounter
T18.2XXD	Foreign body in stomach, subsequent encounter
T18.2XXS	Foreign body in stomach, sequela
T18.3XXA	Foreign body in small intestine, initial encounter
T18.3XXD	Foreign body in small intestine, subsequent encounter
T18.3XXS	Foreign body in small intestine, sequela
T18.4XXA	Foreign body in colon, initial encounter
T18.4XXD	Foreign body in colon, subsequent encounter
T18.4XXS	Foreign body in colon, sequela
T54.1X1A	Toxic effect of other corrosive organic compounds, accidental (unintentional), initial encounter
T54.1X1D	Toxic effect of other corrosive organic compounds, accidental (unintentional), subsequent encounter
T54.1X1S	Toxic effect of other corrosive organic compounds, accidental (unintentional), sequela
T54.1X2A	Toxic effect of other corrosive organic compounds, intentional self-harm, initial encounter
T54.1X2D	Toxic effect of other corrosive organic compounds, intentional self-harm, subsequent encounter
T54.1X2S	Toxic effect of other corrosive organic compounds, intentional self-harm, sequela
T54.1X3A	Toxic effect of other corrosive organic compounds, assault, initial encounter
T54.1X3D	Toxic effect of other corrosive organic compounds, assault, subsequent encounter
T54.1X3S	Toxic effect of other corrosive organic compounds, assault, sequela
T54.1X4A	Toxic effect of other corrosive organic compounds, undetermined, initial encounter
T54.1X4D	Toxic effect of other corrosive organic compounds, undetermined, subsequent encounter
T54.1X4S	Toxic effect of other corrosive organic compounds, undetermined, sequela
T54.3X1A	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), initial encounter
T54.3X1D	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), subsequent encounter
T54.3X1S	Toxic effect of corrosive alkalis and alkali-like substances, accidental (unintentional), sequela
T54.3X2A	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, initial encounter
T54.3X2D	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, subsequent encounter
T54.3X2S	Toxic effect of corrosive alkalis and alkali-like substances, intentional self-harm, sequela
T54.3X3A	Toxic effect of corrosive alkalis and alkali-like substances, assault, initial encounter
T54.3X3D	Toxic effect of corrosive alkalis and alkali-like substances, assault, subsequent encounter
T54.3X3S	Toxic effect of corrosive alkalis and alkali-like substances, assault, sequela
T54.3X4A	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, initial encounter
T54.3X4D	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, subsequent encounter
T54.3X4S	Toxic effect of corrosive alkalis and alkali-like substances, undetermined, sequela
T54.91XA	Toxic effect of unspecified corrosive substance, accidental (unintentional), initial encounter
T54.91XD	Toxic effect of unspecified corrosive substance, accidental (unintentional), subsequent encounter

T54.91XS	Toxic effect of unspecified corrosive substance, accidental (unintentional), sequela
T54.92XA	Toxic effect of unspecified corrosive substance, intentional self-harm, initial encounter
T54.92XD	Toxic effect of unspecified corrosive substance, intentional self-harm, subsequent encounter
T54.92XS	Toxic effect of unspecified corrosive substance, intentional self-harm, sequela
T54.93XA	Toxic effect of unspecified corrosive substance, assault, initial encounter
T54.93XD	Toxic effect of unspecified corrosive substance, assault, subsequent encounter
T54.93XS	Toxic effect of unspecified corrosive substance, assault, sequela
T54.94XA	Toxic effect of unspecified corrosive substance, undetermined, initial encounter
T54.94XD	Toxic effect of unspecified corrosive substance, undetermined, subsequent encounter
T54.94XS	Toxic effect of unspecified corrosive substance, undetermined, sequela
T57.1X1A	Toxic effect of phosphorus and its compounds, accidental (unintentional), initial encounter
T57.1X1D	Toxic effect of phosphorus and its compounds, accidental (unintentional), subsequent encounter
T57.1X1S	Toxic effect of phosphorus and its compounds, accidental (unintentional), sequela
T57.1X2A	Toxic effect of phosphorus and its compounds, intentional self-harm, initial encounter
T57.1X2D	Toxic effect of phosphorus and its compounds, intentional self-harm, subsequent encounter
T57.1X2S	Toxic effect of phosphorus and its compounds, intentional self-harm, sequela
T57.1X3A	Toxic effect of phosphorus and its compounds, assault, initial encounter
T57.1X3D	Toxic effect of phosphorus and its compounds, assault, subsequent encounter
T57.1X3S	Toxic effect of phosphorus and its compounds, assault, sequela
T57.1X4A	Toxic effect of phosphorus and its compounds, undetermined, initial encounter
T57.1X4D	Toxic effect of phosphorus and its compounds, undetermined, subsequent encounter
T57.1X4S	Toxic effect of phosphorus and its compounds, undetermined, sequela
T85.511A	Breakdown (mechanical) of esophageal anti-reflux device, initial encounter
T85.521A	Displacement of esophageal anti-reflux device, initial encounter
T85.591A	Other mechanical complication of esophageal anti-reflux device, initial encounter
T85.598A	Other mechanical complication of other gastrointestinal prosthetic devices, implants and grafts, initial encounter
Z93.4	Other artificial openings of gastrointestinal tract status
<b>Sequential and Periodical EGD</b>	
D00.1	Carcinoma in situ of esophagus
D00.2	Carcinoma in situ of stomach
D01.49	Carcinoma in situ of other parts of intestine
I85.00	Esophageal varices without bleeding
I85.01	Esophageal varices with bleeding
I86.4	Gastric varices
K22.10	Ulcer of esophagus without bleeding
K22.11	Ulcer of esophagus with bleeding
K22.70	Barrett's esophagus without dysplasia
K22.710	Barrett's esophagus with low grade dysplasia
K22.711	Barrett's esophagus with high grade dysplasia
K22.719	Barrett's esophagus with dysplasia, unspecified
K22.8	Other specified diseases of esophagus
K25.0	Acute gastric ulcer with hemorrhage
K25.1	Acute gastric ulcer with perforation

K25.2	Acute gastric ulcer with both hemorrhage and perforation
K25.3	Acute gastric ulcer without hemorrhage or perforation
K25.4	Chronic or unspecified gastric ulcer with hemorrhage
K25.5	Chronic or unspecified gastric ulcer with perforation
K25.6	Chronic or unspecified gastric ulcer with both hemorrhage and perforation
K25.7	Chronic gastric ulcer without hemorrhage or perforation
K27.0	Acute peptic ulcer, site unspecified, with hemorrhage
K27.1	Acute peptic ulcer, site unspecified, with perforation
K27.2	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.3	Acute peptic ulcer, site unspecified, without hemorrhage or perforation
K27.4	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage
K27.5	Chronic or unspecified peptic ulcer, site unspecified, with perforation
K27.6	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation
K27.7	Chronic peptic ulcer, site unspecified, without hemorrhage or perforation
K27.9	Peptic ulcer, site unspecified, unspecified as acute or chronic, without hemorrhage or perforation
K28.0	Acute gastrojejunal ulcer with hemorrhage
K28.1	Acute gastrojejunal ulcer with perforation
K28.2	Acute gastrojejunal ulcer with both hemorrhage and perforation
K28.3	Acute gastrojejunal ulcer without hemorrhage or perforation
K28.4	Chronic or unspecified gastrojejunal ulcer with hemorrhage
K28.5	Chronic or unspecified gastrojejunal ulcer with perforation
K28.6	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation
K28.7	Chronic gastrojejunal ulcer without hemorrhage or perforation
Z04.8	Encounter for examination and observation for other specified reasons
Z08	Encounter for follow-up examination after completed treatment for malignant neoplasm
Z09	Encounter for follow-up examination after completed treatment for conditions other than malignant neoplasm
Z85.00	Personal history of malignant neoplasm of unspecified digestive organ
Z85.01	Personal history of malignant neoplasm of esophagus
Z85.020	Personal history of malignant carcinoid tumor of stomach
Z85.028	Personal history of other malignant neoplasm of stomach
Z85.060	Personal history of malignant carcinoid tumor of small intestine
Z85.068	Personal history of other malignant neoplasm of small intestine
Z85.818	Personal history of malignant neoplasm of other sites of lip, oral cavity, and pharynx
Z85.819	Personal history of malignant neoplasm of unspecified site of lip, oral cavity, and pharynx
Z86.19	Personal history of other infectious and parasitic diseases
Z87.11	Personal history of peptic ulcer disease
Z87.19	Personal history of other diseases of the digestive system
Z87.821	Personal history of retained foreign body fully removed
Z87.828	Personal history of other (healed) physical injury and trauma
Z92.89	Personal history of other medical treatment
<b>ERCP</b>	
B25.2	Cytomegaloviral pancreatitis
C22.1	Intrahepatic bile duct carcinoma
C24.0	Malignant neoplasm of extrahepatic bile duct
C24.1	Malignant neoplasm of ampulla of vater

C24.8	Malignant neoplasm of overlapping sites of biliary tract
C25.0	Malignant neoplasm of head of pancreas
C25.1	Malignant neoplasm of body of pancreas
C25.2	Malignant neoplasm of tail of pancreas
C25.3	Malignant neoplasm of pancreatic duct
C25.4	Malignant neoplasm of endocrine pancreas
C25.7	Malignant neoplasm of other parts of pancreas
C25.8	Malignant neoplasm of overlapping sites of pancreas
C25.9	Malignant neoplasm of pancreas, unspecified
D01.5	Carcinoma in situ of liver, gallbladder and bile ducts
K80.00	Calculus of gallbladder with acute cholecystitis without obstruction
K80.01	Calculus of gallbladder with acute cholecystitis with obstruction
K80.10	Calculus of gallbladder with chronic cholecystitis without obstruction
K80.11	Calculus of gallbladder with chronic cholecystitis with obstruction
K80.12	Calculus of gallbladder with acute and chronic cholecystitis without obstruction
K80.13	Calculus of gallbladder with acute and chronic cholecystitis with obstruction
K80.18	Calculus of gallbladder with other cholecystitis without obstruction
K80.19	Calculus of gallbladder with other cholecystitis with obstruction
K80.20	Calculus of gallbladder without cholecystitis without obstruction
K80.21	Calculus of gallbladder without cholecystitis with obstruction
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction
K80.32	Calculus of bile duct with acute cholangitis without obstruction
K80.33	Calculus of bile duct with acute cholangitis with obstruction
K80.34	Calculus of bile duct with chronic cholangitis without obstruction
K80.35	Calculus of bile duct with chronic cholangitis with obstruction
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction
K80.40	Calculus of bile duct with cholecystitis, unspecified, without obstruction
K80.41	Calculus of bile duct with cholecystitis, unspecified, with obstruction
K80.42	Calculus of bile duct with acute cholecystitis without obstruction
K80.43	Calculus of bile duct with acute cholecystitis with obstruction
K80.44	Calculus of bile duct with chronic cholecystitis without obstruction
K80.45	Calculus of bile duct with chronic cholecystitis with obstruction
K80.46	Calculus of bile duct with acute and chronic cholecystitis without obstruction
K80.47	Calculus of bile duct with acute and chronic cholecystitis with obstruction
K80.50	Calculus of bile duct without cholangitis or cholecystitis without obstruction
K80.51	Calculus of bile duct without cholangitis or cholecystitis with obstruction
K80.60	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K80.61	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction
K80.62	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction
K80.63	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K80.64	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction
K80.65	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction
K80.66	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction

K80.67	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction
K80.70	Calculus of gallbladder and bile duct without cholecystitis without obstruction
K80.71	Calculus of gallbladder and bile duct without cholecystitis with obstruction
K80.80	Other cholelithiasis without obstruction
K80.81	Other cholelithiasis with obstruction
K83.0	Cholangitis
K83.1	Obstruction of bile duct
K83.2	Perforation of bile duct
K83.3	Fistula of bile duct
K83.4	Spasm of sphincter of Oddi
K83.5	Biliary cyst
K83.8	Other specified diseases of biliary tract
K83.9	Disease of biliary tract, unspecified
K85.10	Biliary acute pancreatitis without necrosis or infection
K85.11	Biliary acute pancreatitis with uninfected necrosis
K85.12	Biliary acute pancreatitis with infected necrosis
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K86.2	Cyst of pancreas
K86.3	Pseudocyst of pancreas
K86.81	Exocrine pancreatic insufficiency
K86.89	Other specified diseases of pancreas
K87	Disorders of gallbladder, biliary tract and pancreas in diseases classified elsewhere
K91.30	Postprocedural intestinal obstruction, unspecified as to partial versus complete
K91.5	Postcholecystectomy syndrome
K91.86	Retained cholelithiasis following cholecystectomy
P59.1	Inspissated bile syndrome
P59.20	Neonatal jaundice from unspecified hepatocellular damage
P59.21	Neonatal jaundice from other hepatocellular damage
P59.8	Neonatal jaundice from other specified causes
Q44.2	Atresia of bile ducts
Q44.3	Congenital stenosis and stricture of bile ducts
Q44.4	Choledochal cyst
Q44.5	Other congenital malformations of bile ducts
Q45.1	Annular pancreas
Q45.2	Congenital pancreatic cyst
Q45.3	Other congenital malformations of pancreas and pancreatic duct
R17	Unspecified jaundice
R93.2	Abnormal findings on diagnostic imaging of liver and biliary tract
S36.13XA	Injury of bile duct, initial encounter
S36.13XD	Injury of bile duct, subsequent encounter
S36.13XS	Injury of bile duct, sequela
S36.200A	Unspecified injury of head of pancreas, initial encounter
S36.200D	Unspecified injury of head of pancreas, subsequent encounter
S36.200S	Unspecified injury of head of pancreas, sequela
S36.201A	Unspecified injury of body of pancreas, initial encounter
S36.201D	Unspecified injury of body of pancreas, subsequent encounter

S36.201S	Unspecified injury of body of pancreas, sequela
S36.202A	Unspecified injury of tail of pancreas, initial encounter
S36.202D	Unspecified injury of tail of pancreas, subsequent encounter
S36.202S	Unspecified injury of tail of pancreas, sequela
S36.220A	Contusion of head of pancreas, initial encounter
S36.220D	Contusion of head of pancreas, subsequent encounter
S36.220S	Contusion of head of pancreas, sequela
S36.221A	Contusion of body of pancreas, initial encounter
S36.221D	Contusion of body of pancreas, subsequent encounter
S36.221S	Contusion of body of pancreas, sequela
S36.222A	Contusion of tail of pancreas, initial encounter
S36.222D	Contusion of tail of pancreas, subsequent encounter
S36.222S	Contusion of tail of pancreas, sequela
S36.230A	Laceration of head of pancreas, unspecified degree, initial encounter
S36.230D	Laceration of head of pancreas, unspecified degree, subsequent encounter
S36.230S	Laceration of head of pancreas, unspecified degree, sequela
S36.231A	Laceration of body of pancreas, unspecified degree, initial encounter
S36.231D	Laceration of body of pancreas, unspecified degree, subsequent encounter
S36.231S	Laceration of body of pancreas, unspecified degree, sequela
S36.232A	Laceration of tail of pancreas, unspecified degree, initial encounter
S36.232D	Laceration of tail of pancreas, unspecified degree, subsequent encounter
S36.232S	Laceration of tail of pancreas, unspecified degree,
S36.240A	Minor laceration of head of pancreas, initial encounter
S36.240D	Minor laceration of head of pancreas, subsequent encounter
S36.240S	Minor laceration of head of pancreas, sequela
S36.241A	Minor laceration of body of pancreas, initial encounter
S36.241D	Minor laceration of body of pancreas, subsequent encounter
S36.241S	Minor laceration of body of pancreas, sequela
S36.242A	Minor laceration of tail of pancreas, initial encounter
S36.242D	Minor laceration of tail of pancreas, subsequent encounter
S36.242S	Minor laceration of tail of pancreas, sequela
S36.250A	Moderate laceration of head of pancreas, initial encounter
S36.250D	Moderate laceration of head of pancreas, subsequent encounter
S36.250S	Moderate laceration of head of pancreas, sequela
S36.251A	Moderate laceration of body of pancreas, initial encounter
S36.251D	Moderate laceration of body of pancreas, subsequent encounter
S36.251S	Moderate laceration of body of pancreas, sequela
S36.252A	Moderate laceration of tail of pancreas, initial encounter
S36.252D	Moderate laceration of tail of pancreas, subsequent encounter
S36.252S	Moderate laceration of tail of pancreas, sequela
S36.260A	Major laceration of head of pancreas, initial encounter
S36.260D	Major laceration of head of pancreas, subsequent encounter
S36.260S	Major laceration of head of pancreas, sequela
S36.261A	Major laceration of body of pancreas, initial encounter
S36.261D	Major laceration of body of pancreas, subsequent encounter
S36.261S	Major laceration of body of pancreas, sequela
S36.262A	Major laceration of tail of pancreas, initial encounter
S36.262D	Major laceration of tail of pancreas, subsequent encounter
S36.262S	Major laceration of tail of pancreas, sequela
S36.290A	Other injury of head of pancreas, initial encounter
S36.290D	Other injury of head of pancreas, subsequent encounter

S36.290S	Other injury of head of pancreas, sequela
S36.291A	Other injury of body of pancreas, initial encounter
S36.291D	Other injury of body of pancreas, subsequent encounter
S36.291S	Other injury of body of pancreas, sequela
S36.292A	Other injury of tail of pancreas, initial encounter
S36.292D	Other injury of tail of pancreas, subsequent encounter
S36.292S	Other injury of tail of pancreas, sequela
<b>EUS</b>	
C15.3	Malignant neoplasm of upper third of esophagus
C15.4	Malignant neoplasm of middle third of esophagus
C15.5	Malignant neoplasm of lower third of esophagus
C15.8	Malignant neoplasm of overlapping sites of esophagus
C15.9	Malignant neoplasm of esophagus, unspecified
C16.0	Malignant neoplasm of cardia
C16.1	Malignant neoplasm of fundus of stomach
C16.2	Malignant neoplasm of body of stomach
C16.3	Malignant neoplasm of pyloric antrum
C16.4	Malignant neoplasm of pylorus
C16.5	Malignant neoplasm of lesser curvature of stomach, unspecified
C16.6	Malignant neoplasm of greater curvature of stomach, unspecified
C16.8	Malignant neoplasm of overlapping sites of stomach
C16.9	Malignant neoplasm of stomach, unspecified
C17.0	Malignant neoplasm of duodenum
C22.1	Intrahepatic bile duct carcinoma
C24.0	Malignant neoplasm of extrahepatic bile duct
C24.1	Malignant neoplasm of ampulla of vater
C24.8	Malignant neoplasm of overlapping sites of biliary tract
C25.0	Malignant neoplasm of head of pancreas
C25.1	Malignant neoplasm of body of pancreas
C25.2	Malignant neoplasm of tail of pancreas
C25.3	Malignant neoplasm of pancreatic duct
C25.4	Malignant neoplasm of endocrine pancreas
C25.7	Malignant neoplasm of other parts of pancreas
C25.8	Malignant neoplasm of overlapping sites of pancreas
C25.9	Malignant neoplasm of pancreas, unspecified
C78.4	Secondary malignant neoplasm of small intestine
C78.7	Secondary malignant neoplasm of liver and intrahepatic bile duct
C78.89	Secondary malignant neoplasm of other digestive organs
D13.0	Benign neoplasm of esophagus
D13.1	Benign neoplasm of stomach
D13.2	Benign neoplasm of duodenum
D13.30	Benign neoplasm of unspecified part of small intestine
D13.39	Benign neoplasm of other parts of small intestine
D13.4	Benign neoplasm of liver
D13.5	Benign neoplasm of extrahepatic bile ducts
D13.6	Benign neoplasm of pancreas

D13.7	Benign neoplasm of endocrine pancreas
D37.1	Neoplasm of uncertain behavior of stomach
D37.2	Neoplasm of uncertain behavior of small intestine
D37.6	Neoplasm of uncertain behavior of liver, gallbladder and bile ducts
D37.8	Neoplasm of uncertain behavior of other specified digestive organs
D3A.010	Benign carcinoid tumor of the duodenum
D3A.092	Benign carcinoid tumor of the stomach
K80.00	Calculus of gallbladder with acute cholecystitis without obstruction
K80.01	Calculus of gallbladder with acute cholecystitis with obstruction
K80.10	Calculus of gallbladder with chronic cholecystitis without obstruction
K80.11	Calculus of gallbladder with chronic cholecystitis with obstruction
K80.12	Calculus of gallbladder with acute and chronic cholecystitis without obstruction
K80.13	Calculus of gallbladder with acute and chronic cholecystitis with obstruction
K80.18	Calculus of gallbladder with other cholecystitis without obstruction
K80.19	Calculus of gallbladder with other cholecystitis with obstruction
K80.20	Calculus of gallbladder without cholecystitis without obstruction
K80.21	Calculus of gallbladder without cholecystitis with obstruction
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction
K80.32	Calculus of bile duct with acute cholangitis without obstruction
K80.33	Calculus of bile duct with acute cholangitis with obstruction
K80.34	Calculus of bile duct with chronic cholangitis without obstruction
K80.35	Calculus of bile duct with chronic cholangitis with obstruction
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction
K80.40	Calculus of bile duct with cholecystitis, unspecified, without obstruction
K80.41	Calculus of bile duct with cholecystitis, unspecified, with obstruction
K80.42	Calculus of bile duct with acute cholecystitis without obstruction
K80.43	Calculus of bile duct with acute cholecystitis with obstruction
K80.44	Calculus of bile duct with chronic cholecystitis without obstruction
K80.45	Calculus of bile duct with chronic cholecystitis with obstruction
K80.46	Calculus of bile duct with acute and chronic cholecystitis without obstruction
K80.47	Calculus of bile duct with acute and chronic cholecystitis with obstruction
K80.50	Calculus of bile duct without cholangitis or cholecystitis without obstruction
K80.51	Calculus of bile duct without cholangitis or cholecystitis with obstruction
K80.60	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K80.61	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction
K80.62	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction
K80.63	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K80.64	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction
K80.65	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction
K80.66	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction
K80.67	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction
K80.70	Calculus of gallbladder and bile duct without cholecystitis without obstruction

K80.71	Calculus of gallbladder and bile duct without cholecystitis with obstruction
K80.80	Other cholelithiasis without obstruction
K80.81	Other cholelithiasis with obstruction
K81.0	Acute cholecystitis
K81.2	Acute cholecystitis with chronic cholecystitis
K83.0	Cholangitis
K83.1	Obstruction of bile duct
K83.2	Perforation of bile duct
K83.3	Fistula of bile duct
K83.4	Spasm of sphincter of Oddi
K83.5	Biliary cyst
K83.8	Other specified diseases of biliary tract
K83.9	Disease of biliary tract, unspecified
K85.10	Biliary acute pancreatitis without necrosis or infection
K85.11	Biliary acute pancreatitis with uninfected necrosis
K85.12	Biliary acute pancreatitis with infected necrosis
K86.0	Alcohol-induced chronic pancreatitis
K86.1	Other chronic pancreatitis
K86.2	Cyst of pancreas
K86.3	Pseudocyst of pancreas
K86.81	Exocrine pancreatic insufficiency
K86.89	Other specified diseases of pancreas
K86.9	Disease of pancreas, unspecified
K87	Disorders of gallbladder, biliary tract and pancreas in diseases classified elsewhere
K91.86	Retained cholelithiasis following cholecystectomy
R17	Unspecified jaundice
R19.00	Intra-abdominal and pelvic swelling, mass and lump, unspecified site
R19.01	Right upper quadrant abdominal swelling, mass and lump
R19.02	Left upper quadrant abdominal swelling, mass and lump
R19.06	Epigastric swelling mass or lump
R93.2	Abnormal findings on diagnostic imaging of liver and biliary tract

## **REIMBURSEMENT**

Participating facilities will be reimbursed per their Highmark Health Options contract.

## **SUMMARY OF LITERATURE**

An Esophagogastroduodenoscopy (EGD) (Upper Gastrointestinal Endoscopy) refers to examination of the esophagus, stomach, and upper duodenum (first part of the small intestine) by means of a flexible fiberoptic endoscope. The endoscope contains a video camera which allows the physician to examine the upper gastrointestinal tract. An EGD is the most accurate means of detecting problems of the upper intestinal tract, as well as obtaining biopsies, removing foreign objects, or performing other therapeutic procedures. In addition to the Esophagogastroduodenoscopy, there are other endoscopic procedures that are used to evaluate and treat indications and conditions of the upper gastrointestinal tract, including the Endoscopic Retrograde Cholangiopancreatography (ERCP) and the Endoscopic Ultrasound (EUS).

## Rationale

### **Esophagogastroduodenoscopy (EGD) Evidence Review**

The American Society for Gastrointestinal Endoscopy (ASGE) published several guidelines on the performance of diagnostic, therapeutic, and sequential upper GI endoscopies (ASGE, 2012; ASGE, 2015). The recommendations include the following:

1. Upper abdominal symptoms that persist despite an appropriate trial of therapy;
2. Esophageal reflux symptoms that persist or recur despite appropriate therapy;
3. Upper abdominal symptoms associated with other symptoms or signs suggesting structural disease (e.g., anorexia and weight loss) or new-onset symptoms in patients older than 50 years of age;
4. Dysphagia or odynophagia;
5. Persistent vomiting of unknown cause;
6. Gastrointestinal bleeding;
7. For confirmation and specific histological diagnosis of radiologically demonstrated lesions, ulcers, strictures, and obstructions of the upper gastrointestinal tract;
8. Selected patients with suspected portal hypertension to document or treat esophageal varices;
9. To assess acute injury after caustic ingestion;
10. When EGD results would affect the management of other diseases (e.g., a patient with a history of upper GI bleeding who requires anticoagulation or treatment with a nonsteroidal anti-inflammatory drug);
11. To assess diarrhea in patients suspected of having small-bowel disease (e.g., celiac disease);
12. When a therapeutic maneuver may be needed;
13. When sampling of tissue or fluid is indicated;
14. Removal of foreign bodies or lesions;
15. Placement of feeding or drainage tubes;
16. Dilation and stenting of stenotic lesions;
17. Management of achalasia (e.g., botulinum toxin, balloon dilation);
18. Palliative treatment of stenosing neoplasms;
19. Surveillance for malignancy in patients with pre-malignant conditions (e.g., Barrett's esophagus, polyposis syndromes, gastric adenomas, tylosis or previous caustic ingestion)

The American College of Physicians (ACP) (2012) also published clinical guidelines for upper GI endoscopy use. The recommendations are as follow:

1. Best Practice Advice #1  
Upper endoscopy is indicated in men and women with heartburn and any of the following alarm symptoms:
  - Anemia;
  - Bleeding;
  - Dysphagia;
  - Recurrent vomiting;
  - Weight loss
2. Best Practice Advice #2  
Upper endoscopy is indicated in men and women with:
  - Typical gastroesophageal reflux disease (GERD) symptoms that persist despite a therapeutic trial of 4 to 8 weeks of twice-daily proton-pump inhibitor therapy;

- Severe erosive esophagitis after a 2-month course of Proton-Pump Inhibitor (PPI) therapy to assess healing and rule out Barrett’s esophagus. Recurrent endoscopy after this follow-up examination is not indicated in the absence of Barrett’s esophagus;
- History of esophageal stricture that has recurrent symptoms of dysphagia.

### 3. Best Practice Advice #3

Upper endoscopy may be indicated:

- In men older than 50 years with chronic GERD symptoms (symptoms for more than 5 years) and additional risk factors (nocturnal reflux symptoms, hiatal hernia, elevated body mass index, tobacco use, and intra-abdominal distribution of fat) to detect esophageal adenocarcinoma and Barrett’s esophagus;
- For surveillance evaluation in men and women with a history of Barrett’s esophagus. In men and women with Barrett’s esophagus and no dysplasia, surveillance examinations should occur at intervals no more frequently than 3 to 5 years. More frequent intervals are indicated in patients with Barrett’s esophagus and dysplasia.

#### *GERD*

According to the University of Michigan Health System's guideline on GERD (2007), no gold standard exists for the diagnosis of this disease. Although pH probe is accepted as the standard with a sensitivity of 85% and specificity of 95%, false positives and false negatives still exist. Endoscopy lacks sensitivity in determining pathological reflux. Barium radiology has limited usefulness in the diagnosis of GERD and is not recommended. Furthermore, if symptoms remain unchanged in a patient with a prior normal endoscopy, repeating endoscopy has no benefit and is not recommended.

The American College of Gastroenterology's guidelines for the diagnosis and treatment of GERD (DeVault and Castell, 2005) stated that "[i]f the patient's history is typical for uncomplicated GERD, an initial trial of empirical therapy (including lifestyle modification) is appropriate. Endoscopy at presentation should be considered in patients who have symptoms suggesting complicated disease, those at risk for Barrett's esophagus ... Endoscopy is the technique of choice used to identify suspected Barrett's esophagus and to diagnose complications of GERD. Biopsy must be added to confirm the presence of BE and to evaluate for dyspepsia".

#### *Small Bowel Diseases*

The ASGE issued guidelines on endoscopy in the diagnosis and treatment of inflammatory bowel disease (IBD) stating that an EGD may be helpful for diagnosing IBD when other studies have negative results and for differentiating Crohn's disease from ulcerative colitis in indeterminate colitis (Leighton et al., 2006) (The ASGE does not recommend routine EGD in all patients suspected of having Crohn's disease). The American Academy of Family Physicians (2011) reviewed the proper tools used in diagnosing Crohn’s disease, and it was determined that EGDs are recommended in patients with active Crohn’s disease who received a negative colonoscopy.

#### *Non-cardiac Chest Pain (NCCP)*

NCCP occurs in men and women of all ages, as well as in children. Because of the anatomy of the chest cavity with the heart and esophagus resting near each other, pain from either organ may be similar, which makes it hard to differentiate the pain source. Patients who continue to have chest pain after a cardiac workup fails to provide evidence of heart disease may need a GI workup. The American College of Gastroenterology makes a strong recommendation for NCCP stating that “a cardiac cause should be excluded in patients with chest pain before the commencement of a gastrointestinal evaluation”.

In the 2012 published guidelines, ASGE does not recommend the use of an esophagogastroduodenoscopy when evaluating, diagnosing, or treating the following:

1. Metastatic adenocarcinoma of unknown primary site when the results will not alter management;
2. Radiographic findings of:
  - Asymptomatic or uncomplicated sliding hiatal hernia;
  - Uncomplicated duodenal ulcer that has responded to therapy;
  - Deformed duodenal bulb when symptoms are absent or respond adequately to ulcer therapy.
3. Surveillance for malignancy in patients with gastric atrophy, pernicious anemia, or fundic gland or hyperplastic polyps, gastric intestinal metaplasia, or prior gastric operations for benign disease;
4. Surveillance of healed benign disease such as esophagitis or gastric or duodenal ulcer.

### *Obesity Surgery*

There are several diagnoses and indications that have been investigated when considering the use of an EGD for obesity surgery. There are UpToDate reviews on “Endoscopy in patients who have undergone bariatric surgery” and “Overview of upper gastrointestinal endoscopy (esophagogastroduodenoscopy)” which do not mention confirmation of gastric band placement as an indication of endoscopy/upper gastrointestinal endoscopy (Huang, 2017; Greenwald and Cohen, 2013). Obesity is a serious risk factor to gastrointestinal diseases, such as GERD, erosive esophagitis, hiatal hernia, BE, esophageal adenocarcinoma, H. pylori infection, colorectal polyps and cancer, non-alcoholic fatty liver disease, cirrhosis, and hepato-cellular carcinoma (De Palma, 2014). If there are specific pathological upper GI findings detected preoperatively to an obesity procedure, a surgical path may be altered. The value of a routine endoscopy before bariatric surgery in asymptomatic patients (screening EGDS) remains controversial and unclear (De Palma, 2014; Schigt, 2014; Bennett, 2016).

In regard to post-operative screening EGDs, the Roux-Y gastric bypass (RYGB) procedure completely alters the stomach, which makes the organ inaccessible and contraindicated (Schigt, 2014). Additionally, there is limited data regarding the use of EGDs for the detection of leak following sleeve gastrectomy (Schigt, 2014). Laparoscopic sleeve gastrectomy (LSG) remains under scrutiny as a stand-alone bariatric procedure, with staple line leaks as the most common cause of morbidity and mortality (Sakran, 2013). A retrospective analysis was performed by querying all the LSG cases performed between June 2006 and June 2010, and the authors concluded routine tests to rule out leaks are unessential (Sakran, 2013). Selective utilization is recommended for staple line leaks (Sakran, 2013).

### *HPV-related cancer in esophageal condyloma biopsies*

According to a Hayes Technology Summary, there is insufficient evidence to assess the safety and/or impact on health outcomes or patient management when using Esophageal Condyloma biopsies to detect Human Papillomavirus (HPV) (Hayes, 2018).

### **Endoscopic Retrograde Cholangiopancreatography (ERCP) Evidence Review**

ERCP is a combined endoscopic and radiologic procedure used to diagnose and treat diseases of the biliary tract and pancreas by providing access to and visualization of the bile and pancreatic ducts, as well as related structures (Hayes, 2013). Therapeutic ERCP is less invasive than open surgery for the treatment of gallstone disease, pancreatitis, biliary obstructions, pancreatobiliary cancers, and unexplained abdominal pain related to sphincter of Oddi dysfunction (SOD) (Hayes, 2013). The American College of Gastroenterology (ACG) (2006) published practice guidelines that discussed the role of ERCP in the treatment of acute pancreatitis. The guidelines recommended ERCP is indicated for patients with severe

biliary pancreatitis with retained common bile duct (CBD) stones and patients with cholangitis (Banks, 2006). Additionally, routine ERCP prior to cholecystectomy is unnecessary and adds avoidable risk; however, progressive increases in serum bilirubin tests, liver function tests, and persistent dilation of the CBD are suggestive of CBD obstruction, and it is reasonable to proceed directly to ERCP (Banks, 2006).

Hayes (2013) conducted an evaluation of evidence from many randomized trials and observational studies for ERCP, which suggests patients with predicted or actual middle to moderate disease may have better outcomes with conservative treatment and selective ERCP (indicated by clinical response). Please see the following Hayes ratings for ERCP:

*Treatment of malignant biliary obstruction in patients who are not candidates for curative surgery:*

**A** – For ERCP with or without stent insertion for palliation of biliary obstruction.

*Treatment of bile duct stones and symptomatic gallstone disease:*

**B** – For ERCP alone or combined with sphincterotomy or balloon dilation or in conjunction with laparoscopic cholecystectomy for biliary stone extraction in patients with obstruction due to gallstones.

*Treatment of acute biliary or gallstone pancreatitis:*

**B** – For early endoscopic intervention (within 48 to 72 hours from the onset of symptoms) consisting of ERCP with or without sphincterotomy in patients with predicted or actual severe disease, including those with bile duct stones, persistent ampullary obstruction, and severe abdominal pain.

**C** – For early endoscopic intervention consisting of ERCP with or without sphincterotomy in patients with predicted or actual mild to moderate disease, including those without obstructive jaundice, since there is some evidence that this management strategy is not beneficial compared with conservative treatment and selective ERCP.

*Treatment of chronic pancreatitis or pseudocysts:*

**C** – For ERCP in patients with obstruction due to stones and/or strictures, since there is evidence that other methods, such as surgical drainage and ESWL, may be more effective long term.

**C** – For ERCP drainage of pancreatic pseudocysts in symptomatic patients, since there is a paucity of evidence for this indication and/or a need for controlled clinical trials comparing ERCP with alternative techniques.

*Additional Ratings:*

**D** – For inappropriate uses of therapeutic ERCP, including the following:

- For preoperative treatment of patients who are undergoing cholecystectomy for gallstones and who have a low probability of bile duct stones.
- For early treatment of patients with acute biliary pancreatitis without clinical evidence of bile duct stones or biliary obstruction, since the efficacy of ERCP-based interventions for these subgroups has not been proven and since conservative management with delayed ERCP may reduce the morbidity related to the performance of an unnecessary invasive procedure.
- For treatment of malignant biliary obstruction in jaundiced patients who are candidates for curative surgery unless they require preoperative treatment of the obstructed duct. Noninvasive imaging techniques are more useful for staging disease prior to surgery and for providing information about possible involvement of the liver, portal vein, and extrahepatic lymph nodes.

- For treatment of patients with abdominal pain and suspected sphincter of Oddi dysfunction without specific anatomic or biochemical abnormalities referable to bile duct stones or the pancreas.
- For treatment of gallbladder disease without evidence of bile duct disease.
- For stenting of malignant pancreatobiliary obstruction in patients who are possible candidates for curative surgery, since stent insertion may complicate surgical resection.

**D** – For treatment of patients with the following contraindications to ERCP: an uncooperative or unstable patient, a perforated viscus, or anatomical impediments such as a newly created gastrointestinal anastomosis. This Rating is based on concerns regarding the safety of ERCP in these patient populations.

### **Endoscopic Ultrasound (EUS) Evidence Review**

The ASGE and the American Gastroenterological Association Institute recommend the EUS for clinical situations regarding pancreaticobiliary malignancies. According to the 2007 ASGE guidelines, the endoscopic ultrasound can identify lesions not visualized by a CT or MRI and can further characterize smaller lesions (Hayes, 2011). The EUS is considered complementary to CT for staging, and other radiology and imaging (e.g., PET scan, helical CT, and positron emission tomography) should not be abandoned due to the need for screening of distant metastatic disease, other forms (Hayes, 2011; NCCN, 2011). EUS should be considered in surgical candidates with localized disease (Hayes, 2011). These recommendations are supported by overwhelming evidence from observation studies which indicates application in most practice settings in most situations (Hayes, 2011). Based on the available evidence for, please see the following Hayes ratings for EUS in the *diagnosis of pancreatic tumors*:

**B** – For EUS to diagnose pancreatic tumors when pancreatic cancer is suspected but a discrete lesion is not visualized by an initial CT scan.

**C** – For endoscopic ultrasound (EUS) as a method for staging pancreatic tumors when an initial computed tomography (CT) scan fails to identify a lesion or provides equivocal results. This Rating reflects the sparse evidence of low quality pertaining to the clinical utility of EUS evaluation of pancreatic tumors.

**D** – For EUS as an initial diagnostic imaging method for staging pancreatic tumors. This Rating reflects the sparse evidence for this indication as well as the inability of this method to assess for distant metastases.

**D** – For EUS as an initial diagnostic imaging method for diagnosis of pancreatic tumors. This Rating reflects the lack of evidence for this indication.

### **POLICY SOURCE(S)**

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### Policy History

Date	Activity
04/04/2018	Initial policy developed
06/19/2018	QI/UM Committee approval
08/15/2018	Provider effective date