

## Upper Gastrointestinal Endoscopy (EGD-esophagogastroduodenoscopy)

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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.

**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.

**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.

**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.

**Highmark Health Options (HHO)** – Managed care organization serving vulnerable populations that have complex needs and qualify for Medicaid. Highmark Health Options members include individuals and families with low income, expecting mothers, children, and people with disabilities. Members pay nothing to very little for their health coverage. Highmark Health Options currently serves Delaware Medicaid: Delaware Healthy Children Program (DHCP) and Diamond State Health Plan and Health Plan Plus members.

**Odynophagia** – Painful swallowing.

## **POLICY POSITION**

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, noncardiac 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 inclusive 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 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 Gastroscope (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?NCId=81ncdver=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/lcddetails.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/lcddetails.aspx?LCDId=34434&ContrlId=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/lcddetails.aspx?LCDId=34434&ContrlId=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&)

**ELIGIBLE PROCEDURE CODES**

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).
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).
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.
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).
43239	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure), with biopsy, single or multiple.
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).
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.
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).
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.
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).
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.
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.
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).
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).

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.

**Diagnostic EGD** The following CPT codes are to be used in conjunction with the ICD-10 codes listed below: 43180, 43191, 43192, 43192, 43193, 43194, 43195, 43196, 43197, 43198, 43200, 43201, 43202, 43204, 43205, 43206, 43210, 43211, 43212, 43213, 43214, 43215, 43216, 43217, 43220, 43226, 43227, 43229, 43233, 43235, 43236, 43239, 43241, 43243, 43244, 43245, 43246, 43247, 43248, 43249, 43250, 43251, 43252, 43254, 43255, 43257, 43266, 43270

B37.81	C12	C13.0	C13.1	C13.2
C13.8	C13.9	C15.3	C15.4	C15.5
C15.8	C15.9	C16.0	C16.1	C16.2
C16.3	C16.4	C16.5	C16.6	C16.8
C16.9	C17.0	C25.0	C25.1	C25.2
C25.3	C25.4	C25.7	C25.8	C25.9
C49.A2	C49.A3	C78.4	D00.1	D00.2
D01.7	D01.9	D12.6	D13.0	D13.1
D13.2	D13.30	D13.39	D37.1	D37.2
D37.3	D37.4	D37.5	D49.0	D50.0
D62	D69.42	D69.49	D69.59	D69.6
E41	E43	E44.0	E46	E64.0
I69.091	I69.191	I69.291	I69.391	I69.891
I69.991	I77.2	I85.00	I85.01	I85.10
I85.11	I86.4	J86.0	K20.0	K20.80
K20.81	K20.9	K20.90	K20.91	K21.00
K21.01	K21.9	K22.0	K22.10	K22.11
K22.2	K22.3	K22.4	K22.5	K22.6

K22.70	K22.710	K22.711	K22.719	K22.8
K23	K25.0	K25.1	K25.2	K25.3
K25.1	K25.2	K25.3	K25.4	K25.5
K25.6	K25.7	K25.9	K26.0	K26.1
K26.2	K26.3	K26.4	K26.5	K26.6
K26.7	K26.9	K27.0	K27.1	K27.2
K27.3	K27.4	K27.5	K27.6	K27.7
K27.9	K28.0	K28.1	K28.2	K28.3
K28.4	K28.5	K28.6	K28.7	K28.9
K29.00	K29.01	K29.20	K29.21	K29.30
K29.31	K29.40	K29.41	K29.50	K29.51
K29.60	K29.61	K29.70	K29.71	K29.80
K29.81	K29.90	K29.91	K30	K31.0
K31.1	K31.2	K31.3	K31.4	K31.5
K31.6	K31.7	K31.811	K31.819	K31.82
K31.89	K44.0	K50.011	K50.012	K50.013
K50.014	K50.018	K50.019	K50.111	K50.112
K50.113	K50.114	K50.118	K50.119	K50.811
K50.812	K50.813	K50.814	K50.818	K50.819
K52.9	K55.011	K55.012	K55.019	K55.021
K55.022	K55.029	K70.30	K70.31	K71.7
K74.00	K74.01	K74.02	K74.3	K74.4
K74.5	K74.60	K74.69	K80.00	K80.01
K80.10	K80.11	K80.12	K80.13	K80.18
K80.19	K80.20	K80.21	K80.30	K80.31
K80.32	K80.33	K80.34	K80.35	K80.36
K80.37	K80.40	K80.41	K80.42	K80.43
K80.44	K80.45	K80.46	K80.47	K80.50
K80.51	K80.60	K80.61	K80.62	K80.63
K80.64	K80.65	K80.66	K80.67	K80.70
K80.71	K80.80	K80.81	K83.01	K83.09
K83.1	K83.2	K83.3	K83.4	K83.5
K83.8	K83.9	K85.00	K85.01	K85.02
K85.10	K85.11	K85.12	K85.20	K85.21
K85.22	K85.30	K85.31	K85.32	K85.80
K85.81	K85.82	K85.90	K85.91	K85.92
K86.0	K86.1	K86.2	K86.3	K86.81
K86.89	K87	K90.0	K90.81	K91.30

K91.31	K91.32	K91.61	K91.62	K91.71
K91.72	K91.81	K91.840	K91.841	K91.870
K91.871	K91.872	K91.873	K91.89	K92.0
K92.1	K92.81	K94.23	K94.30	K94.31
K94.32	K94.33	K94.39	P78.83	Q26.5
Q26.6	Q27.33	Q39.0	Q39.1	Q39.2
Q39.3	Q39.4	Q39.5	Q39.6	Q39.8
Q39.9	Q40.2	Q40.3	Q40.8	Q40.9
	R07.9	R10.10	R10.11	R10.12
R10.13	R10.33	R11.0	R11.10	R11.11
R10.12	R11.15	R12	R13.0	R13.10
R13.0	R13.10	R13.11	R13.12	R13.13
R13.14	R13.19	R49.0	R63.0	R63.4
R93.3	T28.0XXA	T28.0XXD	T28.0XXS	T28.1XXA
T28.1XXD	T28.1XXS	T28.2XXA	T28.2XXD	T28.2XXS
T28.5XXA	T28.5XXD	T28.5XXS	T28.6XXA	T28.6XXD
T28.6XXS	T28.7XXA	T28.7XXD	T28.7XXS	T54.0X1A
T54.0X1D	T54.0X1S	T54.0X2A	T54.0X2D	T54.0X2S
T54.0X3A	T54.0X3D	T54.0X3S	T54.0X4A	T54.0X4D
T54.0X4S	T54.1X1A	T54.1X1D	T54.1X1S	T54.1X2A
T54.1X2D	T54.1X2S	T54.1X3A	T54.1X3D	T54.1X3S
T54.1X4A	T54.1X4D	T54.1X4S	T54.2X1A	T54.2X1D
T54.2X1S	T54.2X2A	T54.2X2D	T54.2X2S	T54.2X3A
T54.2X3D	T54.2X3S	T54.2X4A	T54.2X4D	T54.2X4S
T54.3X1A	T54.3X1D	T54.3X1S	T54.3X2A	T54.3X2D
T54.3X2S	T54.3X3A	T54.3X3D	T54.3X3S	T54.3X4A
T54.3X4D	T54.3X4S	T54.91XA	T54.91XD	T54.91XS
T54.92XA	T54.92XD	T54.92XS	T54.93XA	T54.93XD
T54.93XS	T54.94XA	T54.94XD	T54.94XS	T57.1X1A
T57.1X1D	T57.1X1S	T57.1X2A	T57.1X2D	T57.1X2S
T57.1X3A	T57.1X3D	T57.1X3S	T57.1X4A	T57.1X4D
T57.1X4S	Z79.01	Z79.1	Z85.07	Z87.19

**Therapeutic EGD** The following CPT codes are to be used in conjunction with the ICD-10 codes listed below: 43180, 43191, 43192, 43193, 43194, 43195, 43196, 43197, 43198, 43200, 43201, 43202, 43204, 43205, 43206, 43210, 43211, 43212, 43213, 43214, 43215, 43216, 43217, 43220, 43226, 43227, 43229, 43233, 43235, 43236, 43239, 43241, 43243, 43244, 43245, 43246, 43247, 43248, 43249, 43250, 43251, 43252, 43254, 43255, 43257, 43266, 43270

C15.3	C15.4	C15.5	C15.8	C16.0
C16.1	C16.2	C16.3	C16.4	C16.5
C16.6	C16.8	C16.9	C17.0	C17.8
C49.A1	C49.A2	C49.A3	C7A.010	C7A.092
C78.4	D00.1	D00.2	D01.49	D13.0
D13.1	D13.2	D37.8	D3A.010	D3A.092
I85.00	I85.01	I85.10	I85.11	I86.4
J86.0	K20.0	K20.80	K20.81	K20.90
K20.91	K21.9	K22.0	K22.11	K22.2
K22.3	K22.4	K22.5	K22.6	K22.70
K22.710	K22.711	K22.719	K22.8	K25.0
K25.1	K25.2	K25.4	K25.5	K25.6
K26.0	K26.1	K26.2	K26.4	K26.5
K26.6	K27.0	K27.1	K27.2	K27.4
K27.5	K27.6	K28.0	K28.1	K28.2
K28.4	K28.5	K28.6	K29.01	K29.21
K29.31	K29.41	K29.51	K29.61	K29.71
K29.81	K29.91	K31.1	K31.2	K31.3
K31.4	K31.5	K31.6	K31.7	K31.811
K31.819	K31.82	K31.89	K44.0	K74.00
K74.01	K74.02	K80.51	K80.62	K83.01
K83.09	K92.2	K92.81	K94.20	K94.21
K94.22	K94.31	K94.32	K94.33	K94.39
Q26.5	Q26.6	Q27.33	Q39.0	Q39.1
Q39.2	Q39.3	Q39.4	Q39.5	Q39.6
Q39.8	Q39.9	Q40.2	Q40.3	R11.15
R13.0	R13.11	R13.12	R13.13	R13.14
R13.19	S27.812A	S27.812D	S27.812S	S27.813A
S27.813D	S27.813S	S27.818A	S27.818D	S27.818S
S27.819A	S27.819D	S27.819S	T18.100A	T18.100D
T18.100S	T18.108A	T18.108D	T18.108S	T18.110A
T18.110D	T18.110S	T18.118A	T18.118D	T18.118S
T18.120A	T18.120D	T18.120S	T18.128A	T18.128D
T18.128S	T18.190A	T18.190D	T18.190S	T18.198A
T18.198D	T18.198S	T18.2XXA	T18.2XXD	T18.2XXS
T18.3XXA	T18.3XXD	T18.3XXS	T54.1X1A	T54.1X1D
T54.1X1S	T54.1X2A	T54.1X2D	T54.1X2S	T54.1X3A

T54.1X3D	T54.1X3S	T54.1X4A	T54.1X4D	T54.1X4S
T54.3X1A	T54.3X1D	T54.3X1S	T54.3X2A	T54.3X2D
T54.3X2S	T54.3X3A	T54.3X3D	T54.3X3S	T54.3X4A
T54.3X4D	T54.3X4S	T54.91XA	T54.91XD	T54.91XS
T54.92XA	T54.92XD	T54.92XS	T54.93XA	T54.93XD
T54.93XS	T54.94XA	T54.94XD	T54.94XS	T57.1X1A
T57.1X1D	T57.1X1S	T57.1X2A	T57.1X2D	T57.1X2S
T57.1X3A	T57.1X3D	T57.1X3S	T57.1X4A	T57.1X4D
T57.1X4S	T85.511A	T85.521A	T85.591A	T85.598A
Z93.4				

**Sequential and Periodical EGD**

The following CPT codes are to be used in conjunction with the ICD-10 codes listed below: 43180, 43191, 43192, 43192, 43193, 43194, 43195, 43196, 43197, 43198, 43200, 43201, 43202, 43204, 43205, 43206, 43210, 43211, 43212, 43213, 43214, 43215, 43216, 43217, 43220, 43226, 43227, 43229, 43233, 43235, 43236, 43239, 43241, 43243, 43244, 43245, 43246, 43247, 43248, 43249, 43250, 43251, 43252, 43254, 43255, 43257, 43266, 43270

D00.1	D00.2	D01.49	I85.00	I85.01
I86.4	K22.10	K22.11	K22.70	K22.710
K22.711	K22.719	K22.8	K25.0	K25.1
K25.2	K25.3	K25.4	K25.5	K25.6
K25.7	K27.0	K27.1	K27.2	K27.3
K27.4	K27.5	K27.6	K27.7	K27.9
K28.0	K28.1	K28.2	K28.3	K28.4
K28.5	K28.6	K28.7	Z08	Z09
Z85.00	Z85.01	Z85.020	Z85.028	Z85.060
Z85.068	Z85.818	Z85.819	Z86.19	Z87.11
Z87.19	Z87.821	Z87.828	Z92.89	

**ERCP:** The following CPT codes are to be used in conjunction with the ICD-10 codes listed below: 43260, 43261, 43262, 43263, 43264, 43265, 43274, 43275, 43276, 43277, 43278

B25.2	C22.1	C24.0	C24.1	C24.8
C25.0	C25.1	C25.2	C25.3	C25.4
C25.7	C25.8	C25.9	D01.5	K80.00
K80.01	K80.10	K80.11	K80.12	K80.13



K80.18	K80.19	K80.20	K80.21	K80.30
K80.31	K80.32	K80.33	K80.34	K80.35
K80.36	K80.37	K80.40	K80.41	K80.42
K80.43	K80.44	K80.45	K80.46	K80.47
K80.50	K80.51	K80.60	K80.61	K80.62
K80.63	K80.64	K80.65	K80.66	K80.67
K80.70	K80.71	K80.80	K80.81	K83.0
K83.1	K83.2	K83.3	K83.4	K83.5
K83.8	K83.9	K85.10	K85.11	K85.12
K86.0	K86.1	K86.2	K86.3	K86.81
K86.89	K87	K91.30	K91.5	K91.86
P59.1	P59.20	P59.29	P59.8	Q44.2
Q44.3	Q44.4	Q44.5	Q45.1	Q45.2
Q45.3	R17	R93.2	S36.13XA	S36.13XD
S36.13XS	S36.200A	S36.200D	S36.200S	S36.201A
S36.201D	S36.201S	S36.202A	S36.202D	S36.202S
S36.220A	S36.220D	S36.220S	S36.221A	S36.221D
S36.221S	S36.222A	S36.222D	S36.222S	S36.230A
S36.230D	S36.230S	S36.231A	S36.231D	S36.231S
S36.232A	S36.232D	S36.232S	S36.240A	S36.240D
S36.240S	S36.241A	S36.241D	S36.241S	S36.242A
S36.242D	S36.242S	S36.250A	S36.250D	S36.250S
S36.251A	S36.251D	S36.251S	S36.252A	S36.252D
S36.252S	S36.260A	S36.260D	S36.260S	S36.261A
S36.261D	S36.262S	S36.290A	S36.290D	S36.290S
S36.291A	S36.291D	S36.291S	S36.292A	S36.292D
S36.292S				

**EUS: The following CPT codes are to be used in conjunction with the ICD-10 codes listed below: 43231, 43232, 43237, 43238, 43240, 43242, 43253, 43259**

C15.3	C15.4	C15.5	C15.8	C15.9
C16.0	C16.1	C16.2	C16.3	C16.4
C16.5	C16.6	C16.9	C17.0	C22.1
C24.0	C24.1	C24.8	C25.0	C25.1
C25.2	C25.3	C25.4	C25.7	C25.8
C25.9	C78.4	C78.7	C89.89	D13.0
D13.1	D13.2	D13.30	D13.39	D13.4

D13.5	D13.6	D13.7	D37.1	D37.2
D37.6	D37.8	D3A.010	D3A.092	K80.00
K80.01	K80.10	K80.11	K80.12	K80.13
K80.18	K80.19	K80.20	K80.21	K80.30
K80.31	K80.32	K80.33	K80.34	K80.35
K80.36	K80.37	K80.40	K80.41	K80.42
K80.43	K80.44	K80.45	K80.46	K80.47
K80.50	K80.51	K80.60	K80.61	K80.62
K80.63	K80.64	K80.65	K80.66	K80.67
K80.70	K80.71	K80.80	K80.81	K81.0
K81.2	K83.0	K83.1	K83.2	K83.3
K83.4	K83.5	K83.8	K83.9	K85.10
K85.11	K85.12	K86.0	K86.1	K86.2
K86.3	K86.81	K86.89	K86.9	K87
K91.89	R17	R19.00	R19.01	R19.02
R19.06	R93.2			

## 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 fiber-optic 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:

**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

**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.

**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.

## NONCARDIAC 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.

## References

Achem S.R. American College of Gastroenterology. Non-cardiac chest pain. Patient education and resource center updated July 2013 [online]. Accessed on May 4, 2018.

ASGE Standards of Practice Committee, Early DS, Ben-Menachem T, et al. Appropriate use of GI endoscopy. Specific indications statements from the SOP committee. *Gastrointest Endosc* 2012; 75(6):1127-1131. PMID 22624807. Accessed on May 4, 2018.

Banks P.A., Freeman M.L.; Practice Parameters Committee of the American College of Gastroenterology. Practice guidelines in acute pancreatitis. *Am J Gastroenterol*. 2006;101(10):2379-2400.

Bennett S., Gostimir M., Shorr R., et al. The role of routine preoperative upper endoscopy in bariatric surgery: A systematic review and meta-analysis. *Surg Obes Relat Dis*. 2016;12(5):1116-1125.

Bonis, P.A.L., Ahnen, D.J., Axell, L. Lynch syndrome (hereditary nonpolyposis colorectal cancer): Screening and management. UpToDate®. Topic: 15804. Version 14.0. Accessed on May 4, 2018.

Centers for Medicare and Medicaid Services (CMS), Local Coverage Determination (LCD). No. L35350: Upper Gastrointestinal Endoscopy (Diagnostic and Therapeutic). October 1, 2015. Accessed on April 04, 2018.

Centers for Medicare and Medicaid Services (CMS), National Coverage Determination (NCD). No. 100.2: Endoscopy. Accessed on April 04, 2018.

Center for Devices and Radiological Health (CDRH). 510(k) Premarket Notification Database [search: Product Codes FDS; IYO; ITX; KOG]. Updated June 6, 2011. Accessed on May 4, 2018.

Davila R.E., Rajan E., Adler D.G., et al. ASGE Guideline: The role of endoscopy in the patient with lower-GI bleeding. *Gastrointest Endosc* 2005;62(5):656-660.

De Palma G.D., Forestieri P. Role of endoscopy in the bariatric surgery of patients. *World J Gastroenterol.* 2014;20(24):7777-7784. Accessed on May 7, 2018.

Hayes, Inc. Endoscopic Retrograde Cholangiopancreatography for the Treatment of Benign and Malignant Diseases of the Pancreas and Biliary Tree, February 27, 2013. Medical Technology Directory. Accessed on May 4, 2018.

Hayes, Inc. Endoscopic Ultrasound (EUS) for Diagnosis of Pancreatic Tumors, August 3, 2011. Medical Technology Directory. Accessed on May 4, 2018.

Hayes, Inc. Endoscopic Ultrasound (EUS) for Locoregional Staging of Pancreatic Tumors, July 7, 2015. Medical Technology Directory. Accessed on May 4, 2018.

Hayes, Inc. Detection of Human Papillomavirus (HPV) – Related Cancer in Esophageal Condyloma Biopsies, March 13, 2018. Accessed on April 04, 2018.

Huang, C.S. Endoscopy in Patients who have Undergone Bariatric Surgery. UpToDate®, December 5, 2017. Accessed on May 7, 2018.

Hirota W.K., Zuckerman M.J., Adler D.G., et al. Standards of Practice Committee, American Society for Gastrointestinal Endoscopy. ASGE guideline: The role of endoscopy in the surveillance of premalignant conditions of the upper GI tract. *Gastrointest Endosc.* 2006;63(4):570-580.

Jacobson B.C., Hirota W., Baron T.H., et al. Standards of Practice Committee. American Society for Gastrointestinal Endoscopy. The role of endoscopy in the assessment and treatment of esophageal cancer. *Gastrointest Endosc* 2003;57(7):817-822.

Katz P.O., Gerson L.B., Vila M.F. Guidelines for the Diagnosis and Management of Gastroesophageal Reflux Disease. The American College of Gastroenterology. *Am J Gastroenterol* 2013; 108:308-328. PMID 15184824. Accessed on May 4, 2018.

Leighton J.A., Shen B., Baron T.H., et al. Standards of Practice Committee, American Society for Gastrointestinal Endoscopy. ASGE guideline: Endoscopy in the diagnosis and treatment of inflammatory bowel disease. *Gastrointest Endosc.* 2006;63(4):558-565.

National Comprehensive Cancer Network. Clinical practice guideline on gastric cancers (including cancer in the proximal 5 cm of the stomach). Version 1.2013. NCCN: Fort Washington, PA. Accessed on May 4, 2018.

National Comprehensive Cancer Network. Clinical practice guideline: Pancreatic adenocarcinoma. Version 1.2014. NCCN: Fort Washington, PA. Accessed on May 4, 2018.

National Comprehensive Cancer Network. Clinical practice guideline: Esophageal and esophagogastric junction cancers. Version 2.2016. NCCN: Fort Washington, PA. Accessed on May 4, 2018.

The American Society for Gastrointestinal Endoscopy (ASGE). Understanding Barrett's Esophagus, 2010. Accessed on April 30, 2018.

Wilkins, T., Jarvis, K., Patel, J. Diagnosis and Management of Crohn's Disease. *American Family Physician.* 2011; 84(12). Accessed on May 3, 2018.

Sakran N., Goitein D., Raziell A., et al. Gastric leaks after sleeve gastrectomy: A multicenter experience with 2,834 patients. *Surg Endosc.* 2013;27(1):240-245.



Schigt A., Coblijn U., Lagarde S., et al. Is esophagogastroduodenoscopy before Roux-en-Y gastric bypass or sleeve gastrectomy mandatory? *Surg Obes Relat Dis.* 2014;10(3):411-417; quiz 565-566.

Shaheen N.J., Weinberg D.S., et al. Upper Endoscopy for Gastroesophageal Reflux Disease: Best Practice Advice from the Clinical Guidelines Committee of the American College of Physicians. *Annals of Internal Medicine.* Vol 157, number 11, pgs. 806-816. PMID 23208168. Accessed on May 4, 2018.

UpToDate. Overview of upper gastrointestinal endoscopy (esophagogastroduodenoscopy). Literature review current through Jan 2019. Topic last updated: May 22, 2018. Accessed on February 15, 2019.

Aetna Inc. Upper gastrointestinal endoscopy. Clinical medical Policy Bulletin No. 0738. Last reviewed 8/9/2018. Accessed on February 15, 2019.