



Cohere Medical Policy - Esophagogastroduodenoscopy (EGD)

Clinical Guidelines for Medical Necessity Review

Version: 2
Revision Date: March 13, 2025

Important Notices

Notices & Disclaimers:

GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine the medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third-party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision-making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice.

© 2025 Cohere Health, Inc. All Rights Reserved.

Other Notices:

HCPCS® and CPT® copyright 2025 American Medical Association. All rights reserved.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

HCPCS and CPT are registered trademarks of the American Medical Association.

Guideline Information:

Specialty Area: Gastroenterology

Guideline Name: Cohere Medical Policy - Esophagogastroduodenoscopy (EGD)

Date of last literature review: 3/10/2025

Document last updated: 3/12/2025

Type: ☒ Adult (18+ yo) | ☒ Pediatric (0-17 yo)

Table of Contents

Medical Necessity Criteria	4
Service: Esophagogastroduodenoscopy (EGD)	4
Recommended Clinical Approach	4
Medical Necessity Criteria	5
Indications	5
Non-Indications	11
Level of Care Criteria	12
Procedure Codes (CPT/HCPCS)	12
Medical Evidence	14
References	15
Clinical Guideline Revision History/Information	20

Medical Necessity Criteria

Service: Esophagogastroduodenoscopy (EGD)

Recommended Clinical Approach

Esophagogastroduodenoscopy (EGD) is an upper intestinal endoscopy technique used to examine, obtain samples, or treat pathological conditions of the upper intestinal tract. EGD is performed with a lighted, flexible, fiberoptic instrument, usually less than 12 mm in diameter, passed through the cricopharynx. The patient receives conscious sedation, and a topical anesthetic may be applied to the posterior pharynx. The entire esophagus, stomach, and duodenum can be visualized with EGD. Endoscopic ultrasound (EUS) or transendoscopic ultrasound uses a transducer at the end of an endoscope to obtain high-resolution images that improve visualization of the gastrointestinal tract and allow evaluation of adjacent structures, including the pancreas and biliary tree.

Diagnostic EGD is used to visualize the oropharynx, esophagus, stomach, and proximal duodenum and is useful for detecting conditions such as focal benign or malignant lesions, diffuse mucosal changes, luminal obstruction, abnormal motility, and extrinsic compression by contiguous structures.¹ A diagnostic EGD allows the examiner to visualize abnormalities detectable by the technique and to photograph and collect a biopsy sample as appropriate. An endoscopic Doppler probe can be used as an adjunct diagnostic modality to assess the treatment's local blood supply efficacy and to stratify patients at higher risk of repeat upper gastrointestinal bleeding (UGIB). Pulsatile Doppler signals can indicate the presence and path of bleeding vessels. The probe can also determine if vessels were appropriately coagulated following endoscopic hemostasis. The absence of a Doppler signal is consistent with successful hemostasis of a bleeding lesion. Lesions with a persistent dopplerable signal have a higher risk for rebleeding.²

EGD is generally considered a safe procedure, although bleeding, perforation, infection, acute pancreatitis³, and sedation-related complications⁴ following the procedure have been reported in rare instances.⁵

Medical Necessity Criteria

Indications

→ **Esophagogastroduodenoscopy (EGD)** is considered appropriate if **ANY** of the following is **TRUE**^{1,6,24,26}:

- ◆ Gastroesophageal reflux disease (GERD) symptoms (e.g., heartburn, regurgitation, or chest pain) that persist despite treatment⁵⁻⁶; **OR**
- ◆ A single screening exam for GERD with **AT LEAST THREE** of the following risk factors for concurrent Barrett's esophagus^{1,5}:
 - Prolonged GERD for more than 5 years; **OR**
 - The age of the patient is greater than 50 years; **OR**
 - Male gender; **OR**
 - Hiatal hernia⁷⁻⁸; **OR**
 - Current or past tobacco use; **OR**
 - Obesity; **OR**
 - Family history of Barrett's esophagus in a first-degree relative; **OR**
 - Family history of esophageal adenocarcinoma in a first-degree relative; **OR**
- ◆ Planning for anti-reflux surgery⁹; **OR**
- ◆ Nausea that is persistent and unexplained⁶; **OR**
- ◆ Vomiting that is persistent and unexplained⁵⁻⁶; **OR**
- ◆ Atypical chest pain after cardiac disease has been ruled out⁶; **OR**
- ◆ Heartburn with alarm symptoms (e.g., anemia, GI bleeding, unexplained weight loss)^{8,10}; **OR**
- ◆ Prolonged anorexia⁵; **OR**
- ◆ Unexplained weight loss⁵; **OR**
- ◆ Effects of nonsteroidal anti-inflammatory drug (NSAID) use¹¹; **OR**
- ◆ Barrett's esophagus is present, and the patient requires **ALL** of the following¹²:
 - Routine surveillance of non-dysplastic disease every 3 to 5 years^{1,13}; **AND**
 - Reassessment during treatment to eliminate dysplasia (e.g., ablation, mucosal resection, mucosal dissection) every 3 to 6 months¹²; **AND**
 - Surveillance after completion of treatment for dysplasia when **ANY** of the following is **TRUE**¹:

- For low-grade dysplasia – every 6 months for 1 year, then annually thereafter; **OR**
- For high-grade dysplasia – every 3 months for 1 year, then every 6 months for 1 year, then annually thereafter; **OR**
- ◆ Swallowing symptoms including, but not limited to, **ANY** of the following:
 - Difficulty swallowing (e.g., dysphagia); **OR**
 - Pain while swallowing (odynophagia); **OR**
- ◆ Esophageal dysmotility based on barium radiography or esophageal manometry, when suggestive of achalasia¹⁴; **OR**
- ◆ Confirmation and specific histologic diagnosis of radiologically demonstrated lesions, including, but not limited to, **ANY** of the following¹⁴⁻¹⁷:
 - Protrusions/growths from, within, or extrinsic to the mucosal wall; **OR**
 - Excavated lesions, such as erosions, ulcers, or diverticula; **OR**
 - Other mucosal abnormalities, including thickened fold(s) or asymmetric/symmetric narrowing(s) (stenoses/strictures); **OR**
- ◆ Clarification of location or pathology of a lesion during surgery¹⁸; **OR**
- ◆ Evaluation for possible gastric or duodenal polyps in patients with familial adenomatous polyposis or other at-risk hereditary syndromes (e.g., Lynch syndrome, juvenile polyposis syndrome, Peutz-Jegher's syndrome, MUTYH-Associated Polyposis [MAP], Li-Fraumeni syndrome, Cowden syndrome, hereditary gastric cancer syndrome)¹⁹; **OR**
- ◆ The patient is less than 60 years of age and has dyspepsia with **ANY** of the following:
 - Negative *Helicobacter pylori* test and no response to proton pump inhibitor (PPI) therapy^{6,20-21}; **OR**
 - Equivocal results from non-invasive *Helicobacter pylori* testing and need for gastric biopsy²¹⁻²²; **OR**
 - A one-time screening in a patient with a family history of upper GI malignancy in a first-degree relative; **OR**
 - Lymphadenopathy (e.g., supraclavicular, periumbilical); **OR**

- Palpable abdominal mass; **OR**
- Alarm symptoms (e.g., anemia, GI bleeding, unexplained weight loss, dysphagia/odynophagia); **OR**
- ◆ The patient is 60 years of age or older and has dyspepsia; **OR**
- ◆ Peptic ulcer disease with **ANY** of the following²³⁻²⁴:
 - Persistent or recurrent symptoms despite treatment; **OR**
 - Recent identification of gastric or duodenal ulcer, to document ulcer healing after treatment for at least 2 months, even without symptoms; **OR**
- ◆ Erosive reflux esophagitis with **ANY** of the following^{2,23}:
 - Persistent or recurrent symptoms despite appropriate GERD treatment; **OR**
 - To document healing after treatment of LA grade C or D esophagitis and to exclude the development of Barrett's esophagus; **OR**
- ◆ Surveillance as determined by the endoscopist for or suspected recurrence of prior upper GI cancer or pre-cancer, including **ANY** of the following²³:
 - Squamous cell carcinoma of the esophagus; **OR**
 - Adenocarcinoma of the esophagus; **OR**
 - Adenocarcinoma or mucosa-associated lymphoma (MALT) of the stomach; **OR**
 - Adenocarcinoma of duodenum or ampulla; **OR**
 - Stromal/neuroendocrine tumor of the esophagus, stomach, or duodenum; **OR**
 - Other subepithelial pre-malignant lesion of the esophagus, stomach, or duodenum; **OR**
 - Adenomatous polyp of stomach, duodenum, or ampulla; **OR**
 - Dysplasia (low or high grade) in patients with gastric intestinal metaplasia or chronic atrophic gastritis; **OR**
- ◆ Confirmed or suspected eosinophilic esophagitis (EoE) for **ANY** of the following²⁵:
 - Initial exam for suspected EoE for evaluation of dysphagia, GERD symptoms refractory to PPI therapy, or history of esophageal food bolus impaction; **OR**
 - Follow-up exam to reassess esophageal histology for confirmed EoE, after treatment (e.g., food allergen

- restriction, PPI therapy, steroid therapy, anti-interleukin therapy); **OR**
- Follow-up exam to reassess esophagus when symptoms recur on previously effective therapy; **OR**
- ◆ Evaluation of chronic diarrhea to identify an upper GI etiology (e.g., celiac disease) when small bowel disease is suspected; **OR**
- ◆ Suspected celiac disease based on **ANY** of the following²⁶:
 - Typical signs or symptoms (e.g., abdominal pain, diarrhea, constipation, weight loss without intent, iron deficiency anemia); **OR**
 - Abnormal celiac serology including **ANY** of the following:
 - Elevated tissue transglutaminase immunoglobulin A (TTG IgA) with normal total IgA; **OR**
 - Elevated endomysial IgA with normal total IgA; **OR**
 - Elevated deamidated anti-gliadin IgG with IgA deficiency; **OR**
 - The patient is at a high-risk based on celiac human leucocyte antigen (HLA) analysis; **OR**
- ◆ Known celiac disease with **ANY** of the following²⁶:
 - The patient has been on a gluten-free diet for at least 1 year and requires histologic confirmation of remission; **OR**
 - Symptoms persist despite adherence to a gluten-free diet for at least 6 months; **OR**
- ◆ Acute injury including, but not limited to, **ANY** of the following:
 - Caustic agent ingested; **OR**
 - Sharp foreign object ingested²⁷; **OR**
- ◆ Evaluation for esophagogastric varices (swollen veins [varices] in the esophageal or gastric wall) due to suspicion for or confirmation of liver cirrhosis or portal hypertension²⁸; **OR**
- ◆ Routine screening (every 3 years) or surveillance (every 1-2 years) of non-bleeding esophagogastric varices²⁸⁻²⁹; **OR**
- ◆ Evaluation of GI bleeding and **ANY** of the following:
 - Upper GI symptoms; **OR**
 - Presumed chronic blood loss (iron deficiency anemia, positive fecal occult blood test, or both) when colonoscopy is negative³⁰; **OR**
 - Active bleeding is present (hematemesis, melena, or hematochezia); **OR**

- Recent active bleeding (within 72 hrs) and etiology remains unknown; **OR**
- Suspected aorto-enteric fistula; **OR**
- Re-bleeding occurs after recent endoscopic therapy; **OR**
- Surgery is being considered; **OR**
- ◆ Suspected inflammation of the upper gastrointestinal (GI) tract from etiologies including, but not limited to, inflammatory myositis, Crohn's disease, ulcerative colitis, inflammatory bowel disease (IBD), and acute graft versus host disease³¹⁻³²; **OR**
- ◆ Conditions in which upper GI pathology might modify other planned management, such as patients with **ANY** of the following⁵:
 - Organ transplantation is planned; **OR**
 - Long-term anticoagulation therapy; **OR**
 - Long-term nonsteroidal anti-inflammatory drug therapy for arthritis; **OR**
 - Cancer of the head and neck; **OR**
 - Bariatric surgery is planned; **OR**³³
- ◆ EGD with endoscopic ultrasound is considered appropriate with **ANY** of the following³⁸⁻⁵⁰:
 - **ANY** of the following diagnostic indications *not requiring* intramural or transmural fine needle aspiration/biopsy:
 - When initial ultrasound, CT scan, or MRI is nondiagnostic or inconclusive and clinical suspicion remains high for **ANY** of the following known or suspected conditions:
 - ◆ Cholelithiasis; **OR**
 - ◆ Choledocholithiasis; **OR**
 - ◆ Biliary stricture or obstruction; **OR**
 - ◆ Structural or congenital abnormality; **OR**
 - For local and regional staging of confirmed malignancy involving the esophagus, stomach, duodenum, duodenal ampulla, bile duct, pancreas or jejunum when diagnostic imaging is insufficient or indeterminate; **OR**
 - For evaluation of possible etiologies for unexplained acute or recurrent pancreatitis; **OR**

- **ANY** of the following diagnostic indications *that include* intramural or transmural fine needle aspiration/biopsy of/for:
 - Tumor/mass/sub-epithelial lesions involving the upper GI tract (esophagus, stomach, duodenum, duodenal ampulla, jejunum); **OR**
 - Tumor/mass/lesions/cysts involving regional adjacent organs (lung, liver, gallbladder, bile duct, pancreas); **OR**
 - Regional lymph nodes (e.g., mediastinal, peri-esophageal, pre-carinal, peri-gastric, peri-biliary, peri-pancreatic) for **ANY** of the following scenarios:
 - ◆ When enlarged or suspicious for tumor infiltration and sampling might change management; **OR**
 - ◆ When normal in size and random sampling might change staging designation; **OR**
 - ◆ when lymphadenopathy is of unknown origin, sampling is likely to affect patient management, and no superficial lymph nodes are easily accessible for percutaneous sampling; **OR**
 - Confirmation of suspected autoimmune pancreatitis when diagnostic imaging and/or serologic testing is inconclusive; **OR**
 - Exclusion or confirmation of chronic pancreatitis as a possible etiology for chronic unexplained upper abdominal pain; **OR**
- **ANY** of the following *therapeutic* indications:
 - For bile duct or pancreatic duct access to achieve drainage or other therapy (e.g., stent placement, stone removal) if access could not be achieved by ERCP; **OR**
 - For drainage of symptomatic abdominal fluid collections that can be accessed transmurally from the esophagus, stomach or duodenum, including

abscesses, bilomas, pseudocysts, or other pancreatic fluid collections; **OR**

- For creation of a gastroenterostomy for **ANY** of the following:
 - ◆ relieve/palliate symptoms from gastric outlet obstruction when surgery is not feasible; **OR**
 - ◆ facilitate access to the duodenal papilla via stomach or small bowel segment that has been excluded by prior surgery; **OR**
- For transmural injection of therapeutic agents (e.g., ethanol, phenol) including **ANY** of the following:
 - ◆ Neurolytic agent (e.g., botulinum toxin, ethanol, phenol) into the celiac plexus for **ANY** of the following:
 - Palliate chronic pain related to upper abdominal cancer (including pancreatic cancer); **OR**
 - Relieve chronic pain related to chronic pancreatitis that is unresponsive to medical therapy; **OR**
 - Identify/predict surgical success in patients with median arcuate ligament syndrome (MALS) ⁵¹⁻⁵³; **OR**
 - ◆ Botulinum toxin into the esophageal muscularis for treatment of achalasia; **OR**
- For transmural delivery of targeted cancer treatment (e.g., radiofrequency ablation, chemotherapy); **OR**
- For transmural placement of fiducial markers in tumors for surveillance or presurgical marking.

Non-Indications

→ **Diagnostic esophagogastroduodenoscopy (EGD)** is not considered appropriate if **ANY** of the following is **TRUE** ^{1,6,24,26}:

- ◆ Blockage in the esophagus, stomach, or duodenum is previously established; **OR**
- ◆ Surveillance of healed, benign disease, such as gastric or duodenal ulcer or benign esophageal strictures¹; **OR**
- ◆ Confirming *Helicobacter pylori* eradication; **OR**

- ◆ Cancer surveillance in patients with pernicious anemia, treated achalasia, or prior gastric resection¹; **OR**
- ◆ Patients with significant cardiac arrhythmia or recent (within the last 3–6 months) myocardial infarction¹; **OR**
- ◆ Perforated bowel; **OR**
- ◆ Peritonitis; **OR**
- ◆ Toxic megacolon in an unstable patient; **OR**
- ◆ Perforated viscus is known or suspected; **OR**
- ◆ Before bariatric surgery in asymptomatic individuals; **OR**
- ◆ Confirming placement of gastric band; **OR**
- ◆ Diagnosing laryngopharyngeal reflux; **OR**
- ◆ Optical endomicroscopy is requested.

*Note: Patients undergoing dilations, percutaneous endoscopic gastrostomy [PEG], polypectomy, endoscopic sphincterotomy, endoscopic ultrasound-guided fine-needle aspiration [FNA], laser ablation, and coagulation are at higher risk for bleeding, and adjustment of anticoagulation may be necessary.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
43239	Esophagogastroduodenoscopy, flexible, transoral; with biopsy, single or multiple
43235	Esophagogastroduodenoscopy, flexible, transoral; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)
43237	Esophagogastroduodenoscopy, flexible, transoral; with endoscopic ultrasound examination limited to the esophagus, stomach or duodenum, and adjacent structures

43238	Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic ultrasound-guided intramural or transmural fine needle aspiration/biopsy(s), (includes endoscopic ultrasound examination limited to the esophagus, stomach or duodenum, and adjacent structures)
43242	Esophagogastroduodenoscopy, flexible, transoral; 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)
43252	Esophagogastroduodenoscopy, flexible, transoral; with optical endomicroscopy
43253	Esophagogastroduodenoscopy, flexible, transoral; with transendoscopic ultrasound-guided transmural injection of diagnostic or therapeutic substance(s) (eg, 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; 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.

Medical Evidence

Sengupta et al. (2024) documented the recommendations of a panel of experts from the American College of Gastroenterology and the Society of Abdominal Radiology, comparing the advantages and limitations of endoscopic versus radiologic diagnostic examinations in patients with gastrointestinal bleeding. The authors noted that unless contraindicated, the evaluation of non-variceal upper gastrointestinal bleeding begins with EGD, with the ideal timing for the procedure being within 24 hours of presentation due to the increased risk of mortality when performed greater than 24–36 hours.^{[37](#)}

The European Society of Gastrointestinal Endoscopy (ESGE) published a technical review of endoscopic ultrasound in 2022. The authors discussed several scenarios wherein endoscopic ultrasound is the optimal diagnostic or therapeutic modality, such as the drainage of fluid collections, biopsy of suspicious lesions, and surveillance and staging of neoplasms.^{[38](#)}

A 2022 American Society of Gastrointestinal Endoscopy (ASGE) standards of practice review of adverse events associated with EGD found this procedure to be well-tolerated and safe, with more than 7 million esophagogastroduodenoscopies taking place each year in the United States. The overall incidence of the most insidious complications, including perforation, cardiopulmonary sequelae, and bleeding, remains extraordinarily low. Rates of perforation, for example, have been estimated at 1 in 25,000. Bleeding requiring emergency department care or inpatient stay for resolution has been evaluated at 80 in 100,000 patients within 30 days of the EGD.^{[5](#)}

The American College of Gastroenterologists (ACG) and the American Gastroenterological Association (AGA) have published several recent guidelines pertaining to the use of EGD in high-volume clinical scenarios, such as peptic disease, Barrett's esophagus, and celiac disease. This robust guidance has been utilized where appropriate to synthesize this policy.^{[16,24,26](#)}

References

1. Shaheen NJ, Falk GW, Iyer PG, et al. Diagnosis and management of Barrett's esophagus: An updated ACG guideline. *Am J Gastroenterol*. 2022;117(4):559–587. doi: 10.14309/ajg.0000000000001680. PMID: 35354777.
2. Wasserman RD, Abel W, Monkemuller K, et al. Non-variceal upper gastrointestinal bleeding and its endoscopic management. *Turk J Gastroenterol*. 2024;35(8):599–608. doi: 10.5152/tjg.2024.23507. PMID: 39150279.
3. Gaddameedi SR, Rathod M, Ravilla J, et al. Acute pancreatitis after EGD: Case presentation and literature review of this rare post-procedure complication. *Eur J Case Rep Intern Med*. 2024;11(8):004680. doi: 10.12890/2024_004680. PMID: 39130059.
4. Vargo JJ 2nd. Sedation-related complications in gastrointestinal endoscopy. *Gastrointest Endosc Clin N Am*. 2015;25(1):147–158. doi: 10.1016/j.giec.2014.09.009. PMID: 25442964.
5. ASGE Standards of Practice Committee, Coelho-Prabhu N, Forbes N, et al. Adverse events associated with EGD and EGD-related techniques. *Gastrointest Endosc*. 2022;96(3):389–401.e1. doi: 10.1016/j.gie.2022.04.024. PMID: 35843754.
6. Katz PO, Dunbar KB, Schnoll-Sussman FH, et al. ACG clinical guideline for the diagnosis and management of gastroesophageal reflux disease. *Am J Gastroenterol*. 2022;117(1):27–56. doi: 10.14309/ajg.0000000000001538. PMID: 34807007.
7. Laracca GG, Spota A, Perretta S. Optimal workup for a hiatal hernia. *ALES*. 2021 Apr;6:20. doi: 10.21037/ales.2020.03.02.
8. Shaheen NJ, Weinberg DS, Denberg TD, et al. Upper endoscopy for gastroesophageal reflux disease: Best practice advice from the clinical guidelines committee of the American College of Physicians. *Ann Intern Med*. 2012 Dec 4;157(11):808–16. doi: 10.7326/0003-4819-157-11-201212040-00008. PMID: 23208168.
9. Latorre-Rodríguez AR, Kim P, Mittal SK. Endoscopic assessment of failed funduplications differs between endoscopists. *Surg Endosc*. 2024 Nov;38(11):6839–6845. doi: 10.1007/s00464-024-11107-z. PMID: 39168858.

10. ASGE Standards of Practice Committee; Early DS, Ben-Menachem T, et al. Appropriate use of GI endoscopy. *Gastrointest Endosc*. 2012 Jun;75(6):1127–31. doi: 10.1016/j.gie.2012.01.011. PMID: 22624807.
11. Iwamuro M, Kawano S, Otsuka M. Drug-induced mucosal alterations observed during esophagogastroduodenoscopy. *World J Gastroenterol*. 2024 Apr 28;30(16):2220–2232. doi: 10.3748/wjg.v30.i16.2220. PMID: 38690017; PMCID: PMC11056913.
12. Bryce C, Bucaj M, Gazda R. Barret esophagus: Rapid evidence review. *Am Fam Physician*. 2022;106(4):383–387. PMID: 36260894.
13. Triggs JR, Falk GW. Best practices in surveillance for Barrett's esophagus. *Gastrointest Endosc Clin N Am*. 2021 Jan;31(1):59–75. doi: 10.1016/j.giec.2020.08.003. PMID: 33213800; PMCID: PMC7684982.
14. Patel DA, Yadlapati R, Vaezi MF. Esophageal motility disorders: Current approach to diagnostics and therapeutics. *Gastroenterology*. 2022;162(6):1617–1634. doi: 10.1053/j.gastro.2021.12.289. PMID: 35227779.
15. Shah SC, Gawron AJ, Li D. Surveillance of gastric intestinal metaplasia. *Am J Gastroenterol*. 2020;115(5):641–644. doi: 10.14309/ajg.0000000000000540. PMID: 32058339.
16. Shah SC, Piazuelo MB, Kuipers EJ, et al. AGA clinical practice update on the diagnosis and management of atrophic gastritis: Expert review. *Gastroenterology*. 2021;161(4):1325–1332.e7. doi: 10.1053/j.gastro.2021.06.078. PMID: 34454714.
17. Dixon M, Cardoso R, Tinmouth J, et al. What studies are appropriate and necessary for staging gastric adenocarcinoma? Results of an international RAND/UCLA expert panel. *Gastric Cancer*. 2014;17(2):377–382. doi: 10.1007/s10120-013-0262-x. PMID: 23633230.
18. Romain CP, Martinez J. Upper endoscopy and basic procedural interventions. *ALES*. 2019;4. doi: 10.21037/ales.2019.07.02.
19. Sheiko MA, Feinstein JA, Capocelli KE, Kramer RE. Diagnostic yield of EGD in children: a retrospective single-center study of 1000 cases. *Gastrointestinal endoscopy*. 2013 Jul 1;78(1):47–54.
20. Moayyedi P, Lacy BE, Andrews CN, et al. ACG and CAG clinical guideline: Management of dyspepsia. *Am J Gastroenterol*. 2017;112(7):988–1013. doi: 10.1038/ajg.2017.154. PMID: 28631728. Erratum in: *Am J Gastroenterol*. 2017 Sep;112(9):1484. doi: 10.1038/ajg.2017.238.
21. Yang YX, Brill J, American Gastroenterological Association Clinical Practice Guidelines Committee, et al. American Gastroenterological Association Institute guideline on the role of upper gastrointestinal

- biopsy to evaluate dyspepsia in the adult patient in the absence of visible mucosal lesions. *Gastroenterology*. 2015;149(4):1082-1087. doi: 10.1053/j.gastro.2015.07.039. PMID: 26283143.
22. Chey WD, Leontiadis GI, Howden CW, et al. ACG clinical guideline: Treatment of *Helicobacter pylori* infection. *Am J Gastroenterol*. 2017;112(2):212-239. doi: 10.1038/ajg.2016.563. PMID: 28071659. Erratum in: *Am J Gastroenterol*. 2018 Jul;113(7):1102. doi: 10.1038/s41395-018-0132-6.
 23. Nagula S, Parasa S, Laine L, et al. AGA clinical practice update on high-quality upper endoscopy: Expert review. *Clin Gastroenterol Hepatol*. 2024;22(5):933-943. doi: 10.1016/j.cgh.2023.10.034. PMID: 38385942.
 24. ASGE Standards of Practice Committee, Banerjee S, Cash BD, et al. The role of endoscopy in the management of patients with peptic ulcer disease. *Gastrointest Endosc*. 2010;71(4):663-668. doi: 10.1016/j.gie.2009.11.026. PMID: 20363407.
 25. Aceves SS, Alexander JA, Baron TH, et al. Endoscopic approach to eosinophilic esophagitis: American Society for Gastrointestinal Endoscopy Consensus Conference. *Gastrointest Endosc*. 2022;96(4):576-592.e1. doi: 10.1016/j.gie.2022.05.013. PMID: 35965102.
 26. Rubio-Tapia A, Hill ID, Kelly CP, et al. ACG (American College of Gastroenterology) clinical guidelines: Diagnosis and management of celiac disease. *Am J Gastroenterol*. 2013;108(5):656-677. doi: 10.1038/ajg.2013.79. PMID: 23609613.
 27. Quitadamo P, Battagliere I, Del Bene M, et al. Sharp-pointed foreign body ingestion in pediatric age. *J Pediatr Gastroenterol Nutr*. 2023;76(2):213-217. doi: 10.1097/MPG.0000000000003655. PMID: 36346952.
 28. Kalista KF, Hanif SA, Nababan SH, et al. The clinical role of endoscopic ultrasound for management of bleeding esophageal varices in liver cirrhosis. *Case Rep Gastroenterol*. 2022;16(2):295-300. Published 2022 May 10. doi: 10.1159/000524529. PMID: 35814797.
 29. Garcia-Tsao G, Sanyal AJ, Grace ND, et al. Prevention and management of gastroesophageal varices and variceal hemorrhage in cirrhosis. *Hepatology*. 2007 Sep;46(3):922-38. doi: 10.1002/hep.21907. PMID: 17879356.
 30. Kim NH, Park JH, Park DI, et al. Should asymptomatic young men with iron deficiency anemia necessarily undergo endoscopy? *Korean J*

- Intern Med.* 2018;33(6):1084–1092. doi: 10.3904/kjim.2016.421. PMID: 29294595.
31. Hakobyan K, Acob T, Aleksanyan M, et al. Upper gastrointestinal (GI) manifestations of inflammatory myositis: A tale of two patients. *Cureus.* 2024;16(6):e62153. doi: 10.7759/cureus.62153. PMID: 38993454.
 32. Moran CP, Neary B, Doherty GA. Endoscopic evaluation in diagnosis and management of inflammatory bowel disease. *World J Gastrointest Endosc.* 2016;8(20):723–732. doi: 10.4253/wjge.v8.i20.723. PMID: 28042386.
 33. Peker KD, Sahbaz NA, Seyit H, et al. An alternative view on the necessity of EGD before sleeve gastrectomy. *Surg Obes Relat Dis.* 2017;13(12):1959–1964. doi: 10.1016/j.soard.2017.06.002. PMID: 28709560.
 34. Gyawali CP, Carlson DA, Chen JW, et al. ACG clinical guidelines: Clinical use of esophageal physiologic testing. *Am J Gastroenterol.* 2020;115(9):1412–1428. doi: 10.14309/ajg.0000000000000734. PMID: 32769426.
 35. Schuldt AL, Kirsten H, Tuennemann J, et al. Necessity of transnasal gastroscopy in routine diagnostics: A patient-centred requirement analysis. *BMJ Open Gastroenterol.* 2019;6(1):e000264. doi: 10.1136/bmjgast-2018-000264. PMID: 31139423.
 36. Boys JA, Azadgoli B, Martinez M, et al. Adequacy of EGD reporting: a review of 100 reports from 100 endoscopists. *Journal of Gastrointestinal Surgery.* 2021 May 1;25(5):1117–23.
 37. Sengupta N, Kastenberger DM, Bruining DH, et al. The role of imaging for gastrointestinal bleeding: Consensus recommendations from the American College of Gastroenterology and Society of Abdominal Radiology. *Am J Gastroenterol.* 2024;119(3):438–449. doi: 10.14309/ajg.0000000000002631. PMID: 38857483.
 38. Van Wanrooij RL, Bronswijk M, Kunda R, et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) technical review. *Endoscopy.* 2022 Mar;54(03):310–32.
 39. Piester TL, Liu QY. EUS in pediatrics: a multicenter experience and review. *Frontiers in Pediatrics.* 2021 Aug 25;9:709461.
 40. van Riet PA, Erler NS, Bruno MJ, Cahen DL. Comparison of fine-needle aspiration and fine-needle biopsy devices for endoscopic ultrasound-guided sampling of solid lesions: a systemic review and meta-analysis. *Endoscopy.* 2021 Apr;53(04):411–23.
 41. Facciorusso A, Crinò SF, Gkolfakis P, et al. Endoscopic ultrasound fine-needle biopsy vs fine-needle aspiration for lymph nodes tissue

- acquisition: a systematic review and meta-analysis. *Gastroenterology Report*. 2022 Jan 1;10:goac062.
42. Khizar H, Zhicheng H, Chenyu L, et al. Efficacy and safety of endoscopic drainage versus percutaneous drainage for pancreatic fluid collection; a systematic review and meta-analysis. *Annals of Medicine*. 2023 Dec 12;55(1):2213898.
 43. Samanta J, Dhar J, Muktesh G, et al. Endoscopic drainage versus percutaneous drainage for the management of infected walled-off necrosis: a comparative analysis. *Expert Review of Gastroenterology & Hepatology*. 2022 Mar 4;16(3):297–305.
 44. Nabi Z, Talukdar R, Lakhtakia S, Reddy DN. Outcomes of endoscopic drainage in children with pancreatic fluid collections: a systematic review and meta-analysis. *Pediatric Gastroenterology, Hepatology & Nutrition*. 2022 May 9;25(3):251.
 45. Kanno A, Ikeda E, Ando K, et al. The diagnosis of autoimmune pancreatitis using endoscopic ultrasonography. *Diagnostics*. 2020 Nov 25;10(12):1005.
 46. Yoon SB, Moon SH, Song TJ, Kim JH, Kim MH. Endoscopic ultrasound-guided fine needle aspiration versus biopsy for diagnosis of autoimmune pancreatitis: Systematic review and comparative meta-analysis. *Digestive Endoscopy*. 2021 Nov;33(7):1024–33.
 47. Tang RS. Endoscopic evaluation of indeterminate biliary strictures: Cholangioscopy, endoscopic ultrasound, or both? *Digestive Endoscopy*. 2024 Jul;36(7):778–88.
 48. Li Z, Liu W, Xu X, Li P. A meta-analysis comparing endoscopic ultrasound-guided fine-needle aspiration with endoscopic ultrasound-guided fine-needle biopsy. *Journal of Clinical Gastroenterology*. 2022 Sep 1;56(8):668–78.
 49. Strand DS, Law RJ, Yang D, Elmunzer BJ. AGA clinical practice update on the endoscopic approach to recurrent acute and chronic pancreatitis: expert review. *Gastroenterology*. 2022 Oct 1;163(4):1107–14.
 50. National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: Pancreatic adenocarcinoma (ver. 2.2024). Updated February 3, 2025. Accessed February 6, 2025.. https://www.nccn.org/professionals/physician_gls/pdf/pancreatic.pdf.
 51. Karhu E, Nguyen L. Safety and efficacy of EUS-guided celiac plexus block in the evaluation of patients with median arcuate ligament syndrome anatomy for possible surgery. *iGIE*. 2022 Dec 1;1(1):57–61.

52. Barbon DA, Hsu R, Noga J, et al. Clinical response to celiac plexus block confirms the neurogenic etiology of median arcuate ligament syndrome. *Journal of Vascular and Interventional Radiology*. 2021 Jul 1;32(7):1081-7.
53. Bower KS, McCarthy CC, Vyasa P, Nagarsheth K, Desai MJ. Celiac plexus block: A diagnostic tool for neurogenic median arcuate ligament syndrome. *Pain Practice*. 2025 Jan;25(1):e13403.

Clinical Guideline Revision History/Information

Original Date: February 6, 2025		
Review History		
Version 2	3/13/2025	<ul style="list-style-type: none">• Added indications for endoscopic ultrasound (previously absent) and endoscopic injections (previously absent).• Changed policy title to "Esophagogastroduodenoscopy [EGD]" - prior title was considered less inclusive of current range of indications .• Rewrote medical evidence section for relevance.• Added references