

MEDICAL POLICY – 7.01.604

Gastroesophageal Reflux Surgery in Adults

BCBSA Ref. Policy: Not Applicable

Effective Date: Feb. 6, 2026
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 Replaces: N/A

RELATED MEDICAL POLICIES:

- 2.01.38 Transesophageal Endoscopic Therapies for Gastroesophageal Reflux Disease
- 2.01.91 Peroral Endoscopic Myotomy for Treatment of Esophageal Achalasia and Gastroparesis
- 2.01.533 Upper Gastrointestinal (UGI) Endoscopy for Adults
- 7.01.137 Magnetic Esophageal Sphincter Augmentation to Treat Gastroesophageal Reflux Disease
- 7.01.516 Bariatric Surgery

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Introduction

Gastroesophageal reflux surgery is a treatment for people who have severe or long-lasting acid reflux, also called GERD (gastroesophageal reflux disease). GERD happens when stomach acid flows back into the tube that connects your mouth to your stomach (the esophagus), causing symptoms like heartburn, chest discomfort, or regurgitation. GERD surgery is usually done when lifestyle changes and medicines have not helped. The most common procedure is called fundoplication. In this surgery, the top part of the stomach is wrapped around the lower end of the esophagus to strengthen the valve between the stomach and esophagus. This helps keep stomach acid where it belongs. The goal of the surgery is to reduce symptoms, prevent damage to the esophagus, and improve quality of life. It's often done using a minimally invasive technique with small cuts and a camera (laparoscopic surgery), which usually means a quicker recovery. This policy describes when GERD surgery may be considered medically necessary.

Note: The Introduction section is for your general knowledge and is not to be taken as policy coverage criteria. The rest of the policy uses specific words and concepts familiar to medical professionals. It is intended for providers. A provider can be a person, such as a doctor, nurse, psychologist, or dentist. A provider also can

be a place where medical care is given, like a hospital, clinic, or lab. This policy informs them about when a service may be covered.

Policy Coverage Criteria

Note: This policy only applies to individuals aged 19 and older.

Procedure	Medical Necessity
Laparoscopic esophagogastric fundoplication • Nissen procedure (360°) • Toupet procedure (270°) • Dor anterior procedure (180°)	Initial total (complete) or partial laparoscopic esophagogastric fundoplication (noted on the left) may be considered medically necessary to treat symptomatic gastroesophageal reflux disease (e.g. heartburn, regurgitation) when ALL of the following criteria are met: • Symptoms are unresponsive to lifestyle modifications such as weight loss, avoidance of recumbent positions 2-3 hours after a meal, elevation of the head of the bed, avoidance of specific foods that worsen the symptoms, avoidance of tobacco products/smoking, where applicable AND • One of the following pharmacological therapies is tried: ○ A three-month trial of proton pump inhibitors (PPIs) was ineffective, contraindicated, or not tolerated, or ○ PPIs were used for 12 or more consecutive months within the past 18 months, and surgery is considered an alternative to long-term medication use AND • There is objective diagnostic confirmation of reflux and/or esophagitis via endoscopy or • If endoscopy is normal, objective evidence of reflux is confirmed from One of the following: ○ 24-hour ambulatory esophageal pH monitoring or ○ Esophageal manometry to assess motility abnormalities associated with GERD or ○ Barium swallow

Procedure	Medical Necessity
Other conditions for which laparoscopic esophagogastric fundoplication is considered medically necessary • Paraesophageal hiatal hernia • Esophageal myotomy	Laparoscopic esophagogastric fundoplication may be considered medically necessary for either of the following conditions: • The procedure is performed with a paraesophageal hiatal hernia (Types II, III, IV) (see Related Information) that is confirmed by imaging or endoscopy • The procedure is performed with esophageal myotomy in patients with achalasia
Revision or repeat fundoplication procedure	Revision of a previous or repeat fundoplication surgery may be considered medically necessary for any of the following conditions: • Persistent or recurrent symptoms of postoperative reflux (heartburn, regurgitation) • Persistent post-operative dysphagia • A documented mechanical failure such as obstruction • A documented structural abnormality such as a wrap disruption or slippage When the above criteria are not met, laparoscopic esophagogastric fundoplication initial, revision, or repeat total or partial surgery for the treatment of symptomatic gastroesophageal reflux disease is considered not medically necessary.

Procedure	Investigational
• 90° anterior partial fundoplication • Hill repair • Lind partial fundoplication	The following procedures are considered investigational for the surgical treatment of gastroesophageal reflux disease: • 90-degree anterior partial fundoplication • Hill repair, laparoscopic • Lind partial fundoplication • Hiatal hernia repair without current or prior fundoplication, including repair of sliding or paraesophageal hernia

Documentation Requirements

The patient's medical records submitted for review for all conditions should document that medical necessity criteria are met. The record should include the following:

- Office visit notes that contain the relevant history and physical documenting the specific surgical plan along with the individual's symptoms, the lifestyle modifications trialed and failed, the medication therapy trialed, and the objective diagnostic test(s) used to confirm the diagnosis of GERD is present.

AND

- If there is a paraesophageal hernia (Types II, III, or IV) present, it is accompanied by imaging or endoscopy confirmation.

Coding

Code	Description
CPT	
43280	Laparoscopy, surgical, esophagogastric fundoplasty (eg, Nissen, Toupet procedures)
43281	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; without implantation of mesh
43282	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; with implantation of mesh

Note: CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). HCPCS codes, descriptions and materials are copyrighted by Centers for Medicare Services (CMS).

Related Information

Definition of Terms

90° anterior partial fundoplication: is a surgical procedure performed laparoscopically by creating a partial wrap of the stomach around the front (anteriorly) of the esophagus to strengthen the lower esophageal sphincter to prevent stomach acid from flowing back into the esophagus. It is used as a treatment for gastroesophageal reflux.

Dor (180°) anterior partial fundoplication: Is a surgical procedure performed laparoscopically by creating a partial (180°) anterior (front) wrap of the stomach's fundus around the esophagus to prevent reflux.

Hernia Classifications:

Type I: The sliding type, representing more than 95% of hiatal hernias. This type occurs when the gastroesophageal junction is displaced toward the hiatus.

Type II: A paraesophageal hiatal hernia, which occurs when part of the stomach migrates into the mediastinum parallel to the esophagus.

Type III: A paraesophageal hernia combined with a sliding hernia, where both the gastroesophageal junction and a portion of the stomach have migrated into the mediastinum.

Type IV: The stomach and an additional organ, such as the colon, small intestine, or spleen, herniate into the chest.

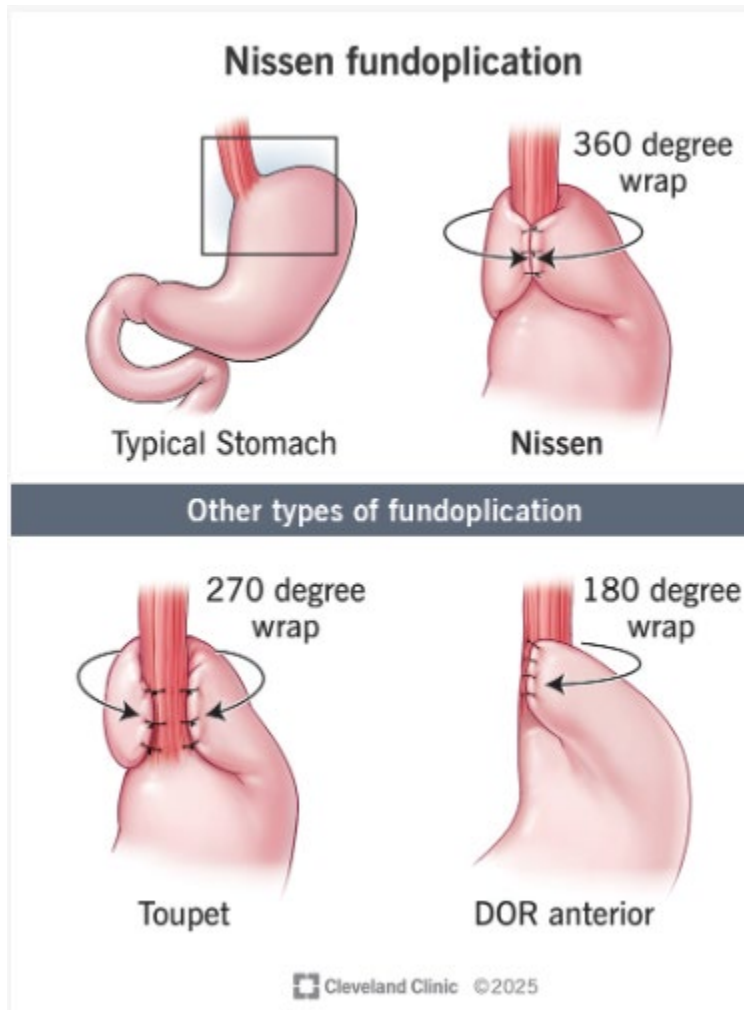
Source: <https://www.ncbi.nlm.nih.gov/books/NBK562200/#:~:text=Type%20I:%20The%20sliding%20type,%5B5%5D%5B6%5D>. Accessed July 24, 2025.

Hill repair (aka gastropexy or fundoplication): is a surgical procedure performed laparoscopically used to treat gastroesophageal reflux disease. It anchors the gastroesophageal junction (where the esophagus and stomach meet) to the back of the abdomen with reconstruction of the gastroesophageal flap-valve mechanism.

Lind fundoplication: is a surgical procedure performed laparoscopically used to treat gastroesophageal reflux by creating a partial wrap (270-300°) of the stomach posteriorly around the lower esophagus to strengthen the esophageal sphincter and prevent stomach acid from flowing back into the esophagus. It is used to treat gastroesophageal reflux.

Toupet (270°) fundoplication: is a surgical procedure performed laparoscopically by creating a partial wrap (270°) of the stomach posteriorly around the lower esophagus to prevent stomach acid from flowing back up the esophagus. It is a preferred method for individuals with swallowing difficulties or other esophageal motility problems.





Source: <https://my.clevelandclinic.org/health/treatments/4200-nissen-fundoplication>. Accessed July 14, 2025.

Evidence Review

Description

Gastroesophageal reflux surgery is a procedure, most commonly a Nissen fundoplication, performed to treat chronic refractory gastroesophageal reflux disease (GERD) by reinforcing the lower esophageal sphincter (LES). This surgery is usually performed laparoscopically and involves creating a wrap of all (Nissen 360 degree) of the fundus (the upper part of the stomach) around or sometimes partially around (Toupet or Dor) the lower part of the esophagus and suturing it in place at the esophagocardial junction with the goal of restoring the anti-reflux barrier. This

technique aids in the strengthening of the lower esophageal sphincter which helps to prevent stomach acid from flowing back into the esophagus.

Background

The Montreal Consensus defined GERD as “a condition which develops when the reflux of the stomach contents causes troublesome symptoms and/or complications.” Symptoms are “troublesome” if they adversely impact an individual’s quality of life. GERD is one of the most common gastrointestinal disorders in the US. The most common symptoms of GERD are reflux and regurgitation. One of the first-line treatments for GERD is lifestyle modification followed by pharmacological therapy.

Lifestyle modifications for GERD may include any of the following: weight loss for those who are overweight or obese, avoidance of tobacco products/smoking for those who smoke or use tobacco products, elevating the head of the bed, avoidance of lying down soon after eating meals or nighttime snacks, avoidance of sleeping right side down, and avoidance of foods that can exacerbate reflux symptoms such as coffee, tea, carbonated beverages, alcohol consumption, spicy foods, acidic foods such as citrus and tomatoes, chocolate, peppermint, and foods high in fat content. If these modifications do not help relieve symptoms of GERD, then the individual will likely need to begin medication to aid in neutralizing or reducing gastric acid. This could include antacids, histamine H₂-receptor antagonists (H₂RAs), and proton pump inhibitors (PPIs). Out of all of these, PPIs are the most prescribed and associated with consistent and superior heartburn and regurgitation relief. PPIs should be given 30-60 minutes before breakfast for once daily dosing and again 30-60 minutes before dinner for twice daily dosing and trialed for 12 weeks.

If reflux symptoms persist, despite optimal medical therapy, or for those individuals who are unwilling to take lifelong medications or cannot tolerate the prescribed medication, an anti-reflux surgical procedure may be warranted. Prior to proceeding with surgery, reflux should be confirmed objectively with one of the following esophageal tests: an endoscopy, and if that is normal, then a 24-hour ambulatory esophageal pH monitoring test or a barium swallow which has poor sensitivity and specificity for GERD when compared to pH testing but can reveal the presence of reflux esophagitis, any esophageal strictures, and esophageal shortening. Esophageal manometry is helpful in assessing motility abnormalities associated with GERD. This is important to know preoperatively as a partial rather than a total laparoscopic esophagogastric fundoplication surgery is recommended for those found to have dysphagia.



Treatment

Laparoscopic Nissen fundoplication became the gold standard for the treatment of chronic refractory esophageal reflux in the 1990s replacing the open procedure. Studies have shown that heartburn and regurgitation were less frequent with surgical than with medical therapy, even though some individuals may still need some anti-reflux medication at some point after surgery, satisfaction with surgical treatment was still rated highly in the short and medium term. As an alternative to the total Nissen fundoplication, partial fundoplications such as the Toupet or Dor are reported to have similar efficacy in relieving GERD symptoms, along with less postoperative dysphagia, gas-bloating, and the inability to belch or vomit. However, the partial fundoplication procedures may confer a higher rate of recurrent GERD symptoms than the Nissen fundoplication.

Paraesophageal Hiatal Hernia Repair with Esophagogastric Fundoplication

The presence of a hiatal hernia is closely associated with the development of gastroesophageal reflux disease. More than 90% of hiatal hernias are sliding, Type I hernias. Symptoms such as heartburn associated with this type of hernia can be treated with medication as this type of hernia is usually not associated with serious complications. Common symptoms of paraesophageal hernias (Types II, III, IV) include postprandial (after a meal) chest discomfort, satiety (fullness), and dyspnea upon exertion. These symptoms cannot be managed medically and can only be addressed by a surgical paraesophageal hernia repair. A paraesophageal hernia untreated can lead to serious complications such as gastric volvulus, strangulation, obstruction, ischemia, or perforation. Thus, fundoplication surgery is recommended during routine paraesophageal hernia repairs.

Summary of Evidence

For individuals who have chronic gastroesophageal symptoms that are refractory to pharmacological therapy who receive laparoscopic esophagogastric fundoplication, the evidence includes RCTs and systematic reviews and meta-analyses. The available evidence supports that laparoscopic Toupet and Dor fundoplications appear to be as safe and effective as the laparoscopic Nissen fundoplication. The partial fundoplications offer better symptom control for dysphagia, flatulence, gas-bloating, and the inability to belch at least in the short term. Differences were no longer observed for these symptoms at 10+ years follow-up where the differences were no longer seen as statistically significant between partial fundoplications and the laparoscopic Nissen fundoplication procedure. (Strate et al, 2008, Shaw, et al, 2010, Broeders



et al 2013, Tian et al 2015, Du et al 2016, Du et al 2017, Analatos et al 2022, Li et al 2023). However, the laparoscopic Nissen fundoplication did demonstrate superior lower esophageal sphincter pressure even though this does appear to wane over time, and some studies report less use of antireflux medication postoperatively with a durability out to 5 years of follow-up versus the partial fundoplication procedures. (Watson et al 1999, Fibbe et al 2001, Baigrie et al 2005, Shaw et al 2010,) There is limited evidence that a 90-degree anterior partial fundoplication, a Lind partial fundoplication or a Hill repair has equivalent outcomes as the Nissen fundoplication or Toupet or Dor partial fundoplications (Watson et al 2004, Khan et al 2009, Aye et al 2012, Hopkins et al 2020) based on the few RCTs with small numbers of participants, short-term follow-up, and in some instances large loss to follow-up (20 to 40%) at one-year, which makes drawing conclusions from the limited evidence for the effects of these procedures on health outcomes difficult. Further, high-quality, well-designed trials are needed to evaluate and compare these procedures to the standard of care.

Ongoing and Unpublished Clinical Trials

Some currently going ongoing trials that might influence this policy are listed in [Table 1](#).

Table 1. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT00260572	Outcomes After Medical and Surgical Treatment of Gastroesophageal Reflux Disease	2500	Dec 2050

TNCT: National Clinical Trial.

Practice Guidelines and Position Statements

The purpose of the following information is to provide reference material. Inclusion does not imply endorsement or alignment with the policy conclusions.



American College of Gastroenterology

In 2022, the ACG made the following applicable recommendations on the management of GERD⁴¹:

- "We do not recommend the use of a barium swallow solely as a diagnostic test for GERD (Conditional recommendation, low level of evidence)."
- "In patients for whom the diagnosis of GERD is suspected but not clear, and endoscopy shows no objective evidence of GERD, we recommend reflux monitoring be performed off therapy to establish the diagnosis. (Strong recommendation, low level of evidence)."
- "We recommend against performing reflux monitoring off therapy solely as a diagnostic test for GERD in patients known to have endoscopic evidence of Los Angeles grade C or D reflux esophagitis, or in patients with long-segment Barrett's esophagus. (Strong recommendation, low level of evidence)."
- "We do not recommend high resolution manometry (HRM) solely as a diagnostic test for GERD."
- "We recommend maintenance PPI therapy indefinitely or antireflux surgery for patients with Los Angeles grade C or D esophagitis. (Strong recommendation, moderate level of evidence)."
- "We recommend optimization of PPI therapy as the first step in management of refractory GERD. (Strong recommendation, moderate level of evidence)."
- "We suggest esophageal pH monitoring (Bravo, catheter-based, or combined impedance-pH monitoring) performed OFF PPIs if the diagnosis of GERD has not been established by a prior pH monitoring study or an endoscopy showing long-segment Barrett's esophagus or severe reflux esophagitis (Los Angeles grade C or D). (Conditional recommendation, low level of evidence)."
- "We suggest esophageal impedance pH monitoring performed ON PPIs for patients with an established diagnosis of GERD whose symptoms have not responded adequately to twice-daily PPI therapy. (Conditional recommendation, low level of evidence)."
- "For patients who have regurgitation as their primary PPI-refractory symptom and who have had abnormal gastroesophageal reflux documented by objective testing, we suggest consideration of anti-reflux surgery or TIF. (Conditional recommendation, low level of evidence)."

- "We recommend antireflux surgery performed by an experienced surgeon as an option for long-term treatment of patients with objective evidence of GERD, especially those who have severe reflux esophagitis (LA grades C or D), large hiatal hernias, and/or persistent, troublesome GERD symptoms. (Strong recommendation, moderate level of evidence)."

American Gastroenterological Association

In 2008, the AGA Medical Position Statement on the management of GERD made the following applicable recommendations³⁸:

- "Antisecretory drugs for the treatment of patients with esophageal GERD syndromes (healing esophagitis and symptomatic relief). In these uses, proton pump inhibitors (PPIs) are more effective than histamine2 receptor antagonists (H2RAs), which are more effective than placebo. (Grade A: strongly recommended based on good evidence that it improves important health outcomes)."
- "Endoscopy to evaluate patients with a suspected esophageal GERD syndrome who have not responded to an empirical trial of twice-daily PPI therapy. Biopsies should target any area of suspected metaplasia, dysplasia, or malignancy. Manometry to evaluate patients with suspected esophageal GERD syndrome who have not responded to an empirical trial of twice-daily PPI therapy and have normal findings on endoscopy. Manometry will serve to localize the lower esophageal sphincter for potential subsequent pH monitoring, to evaluate peristaltic function preoperatively, and to diagnose subtle presentations of the major motor disorders. Evolving information suggests that high-resolution manometry has superior sensitivity to conventional manometry in recognizing atypical cases of achalasia and distal esophageal spasm. Ambulatory impedance-pH, catheter pH, or wireless pH monitoring (PPI therapy withheld for 7 days) to evaluate patients with suspected esophageal GERD syndrome who have not responded to an empirical trial of PPI therapy, have normal findings on endoscopy, and have no major abnormality on manometry. Wireless pH monitoring has superior sensitivity to catheter studies for detecting pathological esophageal acid exposure because of the extended period of recording (48 hours) and has also shown superior recording accuracy compared with some catheter designs. (Grade B: recommended with fair evidence that it improves important health outcomes)."
- "When antireflux surgery and PPI therapy are judged to offer similar efficacy in a patient with an esophageal GERD syndrome, PPI therapy should be recommended as initial therapy because of superior safety. When a patient with an esophageal GERD syndrome is responsive to, but intolerant of, acid suppressive therapy, antireflux surgery should be

recommended as an alternative. (Grade A: strongly recommended based on good evidence that it improves important health outcomes)."

National Institute for Health and Care Excellence

In 2014 NICE published Clinical guideline (CG184) Gastro-oesophageal reflux disease and dyspepsia in adults: investigation and management³⁹ and made the following applicable recommendations: Consider laparoscopic fundoplication for people who have:

"a confirmed diagnosis of acid reflux and adequate symptom control with acid suppression therapy, but who do not wish to continue with this therapy long term."

"a confirmed diagnosis of acid reflux and symptoms that are responding to a PPI, but who cannot tolerate acid suppression therapy."

Society of American Gastrointestinal and Endoscopic Surgeons

In 2021, the SAGES made the following applicable recommendations for the treatment of adults with GERD⁴⁰:

- The panel suggests "managing adult patients with confirmed chronic or chronic refractory gastroesophageal reflux with surgical fundoplication rather than continued medical treatment (conditional recommendation based on very low certainty in the evidence of effects)."
- The panel suggests that "adult patients with GERD who are candidates for surgery be treated with either partial or complete fundoplication based on patient values (conditional recommendations based on low certainty in the evidence of effects)."
 - "For patients who value improvement in reflux symptoms over the risk of dysphagia, complete fundoplication may be the preferred option."
 - "For patients who value the minimization of dysphagia highly, partial fundoplication may be offered preferentially."

In 2024, the SAGES made the following applicable recommendations for the surgical treatment of hiatal hernias⁴³:

- "There was no evidence identified in the literature of truly asymptomatic patients being managed operatively or with surveillance."

- The panel suggests “patients undergoing repair of a type II, III or IV hiatal hernia may benefit from surgical fundoplication compared to no fundoplication (conditional recommendation, low certainty evidence).”

Society of American Gastrointestinal and Endoscopic Surgery (SAGES), American Society for Gastrointestinal Endoscopy (ASGE), American Society for Metabolic and Bariatric Surgery (ASMBS), European Association for Endoscopic Surgery (EAES), Society for Surgery of the Alimentary Tract (SSAT), and The Society of Thoracic Surgeons (STS).

In 2023, the above societies convened for a multi-society consensus conference and created a guideline on the treatment of gastroesophageal reflux disease. The panel members made the following applicable recommendations⁴²:

- The panel suggests “esophagogastroduodenoscopy (EGD), manometry, and pH testing for all patients with esophageal symptoms of medically refractory reflux undergoing preoperative evaluation; however, patients with Los Angeles (LA) grade C or D erosive esophagitis on endoscopy may not require pH testing to confirm the diagnosis of GERD. (Expert Opinion; GRADE: Recommendation was unable to be determined due to lack of evidence)”
- The panel suggests that “adult patients with GERD may benefit from partial fundoplication compared to complete fundoplication. (Conditional recommendation based on moderate certainty of evidence) (Conditional recommendation based on moderate certainty of evidence).”
- The panel suggests that “adult patients with GERD and preoperative dysmotility may benefit from partial over complete fundoplication. (Conditional recommendation based on low certainty of evidence).”
- The panel suggests that “patients with medically refractory GERD and a BMI > 35 may benefit from either Roux-en-Y gastric bypass or fundoplication. (Conditional recommendation based on very low certainty of evidence).”
- The panel suggests that “adult patients with obesity and medically refractory GERD, who have failed previous fundoplication, may benefit from either RYGB or redo fundoplication based on surgeon and patient shared decision making. (Conditional recommendation based on very low certainty of evidence).”

Medicare National Coverage

There is no national coverage determination.

Regulatory Status

Laparoscopic Nissen fundoplication is a procedure and, therefore, not subject to FDA regulation.

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History



Date	Comments
11/01/25	New policy, approved October 14, 2025, effective for dates of service on or after February 6, 2026, following 90-day provider notification. Add to Surgical section. Laparoscopic esophagogastric fundoplication may be considered medically necessary when criteria are met.

Disclaimer: This medical policy is a guide in evaluating the medical necessity of a particular service or treatment. The Company adopts policies after careful review of published peer-reviewed scientific literature, national guidelines and local standards of practice. Since medical technology is constantly changing, the Company reserves the right to review and update policies as appropriate. Member contracts differ in their benefits. Always consult the member benefit booklet or contact a member service representative to determine coverage for a specific medical service or supply. CPT codes, descriptions and materials are copyrighted by the American Medical Association (AMA). ©2025 Premera All Rights Reserved.

Scope: Medical policies are systematically developed guidelines that serve as a resource for Company staff when determining coverage for specific medical procedures, drugs or devices. Coverage for medical services is subject to the limits and conditions of the member benefit plan. Members and their providers should consult the member benefit booklet or contact a customer service representative to determine whether there are any benefit limitations applicable to this service or supply. This medical policy does not apply to Medicare Advantage.

