MEDICAL POLICY

POLICY TITLE	**CONFOCAL LASER ENDOMICROSCOPY**
POLICY NUMBER	**MP 2.093**

CLINICAL BENEFIT	☒ MINIMIZE SAFETY RISK OR CONCERN. ☒ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ☐ ASSURE APPROPRIATE LEVEL OF CARE. ☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ☐ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. ☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE.
Effective Date:	**2/1/2026**

POLICY

Use of confocal laser endomicroscopy is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-Reference:

MP 1.118 Endoscopic Radiofrequency Ablation or Cryoablation for Barrett's Esophagus

PRODUCT VARIATIONS

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations. Please see additional information below.

FEP PPO: Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at: https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies

DESCRIPTION/BACKGROUND

Confocal laser endomicroscopy (CLE), also known as confocal fluorescent endomicroscopy and optical endomicroscopy, allows in vivo microscopic imaging of the mucosal epithelium during endoscopy. The process uses light from a low-power laser to illuminate tissue and, subsequently, the same lens detects light reflected from the tissue through a pinhole. The term confocal refers to having both illumination and collection systems in the same focal plane. Light reflected and scattered at other geometric angles that is not reflected through the pinhole is excluded from detection, which dramatically increases the special resolution of CLE images.

To date, 2 CLE systems have been cleared by the U.S. Food and Drug Administration. One is an endoscope-based system in which a confocal probe is incorporated onto the tip of a conventional endoscope. The other is a probe-based system; the probe is placed through the biopsy channel of a conventional endoscope. The depth of view is up to 250 μm with the endoscopic system and about 120 μm with the probe-based system. A limited area can be examined; no more than 700 μm in the endoscopic-based system and less with the probe-based system. As pointed out in systemic reviews, the limited viewing area emphasizes the

need for careful conventional endoscopy to target the areas for evaluation. Both CLE systems are optimized using a contrast agent. The most widely used agent is intravenous fluorescein, which is FDA-approved for ophthalmologic imaging of blood vessels when used with a laser scanning ophthalmoscope.

Unlike techniques such as chromoendoscopy which are primarily intended to improve the sensitivity of colonoscopy, CLE is unique in that it is designed to immediately characterize the cellular structure of lesions. CLE can thus potentially be used to make a diagnosis of polyp histology, particularly in association with screening or surveillance colonoscopy, which could allow for small hyperplastic lesions to be left in place rather than removed and sent for histologic evaluation. Using CLE would reduce risks associated with biopsy and reduce the number of biopsies and histologic evaluations.

Another potential application of CLE technology is targeting areas for biopsy in individuals with Barrett esophagus (BE) undergoing surveillance endoscopy. CLE would be proposed as an alternative to the current standard approach, recommended by the American Gastroenterological Association, which is that individuals with Barrett esophagus who do not have dysplasia undergo endoscopic surveillance every 3 to 5 years AGA has further recommended that random 4-quadrant biopsies every 2 cm be taken with white-light endoscopy in individuals without known dysplasia.

Other potential uses of CLE under investigation include better diagnosis and differentiation of conditions such as gastric metaplasia, lung cancer, and bladder cancer.

As noted, limitations of CLE systems include a limited viewing area and depth of view. Another issue is standardization of systems for classifying lesions viewed with CLE devices. Although there is not currently an internationally accepted classification system for colorectal lesions, 2 systems have been developed that have been used in a number of studies conducted in different countries. These are the Mainz criteria for endoscopy-based CLE devices and the Miami classification system for probe-based CLE devices. Lesion classification systems are less developed for non–gastrointestinal lesions viewed by CLE devices, e.g., those in the lung or bladder. Another challenge is the learning curve for obtaining high-quality images and classifying lesions. Several recent studies, however, have found that the ability to acquire high-quality images and interpret them accurately can be learned relatively quickly; these studies were specific to colorectal applications of CLE.

Regulatory Status

Two CLE devices have been cleared for marketing by the FDA through the 510(k) process.

Cellvizio® (Mauna Kea Technologies) is a confocal microscopy device with a fiber optic probe (i.e., a probe-based CLE system). The device consists of a laser scanning unit, proprietary software, a flat-panel display, and miniaturized fiber optic probes. The F-600 system, cleared by the FDA in 2006, can be used with any standard endoscope with a working channel of at least 2.8 mm. According to the FDA, the device is intended for imaging the internal microstructure of tissues in the anatomic tract (gastrointestinal or respiratory) that are accessed by an endoscope. The 100 series version of the system (F400-v2) was cleared by the FDA in 2015 for imaging the internal microstructure of tissues and for visualization of body cavities, organs, and

canals during endoscopic and laparoscopic surgery, and has been approved for use with several miniprobes for specific indications. Confocal Miniprobes™ approved for use with the Cellvizio 100 series that are particularly relevant to this review include the GastroFlex™ and ColoFlex™ (for imaging of anatomical tracts, ie, gastrointestinal systems, accessed by an endoscope or endoscopic accessories), and the CranioFlex™ (for visualization within the central nervous system during cranial diagnostic and therapeutic procedures such as tumor biopsy and resection). In 2020, the Cellvizio 100 series system received extended FDA approval to allow for use of fluorescein sodium as a contrast agent for visualization of blood flow for all of its approved indications. Later in 2020, the Cellvizio I.V.E. system with Confocal Miniprobes was approved by the FDA as a newer version of the previously approved 100 series system, designed to reduce the system footprint and improve device usability. The 2 devices are otherwise equivalent and are approved for the same indications. In 2022, the Cellvizio 100 series system F800 model received extended FDA approval to allow for use of indocyanine green (ICG) and pafolacianine as contrast agents. Intravenous administration of ICG is used to perform fluorescence angiography and interstitial administration of ICG is used to perform fluorescence imaging and visualization of the lymphatic system. Intravenous administration of pafolacianine is used to perform fluorescence imaging of tissues. FDA product codes: GCJ, GWG, OWN.

Confocal Video Colonoscope (Pentax Medical) is an endoscopy-based CLE system. The EC-38 70 CILK system, cleared by the FDA in 2004, is used with a Pentax Video Processor and with a Pentax Confocal Laser System. According to the FDA, the device is intended to provide optical and microscopic visualization of and therapeutic access to the lower gastrointestinal tract. FDA product code: GCJ/FDF (endoscope and accessories). This device is no longer commercially available from the manufacturer.

RATIONALE

SUMMARY OF EVIDENCE

For individuals who have suspected or known colorectal lesions who receive confocal laser endomicroscopy (CLE) as an adjunct to colonoscopy, the evidence includes multiple diagnostic accuracy studies. Relevant outcomes are overall survival (OS), disease-specific survival, test validity, and resource utilization. In 3 published systematic reviews, pooled estimates of the overall sensitivity of CLE ranged from 81% to 94%, and pooled estimates of the specificity ranged from 88% to 95%. It is uncertain whether the accuracy is sufficiently high to replace biopsy/polypectomy and histopathologic analysis. Moreover, issues remain concerning the use of this technology in clinical practice (e.g., the learning curve, interpretation of lesions). The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have Barrett esophagus (BE) who are undergoing surveillance and receive CLE with targeted biopsy, the evidence includes several randomized-controlled trials (RCTs) and meta-analyses. Relevant outcomes are OS, disease-specific survival, test validity, and resource utilization. Evidence from RCTs has suggested that CLE has similar or higher sensitivity than standard endoscopy for identifying areas of dysplasia. However, a 2014 meta-

analysis found that the pooled sensitivity, specificity, and negative predictive value (NPV) of available studies were not sufficiently high to replace the standard surveillance protocol. In a 2022 meta-analysis, the absolute increase in neoplasia detection using CLE compared with the Seattle protocol randomized biopsies was 5%. Additionally, dysplasia prevalence was 4% with Seattle protocol randomized biopsies and 9% with CLE. National guidelines continue to recommend 4-quadrant random biopsies for patients with BE undergoing surveillance. One RCT, which compared high-definition white-light endoscopy with high-definition white-light endoscopy plus CLE, was stopped early because an interim analysis did not find a between-group difference in outcomes. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have gastrointestinal lesions and have had endoscopic treatment who receive CLE to assess the adequacy of endoscopic treatment, the evidence includes a systematic review that includes a single RCT and 2 prospective, nonrandomized studies. Relevant outcomes are OS, disease-specific survival, test validity, and resource utilization. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have a suspicion of a condition diagnosed by identification and biopsy of lesions (e.g., lung, bladder, or gastric cancer) who receive CLE, the evidence mainly consists of a small number of diagnostic accuracy studies. Relevant outcomes are OS, disease-specific survival, test validity, and resource utilization. There is limited evidence on the diagnostic accuracy of CLE for these other indications. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

DEFINITIONS

NA

DISCLAIMER

Capital Blue Cross' medical policies are used to determine coverage for specific medical technologies, procedures, equipment, and services. These medical policies do not constitute medical advice and are subject to change as required by law or applicable clinical evidence from independent treatment guidelines. Treating providers are solely responsible for medical advice and treatment of members. These polices are not a guarantee of coverage or payment. Payment of claims is subject to a determination regarding the member's benefit program and eligibility on the date of service, and a determination that the services are medically necessary and appropriate. Final processing of a claim is based upon the terms of contract that applies to the members' benefit program, including benefit limitations and exclusions. If a provider or a member has a question concerning this medical policy, please contact Capital Blue Cross' Provider Services or Member Services.

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CODING INFORMATION

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational, therefore not covered:

Procedure Codes								
0397T	43206	43252	88375					

REFERENCES

1. *Spechler SJ, Sharma P, Souza RF, et al. American Gastroenterological Association medical position statement on the management of Barrett's esophagus. Gastroenterology. Mar 2011; 140(3): 1084-91. PMID 21376940*
2. *Salvatori F, Siciliano S, Maione F, et al. Confocal Laser Endomicroscopy in the Study of Colonic Mucosa in IBD Patients: A Review. Gastroenterol Res Pract. 2012; 2012: 525098. PMID 22474440*
3. *Neumann H, Vieth M, Atreya R, et al. Prospective evaluation of the learning curve of confocal laser endomicroscopy in patients with IBD. Histol Histopathol. Jul 2011; 26(7): 867-72. PMID 21630216*
4. *Buchner AM, Gomez V, Heckman MG, et al. The learning curve of in vivo probe-based confocal laser endomicroscopy for prediction of colorectal neoplasia. Gastrointest Endosc. Mar 2011; 73(3): 556-60. PMID 21353852*
5. *Su P, Liu Y, Lin S, et al. Efficacy of confocal laser endomicroscopy for discriminating colorectal neoplasms from non-neoplasms: a systematic review and meta-analysis. Colorectal Dis. Jan 2013; 15(1): e1-12. PMID 23006609*
6. *Dong YY, Li YQ, Yu YB, et al. Meta-analysis of confocal laser endomicroscopy for the detection of colorectal neoplasia. Colorectal Dis. Sep 2013; 15(9): e488-95. PMID 23810105*
7. *Wanders LK, East JE, Uitentuis SE, et al. Diagnostic performance of narrowed spectrum endoscopy, autofluorescence imaging, and confocal laser endomicroscopy for optical diagnosis of colonic polyps: a meta-analysis. Lancet Oncol. Dec 2013; 14(13): 1337-47. PMID 24239209*
8. *Xie XJ, Li CQ, Zuo XL, et al. Differentiation of colonic polyps by confocal laser endomicroscopy. Endoscopy. Feb 2011; 43(2): 87-93. PMID 21038291*
9. *Buchner AM, Shahid MW, Heckman MG, et al. Comparison of probe-based confocal laser endomicroscopy with virtual chromoendoscopy for classification of colon polyps. Gastroenterology. Mar 2010; 138(3): 834-42. PMID 19909747*
10. *Shahid MW, Buchner AM, Raimondo M, et al. Accuracy of real-time vs. blinded offline diagnosis of neoplastic colorectal polyps using probe-based confocal laser endomicroscopy: a pilot study. Endoscopy. Apr 2012; 44(4): 343-8. PMID 22382851*

11. *Hlavaty T, Huorka M, Koller T, et al. Colorectal cancer screening in patients with ulcerative and Crohn's colitis with use of colonoscopy, chromoendoscopy and confocal endomicroscopy. Eur J Gastroenterol Hepatol. Aug 2011; 23(8): 680-9. PMID 21602687*
12. *Qumseya B, Sultan S, Bain P, et al. ASGE guideline on screening and surveillance of Barrett's esophagus. Gastrointest Endosc. Sep 2019; 90(3): 335-359.e2. PMID 31439127*
13. *Chauhan SS, Dayyeh BK, Bhat YM, et al. Confocal laser endomicroscopy. Gastrointest Endosc. Dec 2014; 80(6): 928-38. PMID 25442092*
14. *DeMeester S, Wang K, Ayub K, et al. High-definition probe-based confocal laser endomicroscopy review and meta-analysis for neoplasia detection in Barrett's esophagus. Techniques and Innovations in Gastrointestinal Endoscopy. 2022;24(4):340-350.*
15. *Xiong YQ, Ma SJ, Zhou JH, et al. A meta-analysis of confocal laser endomicroscopy for the detection of neoplasia in patients with Barrett's esophagus. J Gastroenterol Hepatol. Jun 2016; 31(6): 1102-10. PMID 26676646*
16. *Gupta A, Attar BM, Koduru P, et al. Utility of confocal laser endomicroscopy in identifying high-grade dysplasia and adenocarcinoma in Barrett's esophagus: a systematic review and meta-analysis. Eur J Gastroenterol Hepatol. Apr 2014; 26(4): 369-77. PMID 24535597*
17. *Vithayathil M, Modolell I, Ortiz-Fernandez-Sordo J, et al. Image-Enhanced Endoscopy and Molecular Biomarkers Vs Seattle Protocol to Diagnose Dysplasia in Barrett's Esophagus. Clin Gastroenterol Hepatol. Nov 2022; 20(11): 2514-2523.e3. PMID 35183768*
18. *Ypsilantis E, Pissas D, Papagrigoriadis S, et al. Use of confocal laser endomicroscopy to assess the adequacy of endoscopic treatment of gastrointestinal neoplasia: a systematic review and meta-analysis. Surg Laparosc Endosc Percutan Tech. Feb 2015; 25(1): 1-5. PMID 24910941*
19. *Wallace MB, Crook JE, Saunders M, et al. Multicenter, randomized, controlled trial of confocal laser endomicroscopy assessment of residual metaplasia after mucosal ablation or resection of GI neoplasia in Barrett's esophagus. Gastrointest Endosc. Sep 2012; 76(3): 539-47.e1. PMID 22749368*
20. *Canto MI, Anandasabapathy S, Brugge W, et al. In vivo endomicroscopy improves detection of Barrett's esophagus-related neoplasia: a multicenter international randomized controlled trial (with video). Gastrointest Endosc. Feb 2014; 79(2): 211-21. PMID 24219822*
21. *Sharma P, Meining AR, Coron E, et al. Real-time increased detection of neoplastic tissue in Barrett's esophagus with probe-based confocal laser endomicroscopy: final results of an international multicenter, prospective, randomized, controlled trial. Gastrointest Endosc. Sep 2011; 74(3): 465-72. PMID 21741642*
22. *Dunbar KB, Okolo P, Montgomery E, et al. Confocal laser endomicroscopy in Barrett's esophagus and endoscopically inapparent Barrett's neoplasia: a prospective, randomized, double-blind, controlled, crossover trial. Gastrointest Endosc. Oct 2009; 70(4): 645-54. PMID 19559419*

23. *Richardson C, Colavita P, Dunst C, et al. Real-time diagnosis of Barrett's esophagus: a prospective, multicenter study comparing confocal laser endomicroscopy with conventional histology for the identification of intestinal metaplasia in new users. Surg Endosc. May 2019; 33(5): 1585-1591. PMID 30203202*
24. *Sorokina A, Danilevskaya O, Averyanov A, et al. Comparative study of ex vivo probe-based confocal laser endomicroscopy and light microscopy in lung cancer diagnostics. Respirology. Aug 2014; 19(6): 907-13. PMID 24909555*
25. *Wellikoff AS, Holladay RC, Downie GH, et al. Comparison of in vivo probe-based confocal laser endomicroscopy with histopathology in lung cancer: A move toward optical biopsy. Respirology. Aug 2015; 20(6): 967-74. PMID 26094505*
26. *Fuchs FS, Zirlik S, Hildner K, et al. Confocal laser endomicroscopy for diagnosing lung cancer in vivo. Eur Respir J. Jun 2013; 41(6): 1401-8. PMID 22997220*
27. *Wu J, Wang YC, Luo WJ, et al. Diagnostic Performance of Confocal Laser Endomicroscopy for the Detection of Bladder Cancer: Systematic Review and Meta-Analysis. Urol Int. 2020; 104(7-8): 523-532. PMID 32554957*
28. *Beji S, Wrist Lam G, Østergren PB, et al. Diagnostic value of probe-based confocal laser endomicroscopy versus conventional endoscopic biopsies of non-muscle invasive bladder tumors: a pilot study. Scand J Urol. Feb 2021; 55(1): 36-40. PMID 33153363*
29. *Liem EIML, Freund JE, Savci-Heijink CD, et al. Validation of Confocal Laser Endomicroscopy Features of Bladder Cancer: The Next Step Towards Real-time Histologic Grading. Eur Urol Focus. Jan 15 2020; 6(1): 81-87. PMID 30033066*
30. *Nathan CA, Kaskas NM, Ma X, et al. Confocal Laser Endomicroscopy in the Detection of Head and Neck Precancerous Lesions. Otolaryngol Head Neck Surg. Jul 2014; 151(1): 73-80. PMID 24699456*
31. *Moore C, Mehta V, Ma X, et al. Interobserver agreement of confocal laser endomicroscopy for detection of head and neck neoplasia. Laryngoscope. Mar 2016; 126(3): 632-7. PMID 26372409*
32. *Dittberner A, Ziadat R, Hoffmann F, et al. Fluorescein-Guided Panendoscopy for Head and Neck Cancer Using Handheld Probe-Based Confocal Laser Endomicroscopy: A Pilot Study. Front Oncol. 2021; 11: 671880. PMID 34195078*
33. *Liu J, Li M, Li Z, et al. Learning curve and interobserver agreement of confocal laser endomicroscopy for detecting precancerous or early-stage esophageal squamous cancer. PLoS One. 2014; 9(6): e99089. PMID 24897112*
34. *Guo J, Li CQ, Li M, et al. Diagnostic value of probe-based confocal laser endomicroscopy and high-definition virtual chromoendoscopy in early esophageal squamous neoplasia. Gastrointest Endosc. 2015; 81(6): 1346-54. PMID 25680899*
35. *Liu T, Zheng H, Gong W, et al. The accuracy of confocal laser endomicroscopy, narrow band imaging, and chromoendoscopy for the detection of atrophic gastritis. J Clin Gastroenterol. 2015; 49(5): 379-86. PMID 25485568*
36. *Park CH, Kim H, Jo JH, et al. Role of probe-based confocal laser endomicroscopy-targeted biopsy in the molecular and histopathological study of gastric cancer. J Gastroenterol Hepatol. Jan 2019; 34(1): 84-91. PMID 30221400*

37. *He XK, Liu D, Sun LM. Diagnostic performance of confocal laser endomicroscopy for optical diagnosis of gastric intestinal metaplasia: a meta-analysis. BMC Gastroenterol. Sep 05 2016; 16(1): 109. PMID 27596838*
38. *Qian W, Bai T, Wang H, et al. Meta-analysis of confocal laser endomicroscopy for the diagnosis of gastric neoplasia and adenocarcinoma. J Dig Dis. Jun 2016; 17(6): 366-76. PMID 27129127*
39. *Schueler SA, Gamble LA, Curtin BF, et al. Evaluation of confocal laser endomicroscopy for detection of occult gastric carcinoma in CDH1 variant carriers. J Gastrointest Oncol. Apr 2021; 12(2): 216-225. PMID 34012620*
40. *Kollar M, Krajciova J, Prefertusova L, et al. Probe-based confocal laser endomicroscopy versus biopsies in the diagnostics of oesophageal and gastric lesions: A prospective, pathologist-blinded study. United European Gastroenterol J. May 2020; 8(4): 436-443. PMID 32213027*
41. *Canakis A, Deliwala SS, Kadiyala J, et al. The diagnostic performance of probe-based confocal laser endomicroscopy in the detection of gastric cancer: a systematic review and meta-analysis. Ann Gastroenterol. 2022; 35(5): 496-502. PMID 36061161*
42. *Facciorusso A, Buccino VR, Sacco R. Needle-based confocal laser endomicroscopy in pancreatic cysts: a meta-analysis. Eur J Gastroenterol Hepatol. Sep 2020; 32(9): 1084-1090. PMID 32282543*
43. *Krishna SG, Hart PA, Malli A, et al. Endoscopic Ultrasound-Guided Confocal Laser Endomicroscopy Increases Accuracy of Differentiation of Pancreatic Cystic Lesions. Clin Gastroenterol Hepatol. Feb 2020; 18(2): 432-440.e6. PMID 31220640*
44. *Hao S, Ding W, Jin Y, et al. Appraisal of EUS-guided needle-based confocal laser endomicroscopy in the diagnosis of pancreatic lesions: A single Chinese center experience. Endosc Ultrasound. 2020; 9(3): 180-186. PMID 32584313*
45. *Nakaoka K, Hashimoto S, Kawabe N, et al. Probe-based confocal laser endomicroscopy for the diagnosis of pancreatic ductal structures. J Gastroenterol Hepatol. Jan 2021; 36(1): 118-124. PMID 32433791*
46. *Kovacevic B, Antonelli G, Klausen P, et al. EUS-guided biopsy versus confocal laser endomicroscopy in patients with pancreatic cystic lesions: A systematic review and meta-analysis. Endosc Ultrasound. 2021; 10(4): 270-279. PMID 34290168*
47. *Konjeti VR, McCarty TR, Rustagi T. Needle-based Confocal Laser Endomicroscopy (nCLE) for Evaluation of Pancreatic Cystic Lesions: A Systematic Review and Meta-analysis. J Clin Gastroenterol. Jan 01 2022; 56(1): 72-80. PMID 33252557*
48. *De Palma GD, Esposito D, Luglio G, et al. Confocal laser endomicroscopy in breast surgery: a pilot study. BMC Cancer. Apr 10 2015; 15: 252. PMID 25885686*
49. *Slivka A, Gan I, Jamidar P, et al. Validation of the diagnostic accuracy of probe-based confocal laser endomicroscopy for the characterization of indeterminate biliary strictures: results of a prospective multicenter international study. Gastrointest Endosc. Feb 2015; 81(2): 282-90. PMID 25616752*
50. *Martínek J, Kollár M, Krajčíová J, et al. Confocal laser endomicroscopy in diagnosing indeterminate biliary strictures and pancreatic lesions a prospective pilot study. Rozhl Chir. 2020; 99(6): 258-265. PMID 32736480*

51. *Han S, Kahaleh M, Sharaiha RZ, et al. Probe-based confocal laser endomicroscopy in the evaluation of dominant strictures in patients with primary sclerosing cholangitis: results of a U.S. multicenter prospective trial. Gastrointest Endosc. Sep 2021; 94(3): 569-576.e1. PMID 33798541*
52. *Mi J, Han X, Wang R, et al. Diagnostic accuracy of probe-based confocal laser endomicroscopy and tissue sampling by endoscopic retrograde cholangiopancreatography in indeterminate biliary strictures: a meta-analysis. Sci Rep. May 04 2022; 12(1): 7257. PMID 35508585*
53. *Wani S, Rubenstein JH, Vieth M, et al. Diagnosis and Management of Low-Grade Dysplasia in Barrett's Esophagus: Expert Review From the Clinical Practice Updates Committee of the American Gastroenterological Association. Gastroenterology. Nov 2016; 151(5): 822-835. PMID 27702561*
54. *Muthusamy VR, Wani S, Gyawali CP, et al. AGA Clinical Practice Update on New Technology and Innovation for Surveillance and Screening in Barrett's Esophagus: Expert Review. Clin Gastroenterol Hepatol. Dec 2022; 20(12): 2696-2706.e1. PMID 35788412*
55. *Hirota WK, Zuckerman MJ, Adler DG, et al. ASGE guideline: the role of endoscopy in the surveillance of premalignant conditions of the upper GI tract. Gastrointest Endosc. Apr 2006; 63(4): 570-80. PMID 16564854*
56. *Evans JA, Early DS, Fukami N, et al. The role of endoscopy in Barrett's esophagus and other premalignant conditions of the esophagus. Gastrointest Endosc. Dec 2012; 76(6): 1087-94. PMID 23164510*
57. *Chandrasekhara V, Chathadi KV, Acosta RD, et al. The role of endoscopy in benign pancreatic disease. Gastrointest Endosc. Aug 2015; 82(2): 203-14. PMID 26077456*
58. *Muthusamy VR, Chandrasekhara V, Acosta RD, et al. The role of endoscopy in the diagnosis and treatment of cystic pancreatic neoplasms. Gastrointest Endosc. Jul 2016; 8(1): 1-9. PMID 27206409*
59. *Davidson KW, Barry MJ, Mangione CM, et al. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. JAMA. May 18 2021; 325(19): 1965-1977. PMID 34003218*

POLICY HISTORY

MP 2.093	**02/28/2020 Consensus Review.** No change to policy statement.
	11/23/2020 Consensus Review. No change to policy statement. References updated.
	10/29/2021 Consensus Review. FEP, background, and references updated. No changes to coding.
	11/17/2022 Consensus Review. No change to policy statement. Updated coding table and references.

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	12/20/2023 Consensus Review. No change to policy statement. Coding reviewed; references and rationale updated.
	11/18/2024 Consensus Review. No changes to policy statement. Coding reviewed; references updated.
	09/02/2025 Consensus Review. No changes to policy statement. Background and references updated. Coding reviewed.