

**ENDOSCOPIC SUBMUCOSAL DISSECTION (ESD)**

Effective Date: June 1, 2024

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5/23, 5/24

Date Of Origin: May 11, 2016

Status: Current

**Summary of Changes**

- Clarification:
  - For esophagus region
    - Changed Barrett's esophagus with high grade dysplasia with a visible lesion greater than or equal to 15 mm to greater than 15 mm
  - For esophagus & gastric region
    - Changed from submucosal masses greater than or equal to 20 mm to greater than 20 mm
  - For duodenal & colorectal region
    - Changed from polyps greater than or equal to 20 mm to greater than 20 mm

**I. POLICY/CRITERIA**

Endoscopic submucosal dissection (ESD) for gastrointestinal lesions may be medically necessary when all of the following are met:

1. Lesion is deemed appropriate for ESD by one of the following:
  - a. Endoscopic ultrasound (EUS), OR
  - b. High magnification chromoendoscopy
2. **One** of the following clinical indications at any gastroenterological region of origin:
  - a. Esophagus Region (must meet one of the following)
    1. Barrett's esophagus with high grade dysplasia with a visible lesion >15 mm
    2. Early esophageal cancers by EUS with a negative PET scan
    3. Submucosal masses >20 mm
    4. Esophageal polyps unable to be removed by snare techniques
    5. Recurrent high-grade dysplasia or early cancer
  - b. Gastric Region (must meet one of the following)
    1. High grade dysplasia in non-pedunculated polyps  $\geq$ 20 mm
    2. Early gastric cancer by EUS with negative PET scan
    3. Submucosal masses >20 mm
    4. Gastric polyps unable to be removed by snare techniques

5. Recurrent high-grade dysplasia or early cancer
- c. Duodenal Region (must meet one of the following)
  1. High grade dysplasia polyps >20 mm
  2. Early duodenal cancer by EUS and negative PET scan
  3. Duodenal polyps unable to remove by snare techniques
  4. Recurrent high-grade dysplasia or early cancer
- d. Colorectal Region (must meet one of the following)
  1. Flat large polyps >20 mm
  2. Early colon or rectal cancer by EUS or high magnification chromoendoscopy
  3. Submucosal masses
  4. Recurrent polyps >20 mm
3. None of the following:
  - a. Patients with involvement of the submucosa (sm2 or beyond\*) as demonstrated by EUS or high magnification chromoendoscopy
  - b. Poorly differentiated cancers
  - c. Patients who are deemed to be unsuitable for sedation by anesthesia
  - d. Patients with obvious metastasis
4. Pre-ESD evaluation by gastrointestinal (GI) surgeon to discuss surgical options as alternative to ESD.

\*Non-pedunculated lesions with invasion of more than 1000  $\mu\text{m}$  and pedunculated lesions with stalk invasion were considered as submucosal deep invasive cancer (sm2–3)

## **II. MEDICAL NECESSITY REVIEW**

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the [Priority Health Provider Manual](#).

## **III. APPLICATION TO PRODUCTS**

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- ❖ **HMO/EPO:** *This policy applies to insured HMO/EPO plans.*
- ❖ **POS:** *This policy applies to insured POS plans.*

- ❖ **PPO:** *This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.*
- ❖ **ASO:** *For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.*
- ❖ **INDIVIDUAL:** *For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.*
- ❖ **MEDICARE:** *Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.*
- ❖ **MEDICAID/HEALTHY MICHIGAN PLAN:** *For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945\\_42542\\_42543\\_42546\\_42551-159815--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945_42542_42543_42546_42551-159815--,00.html). If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945\\_5100-87572--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945_5100-87572--,00.html), the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.*

#### IV. BACKGROUND

Developed in the mid-to-late 1990s, ESD is an endoscopic resection technique used to remove large and irregular tumors along the submucosal layer. ESD enables en-bloc removal of gastrointestinal lesions. The basic technique for the procedure is as follows: 1) Cautery is used to mark the perimeter of the lesion, 2) a lifting agent is injected into the submucosa around the perimeter of the lesion, 3) an electrosurgical knife is used to incise the mucosa and cut circumferentially around the lesion, 4) the submucosa beneath the lesion is injected and then the electrosurgical knife is used to dissect in a free-hand manner until the whole specimen has been completely resected, 5) a water jet and hemostatic forceps are used to wash and coagulate any bleeding that occurs during either the mucosal incision or submucosal dissection.

Although ESD was first described as a technique to treat early gastric neoplasia non-operatively, the technique and equipment have evolved over the past decades to expand indications to include locations throughout the gastrointestinal tract from the esophagus to the colon. The risk of malignant change increases with the histological grade of the dysplasia. Due to the discrepancies between Western and Japanese pathologic diagnosis of gastric lesions, several systems including the Japanese Society of Gastroenterological Society (JSGE), Padova, Vienna, and World Health Organization have been developed to standardize the classification of gastric dysplasia.

In highly trained hands, ESD results in higher en-bloc curative resection rates and detailed histopathological evaluation, with lower recurrence when compared to the current conventional therapy in the United States.

According to American Society for Gastrointestinal Endoscopy (2019), ESD is a technically demanding procedure that requires substantial training to achieve competence; inadequate training compromises both patient safety and technical outcomes. ESD poses significant risk when undertaken by an operator inadequately trained in ESD.

The American Society for Gastrointestinal Endoscopy (ASGE)'s 2023 clinical practice guideline addressed the role of ESD versus EMR and/or surgery for the management of early esophageal squamous cell carcinoma (ESCC), esophageal adenocarcinoma (EAC), and gastric adenocarcinoma (GAC) and their corresponding precursor lesions. For ESCC, the ASGE suggests ESD over EMR for patients with early-stage, well-differentiated, nonulcerated cancer >15 mm, whereas in patients with similar lesions >15 mm, the ASGE suggests either ESD or EMR. ASGE suggests against surgery for such patients with ESCC, whenever possible. For EAC, the ASGE suggests ESD over EMR for patients with early-stage well-differentiated, nonulcerated cancer >20 mm, whereas in patients with similar lesions measuring ≤ 20 mm, the ASGE suggests either ESD or EMR. For GAC, the ASGE suggests ESD over EMR for patients with early-stage, well or moderately differentiated, nonulcerated intestinal type cancer measuring 20 to 30 mm, whereas for patients with similar lesions <20 mm, the ASGE suggests either ESD or EMR. The ASGE suggests against surgery for patients with such lesions measuring ≤ 30 mm, whereas for lesions that are poorly differentiated, regardless of size; surgical evaluation is suggested over endoscopic approaches (ASGE, 2023).

## V. CODING INFORMATION

**ICD-10 Diagnoses** that *may* support:

C15.3 – C15.9	Malignant neoplasm of esophagus
C16.0 – C16.9	Malignant neoplasm of stomach
C17.0	Malignant neoplasm of duodenum
C18.0 – C18.9	Malignant neoplasm of colon
C19	Malignant neoplasm of rectosigmoid junction
C20	Malignant neoplasm of rectum
D00.1	Carcinoma in situ of esophagus
D00.2	Carcinoma in situ of stomach
D13.2	Benign neoplasm of duodenum
D48.7	Neoplasm of uncertain behavior of other specified sites
D49.0	Neoplasm of unspecified behavior of digestive system
K22.711	Barrett's esophagus with high grade dysplasia

K31.7 Polyp of stomach and duodenum  
K63.5 Polyp of colon

**CPT/HCPCS codes:**

C9779 Endoscopic submucosal dissection (ESD), including endoscopy or colonoscopy, mucosal closure, when performed (*billable by Facility only*)  
43499 Unlisted procedure, esophagus  
43999 Unlisted procedure, stomach  
44799 Unlisted procedure, small intestine  
45399 Unlisted procedure, colon  
45999 Unlisted procedure, rectum  
(*Explanatory notes must accompany claims billed with unlisted codes.*)

**VI. REFERENCES**

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