

Measure XXXX: Endoscopy/Barrett's esophagus surveillance: Systematic biopsies during surveillance esophagoscopy or esophagogastroduodenoscopy (EGD) in patients with Barrett's esophagus without dysplasia – Adequacy of surveillance

DESCRIPTION:

Percentage of patients aged 18 years and older with a diagnosis of Barrett's Esophagus without dysplasia who have 4-quadrant biopsies taken every 2cm of the entire BE length on surveillance esophagoscopy or esophagogastroduodenoscopy (EGD).

INSTRUCTIONS:

This measure is to be reported a minimum of **once per reporting period** for **all** patients with a diagnosis of Barrett's esophagus without dysplasia undergoing an esophagoscopy or EGD for Barrett's esophagus surveillance during the reporting period. This measure is intended to reflect the quality of services provided for patients with Barrett's esophagus. This measure may be reported by physicians or other qualified healthcare professionals who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

Measure Reporting via Registry:

ICD-10-CM diagnosis codes, CPT codes, and patient demographics are used to identify patients who are included in the measure's denominator. The listed numerator options are used to report the numerator of the measure.

The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR

All patients aged 18 years and older with a history of Barrett's esophagus without dysplasia receiving an esophagoscopy or EGD for Barrett's esophagus surveillance.

Denominator Instructions: Clinicians who indicate that the EGD procedure is incomplete or was discontinued should use modifier 52, 53, 73, or 74 (as appropriate) in addition to the procedure code. Patients who have a coded EGD procedure that has a modifier 52, 53, 73, or 74 will be excluded from the denominator.

Denominator Criteria (Eligible Cases):

Patients aged \geq 18 years on date of encounter

AND

Diagnosis of Barrett's esophagus without dysplasia (ICD-10-CM): K22.70

AND

Patient encounter during the reporting period (CPT): 43191, 43193, 43197, 43198, 43200, 43202, 43216, 43211, 43235, 43239, 43250, 43254

WITHOUT

Patient encounter during the reporting period (CPT): 43211, 43229, 43254, 43270

WITHOUT

CPT Category I Modifiers: 52, 53, 73 or 74

NUMERATOR:

Patients who had four quadrant biopsies taken at least every 2cm of the entire Barrett's esophagus length.

Numerator Options:

Performance Met: Four quadrant biopsies taken at least every 2cm of the entire Barrett's esophagus length, documented

OR

Medical Performance Exclusion: Documentation of medical reason(s) for obtaining less than four quadrant biopsies every 2cm of the entire Barrett's esophagus length (e.g. erosive esophagitis, coagulopathy, thrombocytopenia, esophageal varices, esophageal stricture, gastrointestinal bleeding, gastrointestinal perforation, patient instability, visible lesion within Barrett's segment suspicious for neoplasia, no Barrett's esophagus seen)

OR

Other Performance Exclusion: Documentation of the use of endoscopic image enhancement technology for in-vivo optical diagnosis of Barrett's esophagus histology (e.g. chromoendoscopy, optical endomicroscopy, etc.)

OR

Performance Not Met: obtained less than four quadrant biopsies every 2cm of the entire Barrett's esophagus length, reason not otherwise specified

Rationale:

Barrett's esophagus is the pre-malignant condition for esophageal adenocarcinoma.¹ Barrett's esophagus can progress in a step-wise fashion from Barrett's esophagus without dysplasia, to Barrett's esophagus with low grade dysplasia, to Barrett's esophagus with high grade dysplasia, and then to esophageal adenocarcinoma. Esophagoscopy or EGD with systematic biopsies involving taking 4 quadrant biopsies every 2cm of the entire Barrett's esophagus segment length can detect areas of dysplasia and early cancer. Lack of adherence to obtaining this number of systematic biopsies has been associated with a decreased rate of detecting dysplasia and/or early cancer.²

CLINICAL RECOMMENDATION STATEMENTS:

Published guidelines from the American College of Gastroenterology, American Gastroenterological Association, and American Society for Gastrointestinal Endoscopy all recommend endoscopic surveillance of patients with Barrett's esophagus.³⁻⁵ Endoscopic surveillance should be conducted using high-definition/high-resolution endoscopes.⁶ In patients with Barrett's esophagus without dysplasia, four-quadrant biopsies should be taken from areas of visible Barrett's mucosa at 2cm intervals of the entire Barrett's esophagus length.^{7, 8} Each individual biopsy does not need to be submitted to pathology in a unique specimen jar.

References:

1. Spechler SJ, Souza RF. Barrett's esophagus. N Engl J Med 2014;371:836-45.
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3. Shaheen NJ, Falk GW, Iyer PG, Gerson LB. ACG Clinical Guideline: Diagnosis and Management of Barrett's Esophagus. Am J Gastroenterol 2016;111:30-50; quiz 51.
4. Evans JA, Early DS, Fukami N, Ben-Menachem T, Chandrasekhara V, Chathadi KV, Decker GA, Fanelli RD, Fisher DA, Foley KQ, Hwang JH, Jain R, Jue TL, Khan KM, Lightdale J, Malpas PM, Maple JT, Pasha SF, Saltzman JR, Sharaf RN, Shergill A, Dornitz JA, Cash BD. The role of endoscopy in Barrett's esophagus and other premalignant conditions of the esophagus. Gastrointest Endosc 2012;76:1087-94.
5. Spechler SJ, Sharma P, Souza RF, Inadomi JM, Shaheen NJ. American Gastroenterological Association medical position statement on the management of Barrett's esophagus. Gastroenterology 2011;140:1084-91.

6. Sami SS, Subramanian V, Butt WM, Bejkar G, Coleman J, Mannath J, Rangunath K. High definition versus standard definition white light endoscopy for detecting dysplasia in patients with Barrett's esophagus. *Dis Esophagus* 2015;28:742-9.
7. Abela JE, Going JJ, Mackenzie JF, McKernan M, O'Mahoney S, Stuart RC. Systematic four-quadrant biopsy detects Barrett's dysplasia in more patients than nonsystematic biopsy. *Am J Gastroenterol* 2008;103:850-5.
8. Fitzgerald RC, Saeed IT, Khoo D, Farthing MJ, Burnham WR. Rigorous surveillance protocol increases detection of curable cancers associated with Barrett's esophagus. *Dig Dis Sci* 2001;46:1892-8.