

# Healthcare Cost of Over-Diagnosis of Low-Grade Dysplasia in Barrett's Esophagus

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## ABSTRACT

**Introduction:** Published reports have demonstrated that many Barrett's esophagus patients are over-diagnosed as low-grade dysplasia (BE-LGD). We performed an analysis of the surveillance and treatment costs associated with the over-diagnosis of BE-LGD.

**Methods:** As the principal cost variables, we used endoscopic and histologic procedures performed during the recommended surveillance intervals for patients with BE-LGD, the national average Medicare reimbursement for the Current Procedural Terminology codes of the procedures performed, and a spreadsheet-based tool we

created to determine the overall healthcare cost associated with the over-diagnosis of BE-LGD in the US population.

**Results:** The average excess cost (range) for every patient in the US who is over-diagnosed with BE-LGD is estimated to be \$5557 (\$3115 to \$8072). The principal contributors to the excess cost of over-diagnosis of BE-LGD in these patients are: endoscopy (\$2626 to \$4639), pathologist biopsy review (\$275 to \$2185), and esophagogastroduodenoscopy-guided endoscopic ablation (\$214 to \$1249).

**Conclusions:** The healthcare cost of over-diagnosis of BE-LGD is significant. To reduce the overall healthcare cost impact of over-diagnosis of BE-LGD, strict adherence to the recommendations of the American Gastroenterological Association, American College of Gastroenterology, and American Society for Gastrointestinal Endoscopy that pathology review of all BE biopsy specimens be performed by a gastrointestinal pathologist is warranted.

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