

The Cost of Care: Eosinophilic Esophagitis in the U.S.

Background

- Eosinophilic Esophagitis (EoE) is a chronic, immune-mediated inflammatory disease of the esophagus. Patients commonly experience dysphagia, food impaction, chest pain, and feeding difficulties, which often require repeated diagnostic and therapeutic procedures. Because EoE is a lifelong condition with no definitive cure, long-term management is typically necessary.
- The prevalence of EoE has increased in the U.S. over the past two decades. Management frequently includes proton pump inhibitors, swallowed topical corticosteroids, dietary elimination therapy, repeated endoscopies with biopsies, and, in some cases, esophageal dilation (Dellon & Hirano).
- Although the clinical features of EoE are well described, fewer studies have examined its economic impact. Existing estimates of cost vary widely due to differences in study design, data sources, and definitions of healthcare utilization. In addition, indirect costs such as lost productivity, caregiver burden, and dietary expenses are often not included, leading to underestimation of the true burden.
- Question:** How EoE contributes to the annual economic burden on patients and the healthcare system.

Methods

- A literature review was conducted summarize existing evidence on the economic burden of eosinophilic esophagitis. PubMed and Google Scholar were searched to identify peer-reviewed U.S. studies reporting healthcare costs or utilization related to EoE.
- Searches were limited to articles published between 2010-present to capture cost estimates. MeSH terms included eosinophilic esophagitis combined with economic keywords such as cost, economic burden, healthcare utilization, and financial burden.
- Articles were included if they reported quantitative economic outcomes such as direct healthcare costs, utilization rates, or national cost estimates.
- Articles were excluded if they were conducted outside the U.S., focused only on clinical outcomes, or lacked original cost data. Editorials, commentaries, and narrative reviews without primary economic analyses were excluded as well.
- Titles and abstracts were screened for relevance, followed by full-text review of eligible articles.
- Extracted data included study design, population, cost estimates, healthcare utilization measures, funding source, and reported limitations.

Results

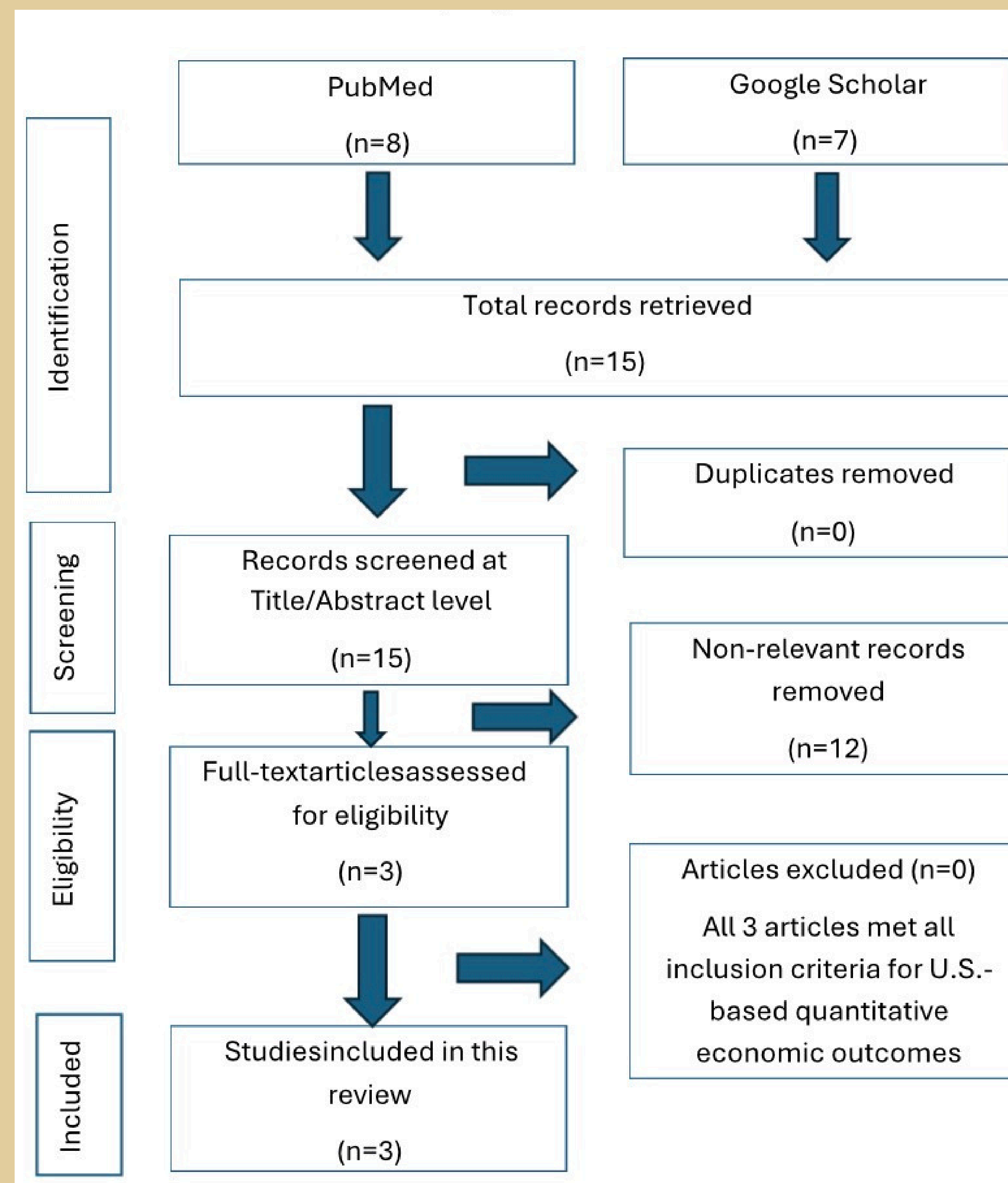


Figure 1. Screening flow diagram illustrates the literature search and screening process.

- Approximately fifteen records were identified across PubMed and Google Scholar searches. After title and abstract screening, twelve records were excluded because they did not address economic outcomes, were not U.S.-based, or lacked primary cost data. Three studies met all inclusion criteria and were included in the final review.
- All included studies demonstrated that patients with EoE incur significantly higher healthcare costs than individuals without EoE. Annual per-patient healthcare costs ranged from approximately \$3,000 to over \$10,000, depending on disease severity. For example, patients undergoing esophageal dilation experienced costs exceeding \$10,000 more annually (Chehade et al.).
- Estimates of the total annual U.S. healthcare burden attributable to EoE ranged from approximately \$500 million to \$1.36 billion. Major contributors to increased costs included outpatient visits, endoscopic procedures, prescription medications, and specialist care (Jensen et al.; Thel et al.).

Discussion

- Findings from this review indicate that EoE contributes a substantial and persistent economic burden to the U.S. healthcare system. The increased costs observed across studies were consistent with expectations given the chronic nature of EoE and its reliance on repeated diagnostic and procedures.
- Comparisons with earlier studies, such as Jensen et al. (2015), show that more recent cost estimates remain similar or higher, suggesting that the economic burden has not decreased over time.
- Rising prevalence and increasing healthcare prices likely contribute to higher national cost estimates in more recent studies.
- Several limitations should be considered, including the small number of U.S.-based economic studies and reliance on administrative claims data. Most studies focused only on direct medical costs and did not include indirect costs such as lost productivity or dietary therapy expenses.
- These findings highlight the need for improved disease management strategies and policies aimed at reducing unnecessary procedures and long-term healthcare utilization.

Conclusion

- Eosinophilic esophagitis imposes a significant and growing annual economic burden on U.S. patients and the healthcare system.
- Current evidence suggests that direct healthcare costs associated with EoE exceed \$1 billion annually.
- As prevalence continues to rise, the financial impact of EoE is likely to increase further.
- Early diagnosis, effective maintenance therapy, and optimized treatment strategies may help reduce long-term costs and healthcare utilization.

References



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