

**Washington State Health Care Authority, HTA Program
FINAL Key Questions and Background
Upper Endoscopy for gastroesophageal reflux disease (GERD) and upper
gastrointestinal (GI) symptoms**

Introduction

Upper endoscopy for gastroesophageal reflux disease (GERD) was selected for review by the HTA program. Acid reflux is a condition where the acidic juices (digestive acids) regurgitate or reflux up into the esophagus. GERD is a more serious form of acid reflux. Occasional acid reflux is a common condition and does not necessarily mean a person has GERD. GERD can lead to more serious health problems due to the effect of digestive acid on the lining of the esophagus. Causes of GERD are varied, but may include anatomical abnormalities, obesity, pregnancy, and smoking. GERD may occur in children and adults. Persistent acid reflux may indicate GERD.

Upper endoscopy is a diagnostic procedure. Upper endoscopy involves the insertion of a thin flexible tube down a patient's throat and esophagus. The endoscope has a light and camera attached allowing a doctor to visually inspect the esophagus for abnormalities and to take small pieces of tissue (biopsy) if needed.

Policy Context

Upper GI symptoms, acid reflux and GERD are very common. Upper endoscopy is an invasive diagnostic procedure that may be indicated for persons with upper GI symptoms and/or a diagnosis of GERD. State agencies concerns: safety- Low, efficacy- Medium-High, cost- Medium-High.

Population: Adults with an initial presenting complaint of upper gastrointestinal symptoms and/or GERD

Intervention: Upper gastrointestinal endoscopy

Comparator: Medical management without endoscopy – including screening questionnaires, noninvasive H. pylori testing, empiric acid-suppression therapy

Outcomes: Clinical symptom resolution (e.g. as measured by symptom scoring tools), health care resource utilization, development of serious gastrointestinal pathology (e.g. malignancy, Barrett's esophagus, esophageal stricture), quality of life indicators

Key Questions

- KQ1: What is the evidence of effectiveness for early treatment strategies that include upper endoscopy compared with empiric medical management?
- KQ2: Are there clinical signs and symptoms useful to identify patients for whom early endoscopy is effective to improve health outcomes and/or disease management?
- KQ3: For what diagnoses and within what time frames, is repeat endoscopy indicated versus other tests or no follow-up tests for surveillance of disease progression and/or treatment response? Does repeat endoscopy change treatment and outcome?
- KQ4: What are the potential harms of performing upper endoscopy in the diagnostic or treatment planning workup of adults with upper GI symptoms? What is the incidence of these harms? Include consideration of progression of treatment in unnecessary or inappropriate ways.
- KQ5: What is the evidence that upper endoscopy has differential efficacy or safety issues in sub populations? Including consideration of:
- Gender
 - Age
 - Psychological or psychosocial co-morbidities
 - Other patient characteristics or evidence based patient selection criteria, especially comorbidities of diabetes, high BMI, and chronic ingestion of alcohol
 - Provider type, setting or other provider characteristics
 - Payer / beneficiary type: including worker's compensation, Medicaid, state employees?
- KQ6: What is the evidence of cost and cost-effectiveness of endoscopy compared to other treatment strategies when used in diagnostic or treatment planning workups of adults with upper GI symptoms?

Public comment and Response

HTA received 1 public comment. The comment was forwarded to the technology assessment center for consideration and was reviewed by HTA program staff.

The commenter recommended eliminating key question #1 and #2; recommended changing key question #3 from "...Does repeat endoscopy change treatment and outcome?" to "...Does endoscopy (initial or repeat) change treatment and outcome?"; and for key question 5, recommended adding under (d) individuals known to ingest alcohol chronically.

Response: No changes to key questions 1, 2 and 3. Added "and chronic ingestion of alcohol" to KQ5 sub bullet (d).

[For additional information on key questions and public comments](#)