

# NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

## SCOPE

### 1 Guideline title

Dyspepsia and gastro-oesophageal reflux disease: investigation and management of dyspepsia, symptoms suggestive of gastro-oesophageal reflux disease, or both.

#### 1.1 Short title

Dyspepsia and gastro-oesophageal reflux disease.

### 2 The remit

This will replace [‘Dyspepsia’](#) (NICE clinical guideline 17).

This is being undertaken as part of the guideline review cycle.

### 3 Clinical need for the guideline

#### 3.1 Epidemiology

- a) Dyspepsia describes a range of symptoms arising from the upper gastrointestinal (GI) tract but it has no universally accepted definition. The British Society of Gastroenterology (BSG) defines dyspepsia as a group of symptoms that alert doctors to consider disease of the upper GI tract, and states that dyspepsia itself is not a diagnosis. These symptoms, which typically are present for 4 weeks or more, include upper abdominal pain or discomfort, heartburn, gastric reflux, nausea, or vomiting.
- b) The UK prevalence depends on the definition of dyspepsia used, and ranges from 12% to 41%. Using the broad BSG definition, it is estimated that annually around 40% of the adult population experience dyspepsia. Dyspepsia accounts for between 1.2% and

4% of all consultations in primary care in the UK, half of which are for functional dyspepsia – that is, dyspepsia of unknown aetiology (previously known as non-ulcer dyspepsia).

- c) The aetiology of dyspepsia symptoms include gastric and duodenal ulcers, gastro-oesophageal reflux disease (GORD), oesophagitis, and oesophageal or gastric cancers; however, the cause is often unknown (functional dyspepsia). In addition, certain foods and drugs (such as anti-inflammatory drugs) are believed to contribute to the symptoms and underlying causes of dyspepsia.
- d) An endoscopy may be indicated for some people with dyspepsia in order to investigate the cause. Morbidity and mortality rates from diagnostic upper GI endoscopy are low.
- e) *Helicobacter pylori* (*H pylori*) is widely present in the general population, often causing no harm, but it is strongly associated with gastric and duodenal ulcers. However, its role in functional dyspepsia and GORD is less clear. The prevalence of *H pylori* infection varies internationally, with over 80% of Japanese and South American people infected, compared with a rate of approximately 40% in the UK and 20% in Scandinavia.
- f) Some evidence suggests that *H pylori* infection is associated with social deprivation and that its prevalence increases with age.
- g) GORD is a chronic condition where gastric juices from the stomach (usually acidic) flow back up into the oesophagus. It can be severe or frequent enough to cause symptoms, damage the oesophagus (for example, oesophagitis), or both. It can lead to an abnormality of the cells in the lining of the oesophagus (Barrett's oesophagus), which is itself considered the most important risk factor for oesophageal adenocarcinoma, the incidence of which has increased considerably in the past decade.

- h) There are several risk factors for GORD including hiatus hernia, certain foods, heavy alcohol use, smoking, and pregnancy, but there is also a genetic component. Some studies have shown a weak link between obesity and GORD. There is also some evidence to suggest that GORD is more likely to occur in socially disadvantaged people. Its prevalence increases with age. Functional heartburn is diagnosed when there are symptoms of reflux in the absence of pathology.
- i) Hospital episode statistics data from 2010–11 showed that there were:
- over 41,000 consultant episodes for people with dyspepsia (39% male and 61% female)
  - over 35, 000 consultant episodes for people with GORD with oesophagitis (59% male and 41% female)
  - nearly 38,000 consultant episodes for people with GORD without oesophagitis (49% male and 51% female).

### **3.2 Current practice**

- a) Some of the costs associated with treating dyspepsia are decreasing, but the overall use of treatments is increasing. As a result, the management of dyspepsia continues to have potentially significant costs to the NHS.
- b) The use of endoscopy has increased considerably over the past decade, as awareness of its value in diagnosing dyspepsia and GORD has grown.
- c) The review of '[Dyspepsia: management of dyspepsia in adults in primary care](#)' (NICE clinical guideline 17) highlighted some concerns about the drug regimens currently recommended in the guideline for *H pylori* eradication, as some bacterial resistance had developed. Overall, the review process concluded that guidance in

this area should be updated, including an expansion to cover aspects of specialist hospital care.

- d) The current guideline covers the management of several underlying causes of dyspepsia in primary care but there is currently a lack of comprehensive national guidance about the management of GORD (in particular, surgical management) when pharmacological treatments fail. Given this, and the possible role of GORD (with the subsequent development of Barrett's oesophagus) as a risk factor for cancer, an extension of the scope of the guideline to cover the management of GORD into secondary care is needed. This is in line with the broader aim of supporting Department of Health initiatives in the early detection of upper GI cancer. For the purpose of this guideline, specialist care will be defined as situations where treatment decisions are made by a consultant-led service in secondary or tertiary care.

## **4 The guideline**

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

## **4.1      *Population***

### **4.1.1    Groups that will be covered**

#### **Areas from the original guideline that will be included in the new guideline**

- a)       Adults (18 years and older) with symptoms of dyspepsia or symptoms suggestive of GORD, or both.
- b)       No subgroups of people have been identified as needing specific consideration.

#### **Areas not in the original guideline that will be included in the new guideline**

- c)       Adults with a diagnosis of Barrett's oesophagus.

### **4.1.2    Groups that will not be covered**

- a)       Children (younger than 18 years).
- b)       People with a diagnosis of oesophagogastric cancer.

## **4.2      *Healthcare setting***

- a)       All settings where care is delivered for NHS patients.

## **4.3      *Clinical management***

### **4.3.1    Key clinical issues that will be covered**

#### **Areas from the original guideline that will be included in the new guideline**

##### ***Investigation and referral***

- a)       Indications for endoscopy in patients with dyspepsia or GORD symptoms.
- b)       Exclusion of Barrett's oesophagus by endoscopy in patients with symptoms suggestive of GORD.

- c) Criteria for referral to consultant-led medical or surgical services.

### ***H pylori***

- d) Pharmacological management for eradication of *H pylori* in patients with confirmed infection.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

### **Areas not in the original guideline that will be included in the new guideline**

#### ***Specialist management***

- e) Specialist pharmacological management of dyspepsia, heartburn, other symptoms of reflux and GORD.
- f) Specialist medical and surgical management of GORD, including total or partial fundoplication (open or laparoscopic).

#### ***Surveillance for Barrett's oesophagus***

- g) Surveillance of patients with Barrett's oesophagus.

### **4.3.2 Clinical issues that will not be covered**

#### **Areas from the original guideline that will not be included in the new guideline**

#### ***Investigation and referral***

- a) Alarm signs and systems for oesophagogastric cancer.
- b) Differential diagnosis of the cause of dyspepsia (other than the use of endoscopy).

- c) Investigations for the diagnosis of GORD and assessment of disease impact (such as oesophageal manometry, pH monitoring, and oesophageal impedance testing).
- d) Psychological interventions for functional dyspepsia.
- e) Effectiveness of lifestyle interventions (such as diet alcohol intake and smoking).
- f) Community pharmacist management of dyspepsia symptoms, provision of patient information, recording of adverse events, and particularly, the use of over-the-counter drugs, antacids, or alginates.
- g) Non-specialist pharmacological management of dyspepsia and GORD and sequencing of these treatments (for related NICE publications regarding proton pump inhibitors [PPIs], see section 6.1).
- h) Management of dyspepsia in patients receiving concomitant non-steroidal anti-inflammatory drug (NSAID) treatment.
- i) Step-down protocols and move to self treatment.
- j) The provision of patient information.
- k) Psychological interventions for dyspepsia.

### ***H pylori***

- l) Type of *H pylori* test (breath, stool, laboratory-based serology).
- m) Retesting and re-endoscopy for *H pylori*.

### **Areas not covered by the original guideline or the new guideline**

- n) Prophylactic treatment using PPIs or *H pylori* test-and-treat for the prevention of dyspepsia symptoms or pathological changes to the oesophagus in patients taking prescribed drugs that might precipitate these.

- o) Diagnosis and management of functional heartburn (including the use of tricyclic antidepressants for management).
- p) The role of *H pylori* eradication in the management of GORD.
- q) Specialist diagnosis and assessment of GORD with pH monitoring, impedance testing, and manometry.
- r) Specialist surgical management of dyspepsia.
- s) Diagnosis and management of oesophagogastric cancer.
- t) Treatment of Barrett's oesophagus.
- u) Heartburn in pregnancy.
- v) Treatment of Zollinger–Ellison syndrome, achalasia, or hiatus hernia (the investigation and management of dyspepsia and reflux symptoms in patients with these conditions will be covered).
- w) Emergency management of bleeding or perforated ulcers.
- x) Emergency management of acute upper GI bleeding.
- y) Management of dysphagia.
- z) Surgical dilatation of strictures in patients with GORD.
- aa) Minimally invasive surgical techniques for GORD (except laparoscopic fundoplication), including:
  - endoscopic gastroplication
  - endoscopic radiofrequency ablation
  - endoscopic augmentation of the lower oesophageal sphincter with hydrogel implants.



## **4.4 Main outcomes**

### **General**

- a) Reduction in symptoms (severity/frequency).
- b) Biopsy findings (pathology).
- c) Endoscopic appearance of oesophagus.
- d) Health-related quality of life (measured using EQ-5D and/or disease-specific tools, if available).
- e) Reduction in medication requirement (frequency and dose).
- f) Adverse effects of interventions (diagnostic or treatment).
- g) Resource use and costs.

### **GORD-specific**

- h) Occurrence of Barrett's oesophagus and progression to adenocarcinoma.
- i) Findings from oesophageal manometry, pH monitoring and impedance testing.

## **4.5 Review questions**

### **Investigation and referral**

- a) What signs and symptoms indicate the need for endoscopy?
- b) What characteristics/symptoms of GORD or symptoms suggestive of GORD indicate endoscopy to exclude Barrett's oesophagus?
- c) What patient characteristics/criteria indicate referral of a patient with dyspepsia, heartburn, or confirmed GORD to a consultant-led medical or surgical service?

***H pylori***

- d)
  - i) What is the clinical effectiveness of eradication regimen for *H pylori* in patients with symptoms of dyspepsia who are positive for *H pylori*?
  - ii) What *H pylori* eradication regimens should be offered as second-line (or third-line) treatments when first-line treatments fail?

**Specialist management**

- e) What is the effectiveness of fundoplication compared with medical management in patients with GORD?
- f) What other medical management is effective for patients who are refractory to PPIs, H<sub>2</sub> receptor antagonists, or *H pylori* eradication despite optimum primary care, or patients who have relapsed following surgery?

**Surveillance for Barrett's oesophagus**

- g) Should surveillance be used for patients with Barrett's oesophagus to detect progression to cancer?

**4.6 Economic aspects**

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

## 4.7 Status

### 4.7.1 Key issues that will and will not be covered

Issue	Covered in CG17 or other guidance	Included in new guideline
Prophylactic treatment for the prevention of dyspepsia	No	No
Community/pharmacy provision of information and recording of adverse events	Yes	No
Pharmacist management with over-the-counter drugs for dyspepsia or GORD	Yes	No
Differential diagnosis of the cause of dyspepsia (other than the use of endoscopy)	Yes	No
Selection of patients for endoscopy (other than alarm signs/symptoms)	Yes	Yes
Use of endoscopy in patients with dyspepsia or GORD symptoms to inform treatment decisions	Yes	No
Role of <i>H pylori</i> eradication in GORD	No	No
Alarm symptoms for immediate and/or urgent referral for endoscopy	Yes (now covered in <a href="#">CG27</a> )	No
Further diagnosis and assessment of GORD following endoscopy	No	No
Exclusion of Barrett's oesophagus with endoscopy in patients with GORD symptoms	No	Yes
Treatment of Barrett's oesophagus	(Ablative management covered in <a href="#">CG106</a> )	No
Surveillance of Barrett's oesophagus	No	Yes
Diagnosis and management of oesophagogastric cancer	No	No
Emergency management of bleeding or perforated ulcers	No	No
Emergency management of acute upper GI bleeding (without dyspepsia)	No	No
Management of dysphagia (without dyspepsia)	No	No
Criteria for referral to medical or surgical specialist	No	Yes
Step-down protocols for dyspepsia or GORD	Yes	No
Lifestyle interventions for dyspepsia	Yes	No
Patient information	Yes	No
Psychological interventions for dyspepsia	Yes	No
Primary care pharmacological management of dyspepsia and GORD (such as PPIs, H <sub>2</sub> receptor antagonists)	Yes	No

Management of patients with dyspepsia receiving concomitant NSAID treatment	Yes	No
Primary care pharmacological management of dyspepsia - <i>H pylori</i> eradication	Yes	Yes
Primary care pharmacological management of dyspepsia - <i>H pylori</i> eradication (second-line or third-line treatment)	Yes	Yes
Specialist pharmacological management of refractory dyspepsia and GORD (such as PPIs, H <sub>2</sub> receptor antagonists, <i>H pylori</i> eradication)	No	Yes
Type of test for <i>H pylori</i> investigation	Yes	No
Re-test for <i>H pylori</i> to assess response to treatment and/or pathological progression	Yes	No
Repeat endoscopy for <i>H pylori</i> to assess response to treatment and/or pathological progression	Yes	No
Specialist surgical management of dyspepsia	No	No
Surgical dilatation of strictures in patients with GORD	No	No
Specialist surgical management of GORD – fundoplication	No	Yes
Other endoscopic surgical treatments in the specialist management of GORD (gastroplication, radiofrequency ablation and augmentation of the lower oesophageal sphincter)	Yes (covered in guidance on interventional procedures)	No
Specialist diagnostic tests to confirm functional heartburn	No	No
Specialist management of functional heartburn with tricyclic antidepressants	No	No
Heartburn in pregnancy	Yes (covered in <a href="#">CG62</a> )	No
Treatment of Zollinger–Ellison syndrome, achalasia, or hiatus hernia	No	No

#### 4.7.2 Scope

This is the consultation draft of the scope. The consultation dates are 10 May to 7 June 2012.

#### 4.7.3 Timing

The development of the guideline recommendations will begin in July 2012.

## 5 Related NICE guidance

### 5.1 *Published guidance*

#### 5.1.1 NICE guidance to be replaced

This guideline will replace the following NICE guidance:

- Dyspepsia. NICE clinical guideline 17 (2004).

#### 5.1.2 Other related NICE guidance

- Patient experience in adult NHS services. [NICE clinical guideline 138](#) (2011).
- Service user experience in adult mental health. [NICE clinical guideline 136](#) (2011).
- Minimally invasive oesophagectomy. [NICE interventional procedure guidance 407](#) (2011).
- Endoluminal gastroplication for gastro-oesophageal reflux disease. [NICE interventional procedure guidance 404](#) (2011).
- Barrett's oesophagus. [NICE clinical guideline 106](#) (2010).
- Chest pain of recent onset. [NICE clinical guideline 95](#) (2010).
- Endoscopic submucosal dissection of gastric lesions. [NICE interventional procedure guidance 360](#) (2010).
- Endoscopic mucosal resection and endoscopic submucosal dissection of non-ampullary duodenal lesions. [NICE interventional procedure guidance 359](#) (2010).
- Endoscopic submucosal dissection of oesophageal dysplasia and neoplasia. [NICE interventional procedure guidance 355](#) (2010).
- Photodynamic therapy for Barrett's oesophagus. [NICE interventional procedure guidance 350](#) (2010).
- Epithelial radiofrequency ablation for Barrett's oesophagus. [NICE interventional procedure guidance 344](#) (2010).
- Medicines adherence. [NICE clinical guideline 76](#) (2009).
- Endoscopic radiofrequency ablation for gastro-oesophageal reflux disease. [NICE interventional procedure guidance 292](#) (2007).

- Photodynamic therapy for early oesophageal cancer. [NICE interventional procedure guidance 200](#) (2006).
- Catheterless oesophageal pH monitoring. [NICE interventional procedure guidance 187](#) (2006).
- Endoscopic injection of bulking agents for gastro-oesophageal reflux disease. [NICE interventional procedure guidance 55](#) (2004).

## **5.2 Guidance under development**

NICE is currently developing the following related guidance (details available from the NICE website):

- Acute upper gastrointestinal bleeding. NICE clinical guideline. Publication expected June 2012.
- Laparoscopic insertion of a magnetic bead band for gastro-oesophageal reflux disease. NICE interventional procedure. Publication expected July 2012.
- GORD in children. NICE clinical guideline. Publication TBC.
- Recognition and management of suspected cancer (update of CG27). NICE clinical guideline. Publication TBC.

## **6 Related NICE products**

### **6.1 Products under development**

- NICE prescribing Bulletin on the use PPI in GORD (It is intended that publication will coincide with the guideline publication).

Since clinical and cost effectiveness are established, the prescribing bulletin will summarise the evidence and provide advice on the use of PPIs in GORD, reflecting changes in cost acquisition since CG 17 and including emerging evidence on long term side effects.

## **7 Further information**

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [‘How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS’](#)
- [‘The guidelines manual’](#).

Information on the progress of the guideline will also be available from the [NICE website](#).