

Issue date: August 2004

## Quick reference guide

# Dyspepsia – management of dyspepsia in adults in primary care

In June 2005 the recommendations on referral for endoscopy in the NICE guideline on dyspepsia were amended in line with the recommendation in the NICE Clinical Guideline on referral for suspected cancer (*NICE Clinical Guideline* no. 27: Referral guidelines for suspected cancer. June 2005. See [www.nice.org.uk/CG027](http://www.nice.org.uk/CG027)). This quick reference guide has been amended to take account of the changes in the NICE guideline (see pages 2, 3, 5, 6 and 13).

For ease of reference, the original text in this document has been ~~struck through~~ and the revised text has been set in *italics* below it.

## Clinical Guideline 17

Developed by the Newcastle Guideline Development and  
Research Unit

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**This guidance is written in the following context:**

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Health professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of health professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

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## Key priorities for implementation

### Referral for endoscopy

- Review medications for possible causes of dyspepsia (for example, calcium antagonists, nitrates, theophyllines, bisphosphonates, corticosteroids and non-steroidal anti-inflammatory drugs [NSAIDs]). In patients requiring referral, suspend NSAID use.
- Urgent specialist referral for endoscopic investigation\* is indicated for patients of any age with dyspepsia when presenting with any of the following: chronic gastrointestinal bleeding, progressive unintentional weight loss, progressive difficulty swallowing, persistent vomiting, iron deficiency anaemia, epigastric mass or suspicious barium meal.
- ~~Routine endoscopic investigation of patients of any age, presenting with dyspepsia and without alarm signs, is not necessary. However, for patients over 55, consider endoscopy when symptoms persist despite *Helicobacter pylori* (*H. pylori*) testing and acid suppression therapy, and when patients have one or more of the following: previous gastric ulcer or surgery, continuing need for NSAID treatment or raised risk of gastric cancer or anxiety about cancer.~~
- *Routine endoscopic investigation of patients of any age, presenting with dyspepsia and without alarm signs, is not necessary. However, in patients aged 55 years and older with unexplained\*\* and persistent\*\* recent-onset dyspepsia alone, an urgent referral for endoscopy should be made.*

### Interventions for uninvestigated dyspepsia

- Initial therapeutic strategies for dyspepsia are empirical treatment with a proton pump inhibitor (PPI) or testing for and treating *H. pylori*. There is currently insufficient evidence to guide which should be offered first. A 2-week washout period following PPI

use is necessary before testing for *H. pylori* with a breath test or a stool antigen test.

### Interventions for gastro-oesophageal reflux disease (GORD)

- Offer patients who have GORD a full-dose PPI for 1 or 2 months.
- If symptoms recur following initial treatment, offer a PPI at the lowest dose possible to control symptoms, with a limited number of repeat prescriptions.

### Interventions for peptic ulcer disease

- Offer *H. pylori* eradication therapy to *H. pylori*-positive patients who have peptic ulcer disease.
- For patients using NSAIDs with diagnosed peptic ulcer, stop the use of NSAIDs where possible. Offer full-dose PPI or H<sub>2</sub>RA therapy for 2 months to these patients and if *H. pylori* is present, subsequently offer eradication therapy.

### Interventions for non-ulcer dyspepsia

- Management of endoscopically determined non-ulcer dyspepsia involves initial treatment for *H. pylori* if present, followed by symptomatic management and periodic monitoring.
- Re-testing after eradication should not be offered routinely, although the information it provides may be valued by individual patients.

### Reviewing patient care

- Offer patients requiring long-term management of symptoms for dyspepsia an annual review of their condition, encouraging them to try stepping down or stopping treatment.
- A return to self-treatment with antacid and/or alginate therapy (either prescribed or purchased over-the-counter and taken as required) may be appropriate.

## Key priorities for implementation (continued)

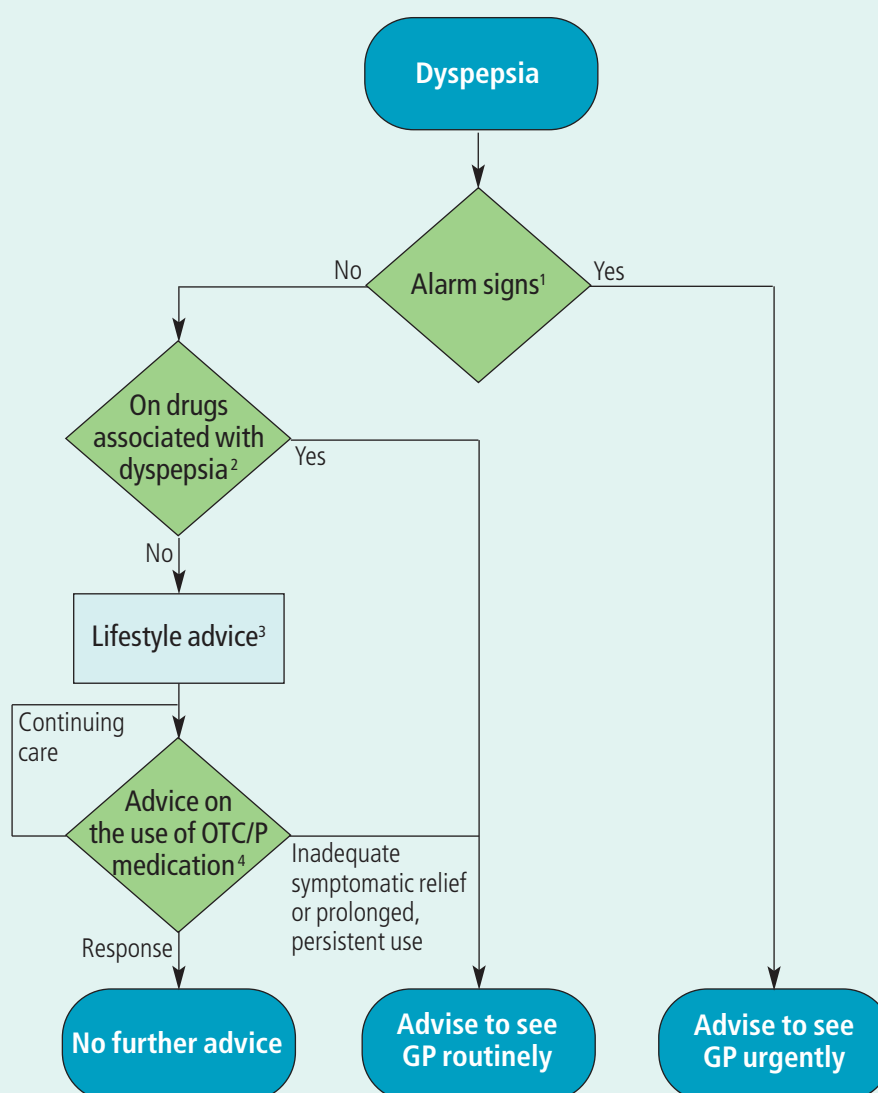
### *H. pylori* testing and eradication

- *H. pylori* can be initially detected using either a carbon-13 urea breath test or a stool antigen test, or laboratory-based serology where its performance has been locally validated.
  - Office-based serological tests for *H. pylori* cannot be recommended because of their inadequate performance.
  - For patients who test positive, provide a 7-day, twice-daily course of treatment consisting of a full-dose PPI with either metronidazole 400 mg and clarithromycin 250 mg or amoxicillin 1 g and clarithromycin 500 mg.
- \* The Guideline Development Group considered that 'urgent' meant being seen within 2 weeks.

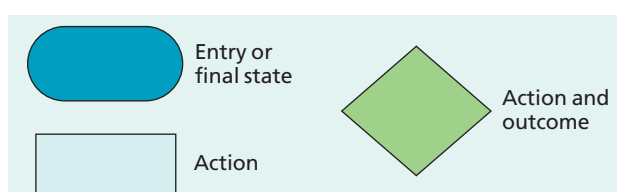
\*\* In the referral guidelines for suspected cancer (NICE Clinical Guideline no. 27), 'unexplained' is defined as 'a symptom(s) and/or sign(s) that has not led to a diagnosis being made by the primary care professional after initial assessment of the history, examination and primary care investigations (if any)'. In the context of this recommendation, the primary care professional should confirm that the dyspepsia is new rather than a recurrent episode and exclude common precipitants of dyspepsia such as ingestion of NSAIDs. 'Persistent' as used in the recommendations in the referral guidelines refers to the continuation of specified symptoms and/or signs beyond a period that would normally be associated with self-limiting problems. The precise period will vary depending on the severity of symptoms and associated features, as assessed by the healthcare professional. In many cases, the upper limit the professional will permit symptoms and/or signs to persist before initiating referral will be 4–6 weeks.

# 1 Community care and pharmacy

## Flowchart to guide pharmacist management of dyspepsia

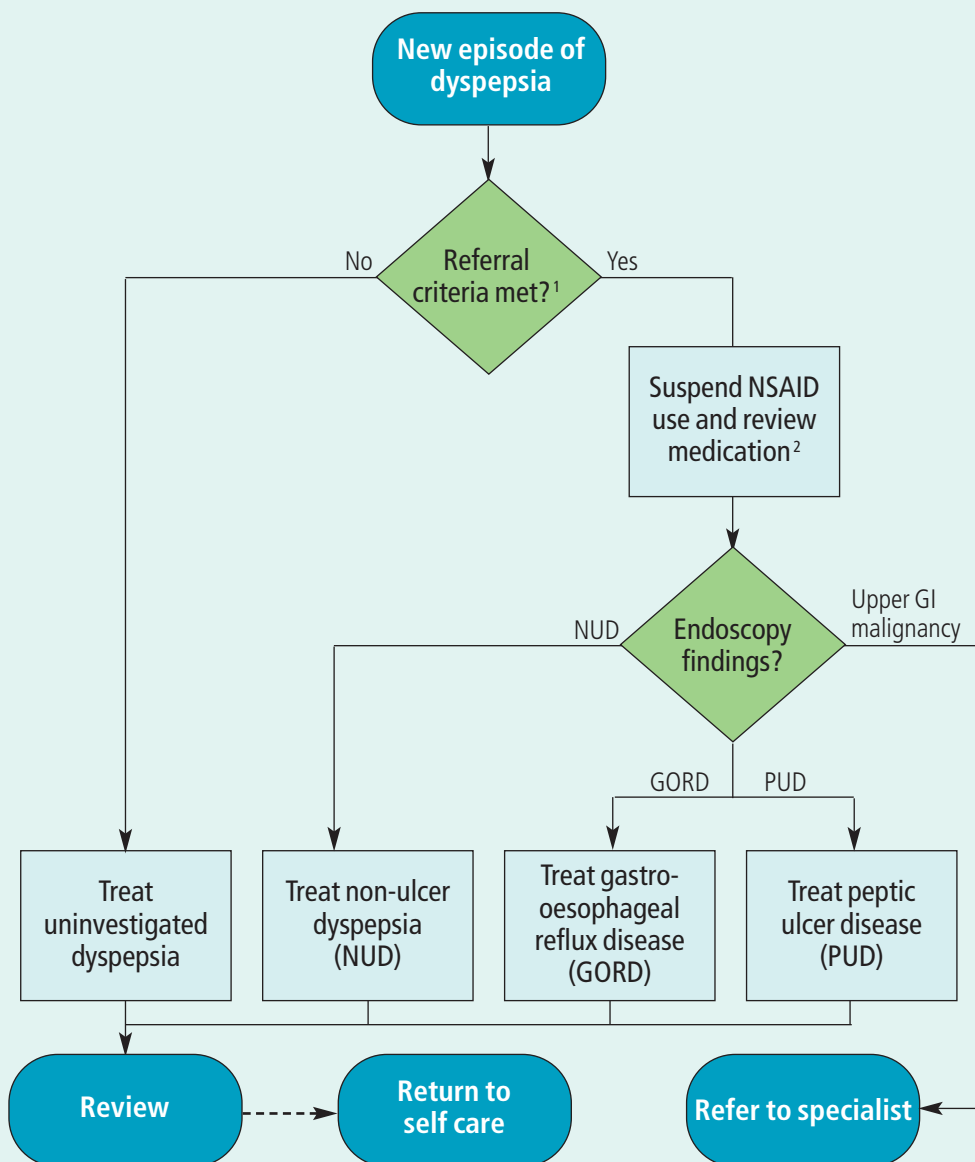


- 1 Alarm signs include dyspepsia with gastrointestinal bleeding, difficulty swallowing, unintentional weight loss, abdominal swelling and persistent vomiting.
- 2 Ask about current and recent clinical and self care for dyspepsia. Ask about medications that may be the cause of dyspepsia, for example, calcium antagonists, nitrates, theophyllines, bisphosphonates, corticosteroids and NSAIDs.
- 3 Offer lifestyle advice, including advice about healthy eating, weight reduction and smoking cessation.
- 4 Offer advice about the range of pharmacy-only and over-the-counter medications, reflecting symptoms and previous successful and unsuccessful use. Be aware of the full range of recommendations for the primary care management of adult dyspepsia to work consistently with other healthcare professionals.



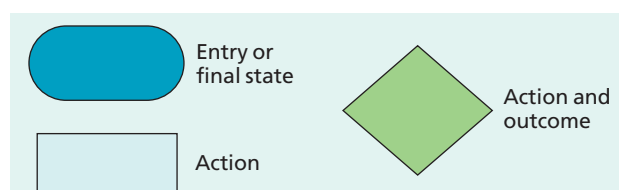
## 2 Presentation at GP and endoscopy

### Flowchart of referral criteria and subsequent management



<sup>1</sup> Immediate referral is indicated for significant acute gastrointestinal bleeding. Consider the possibility of cardiac or biliary disease as part of the differential diagnosis. Urgent specialist referral\* for endoscopic investigation is indicated for patients of any age with dyspepsia when presenting with any of the following: chronic gastrointestinal bleeding, progressive unintentional weight loss, progressive difficulty swallowing, persistent vomiting, iron deficiency anaemia, epigastric mass or suspicious barium meal. Routine endoscopic investigation of patients of any age, presenting with dyspepsia and without alarm signs, is not necessary. However, for patients over 55, consider endoscopy when symptoms persist despite *Helicobacter pylori* (*H. pylori*) testing and acid suppression therapy, and when patients have one or more of the following: previous gastric ulcer or surgery.

(continued on next page)



## 2 Presentation at GP and endoscopy (continued)

~~continuing need for NSAID treatment or raised risk of gastric cancer or anxiety about cancer.~~  
*Routine endoscopic investigation of patients of any age, presenting with dyspepsia and without alarm signs, is not necessary. However, in patients aged 55 years and older with unexplained\*\* and persistent\*\* recent-onset dyspepsia alone, an urgent referral for endoscopy should be made.*

Consider managing previously investigated patients without new alarm signs according to previous endoscopic findings.

- 2 Review medications for possible causes of dyspepsia, for example, calcium antagonists, nitrates, theophyllines, bisphosphonates, steroids and NSAIDs. Patients undergoing endoscopy should be free from medication with either a proton pump inhibitor (PPI) or an H<sub>2</sub> receptor (H<sub>2</sub>RA) for a minimum of 2 weeks.

- \* The Guideline Development Group considered that 'urgent' meant being seen within 2 weeks.

- \*\* *In the referral guidelines for suspected cancer (NICE Clinical Guideline no. 27), 'unexplained' is defined as 'a symptom(s) and/or sign(s) that has not led to a diagnosis being made by the primary care professional after initial assessment of the history, examination and primary care investigations (if any)'. In the context of this recommendation, the primary care professional should confirm that the dyspepsia is new rather than a recurrent episode and exclude common precipitants of dyspepsia such as ingestion of NSAIDs. 'Persistent' as used in the recommendations in the referral guidelines refers to the continuation of specified symptoms and/or signs beyond a period that would normally be associated with self-limiting problems. The precise period will vary depending on the severity of symptoms and associated features, as assessed by the healthcare professional. In many cases, the upper limit the professional will permit symptoms and/or signs to persist before initiating referral will be 4–6 weeks.*



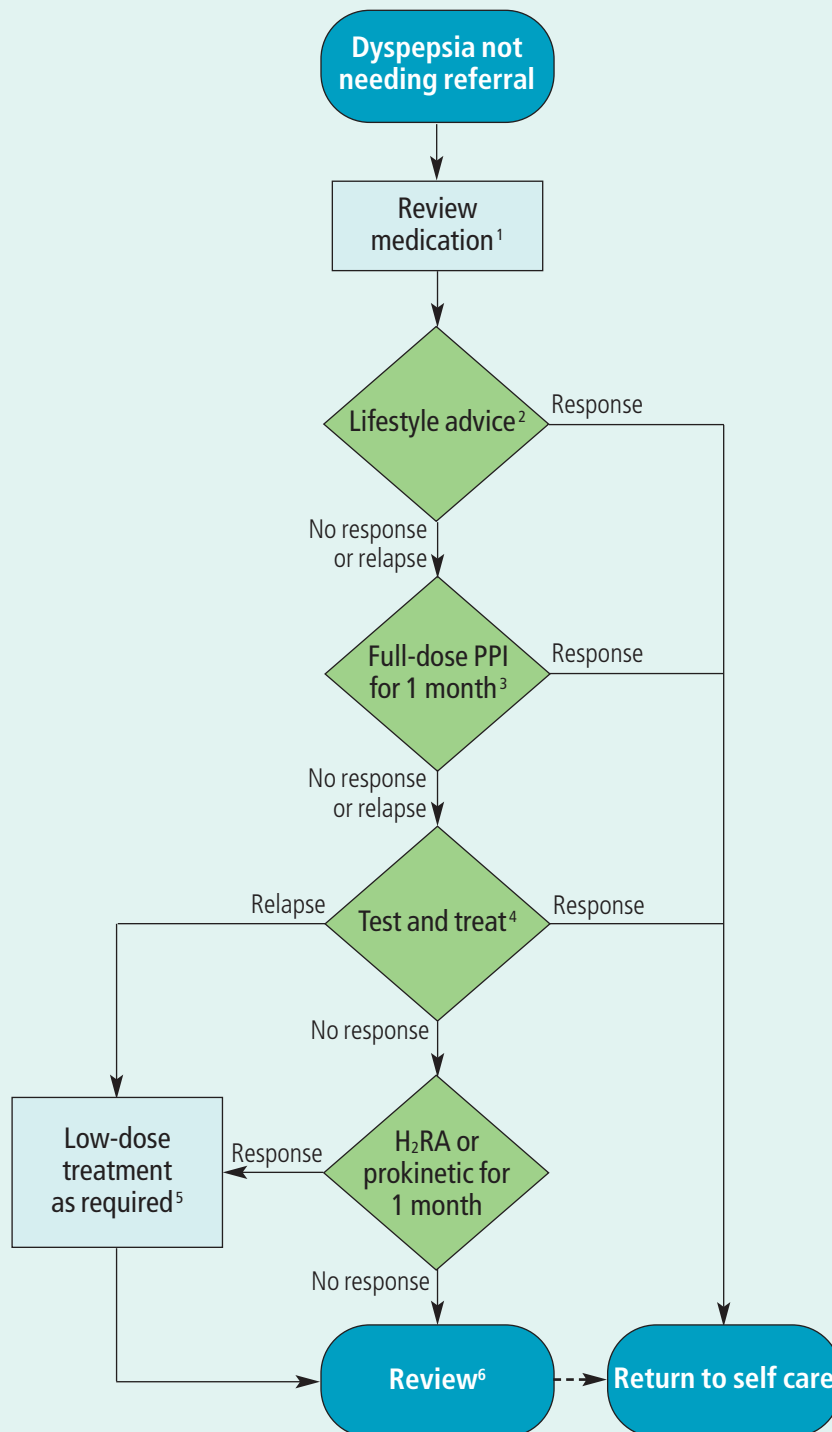
### 3 Common elements of care

#### *Recommendations*

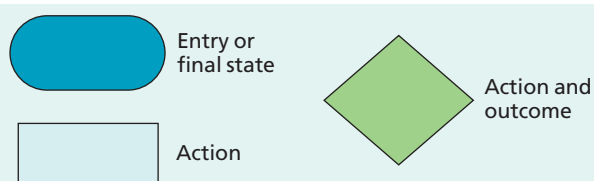
- For many patients, self-treatment with antacid and/or alginate therapy (either prescribed or purchased over-the-counter and taken 'as required') may continue to be appropriate for immediate symptom relief. However, additional therapy is appropriate to manage symptoms that persistently affect patients' quality of life.
- Offer older patients (over 80 years of age) the same treatment as younger patients, taking account of any comorbidity and their existing use of medication.
- Offer simple lifestyle advice, including advice on healthy eating, weight reduction and smoking cessation.
- Advise patients to avoid known precipitants they associate with their dyspepsia where possible. These include smoking, alcohol, coffee, chocolate, fatty foods and being overweight. Raising the head of the bed and having a main meal well before going to bed may help some people.
- Provide patients with access to educational materials to support the care they receive.
- Psychological therapies, such as cognitive behavioural therapy and psychotherapy, may reduce dyspeptic symptoms in the short term in individual patients. Given the intensive and relatively costly nature of such interventions, routine provision by primary care teams is not currently recommended.
- Patients requiring long-term management of dyspepsia symptoms should be encouraged to reduce their dose of prescribed medication stepwise: by using the effective lowest dose, by trying as-required use when appropriate, and by returning to self-treatment with antacid or alginate therapy.

## 4 Uninvestigated dyspepsia

### Management flowchart for patients with uninvestigated dyspepsia

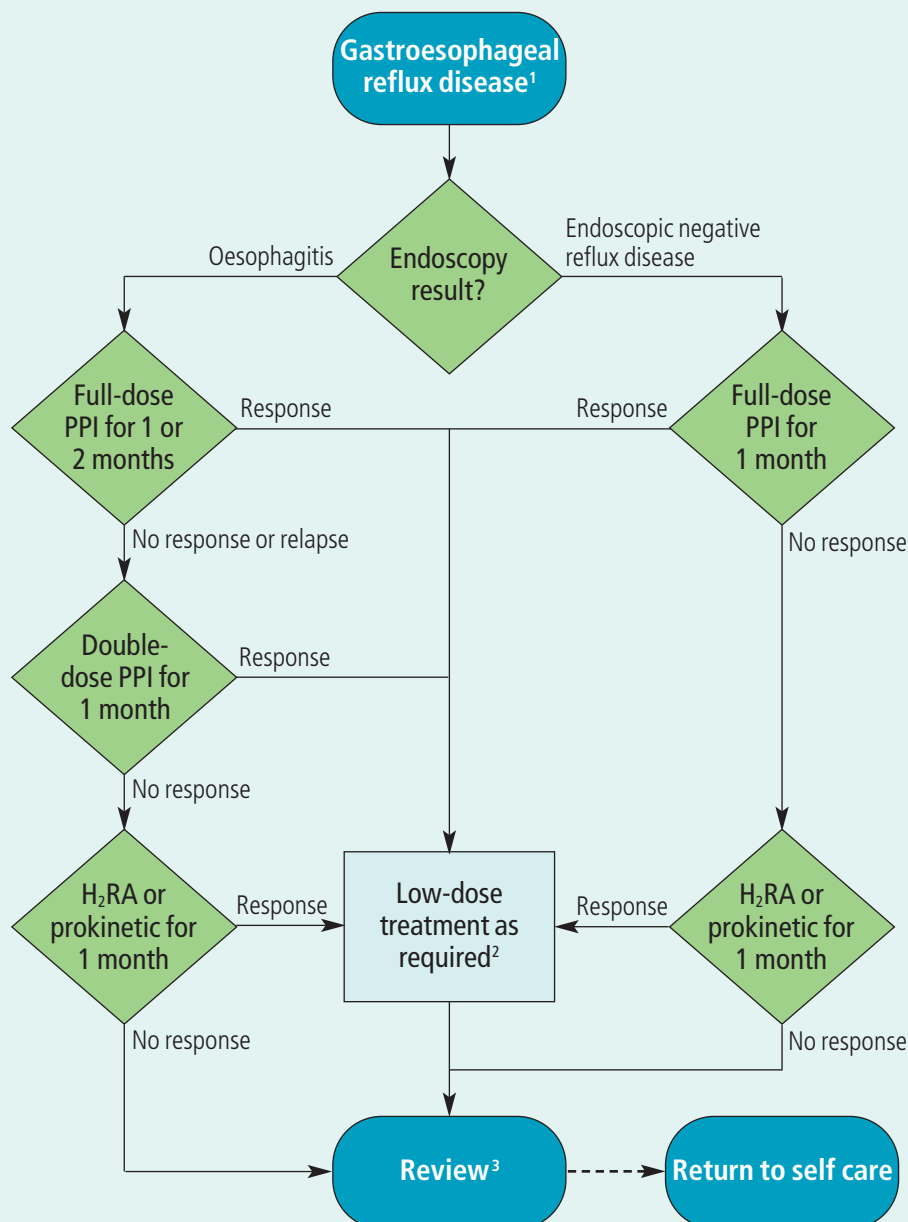


- 1 Review medications for possible causes of dyspepsia, for example, calcium antagonists, nitrates, theophyllines, bisphosphonates, steroids and NSAIDs.
- 2 Offer lifestyle advice, including advice on healthy eating, weight reduction and smoking cessation, promoting continued use of antacid/alginates.
- 3 There is currently inadequate evidence to guide whether full-dose PPI for one month or *H. pylori* test and treat should be offered first. Either treatment may be tried first with the other being offered where symptoms persist or return.
- 4 Detection: use carbon-13 urea breath test, stool antigen test or, when performance has been validated, laboratory-based serology. Eradication: use a PPI, amoxicillin, clarithromycin 500 mg (PAC<sub>500</sub>) regimen or a PPI, metronidazole, clarithromycin 250 mg (PMC<sub>250</sub>) regimen. Do not re-test even if dyspepsia remains unless there is a strong clinical need.
- 5 Offer low-dose treatment with a limited number of repeat prescriptions. Discuss the use of treatment on an as-required basis to help patients manage their own symptoms.
- 6 In some patients with an inadequate response to therapy it may become appropriate to refer to a specialist for a second opinion. Emphasise the benign nature of dyspepsia. Review long-term patient care at least annually to discuss medication and symptoms.



## 5 Gastro-oesophageal reflux disease, peptic ulcer and non-ulcer dyspepsia

### Management flowchart for patients with GORD



1 GORD refers to endoscopically determined oesophagitis or endoscopy-negative reflux disease. Patients with uninvestigated 'reflux-like' symptoms should be managed as patients with uninvestigated dyspepsia. There is currently no evidence that *H. pylori* should be investigated in patients with GORD.

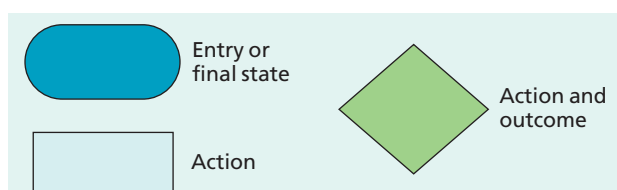
2 Offer low-dose treatment, possibly on an as-required basis, with a limited number of repeat prescriptions.

3 Review long-term patient care at least annually to discuss medication and symptoms.

In some patients with an inadequate response to therapy or new emergent symptoms it may become appropriate to refer to a specialist for a second opinion.

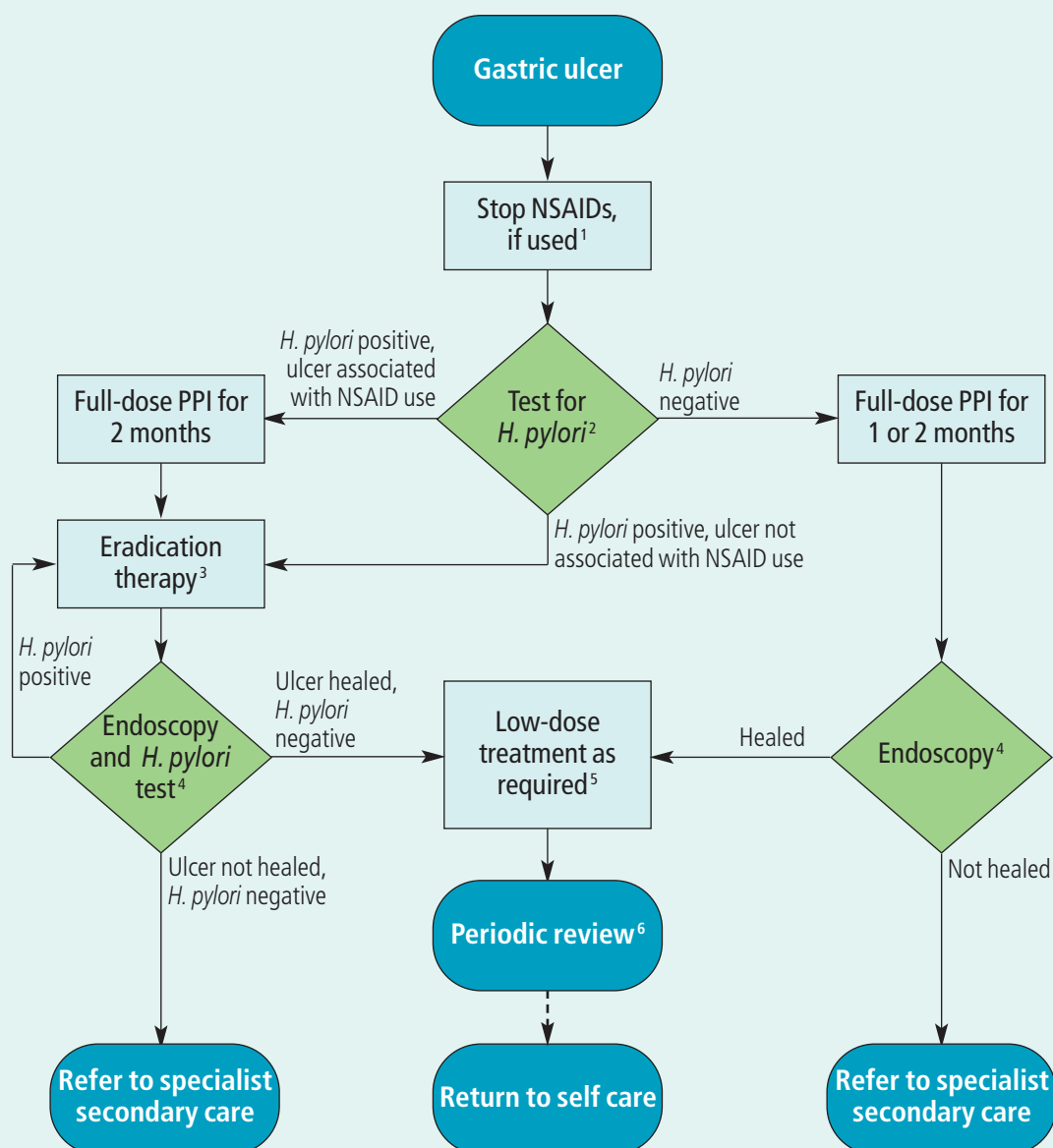
Review long-term patient care at least annually to discuss medication and symptoms.

A minority of patients have persistent symptoms despite PPI therapy and this group remain a challenge to treat. Therapeutic options include doubling the dose of PPI therapy, adding an H<sub>2</sub>RA at bedtime and extending the length of treatment.

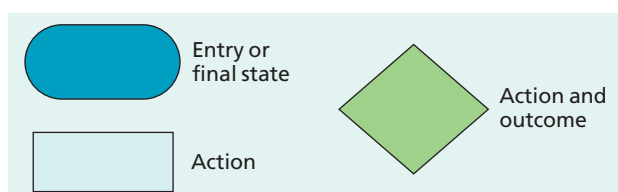


## 5 Gastro-oesophageal reflux disease, peptic ulcer and non-ulcer dyspepsia

### Management flowchart for patients with gastric ulcer

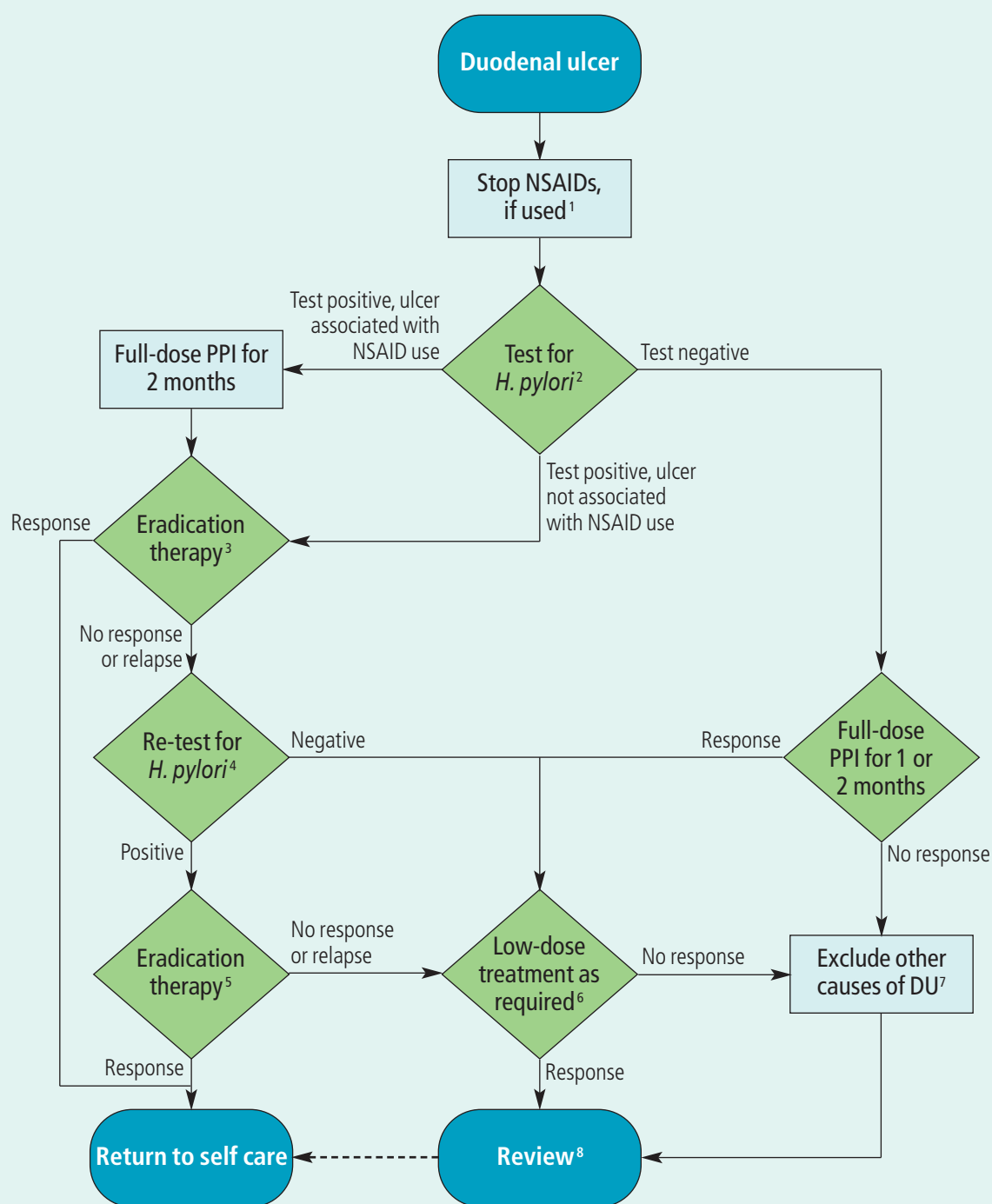


- 1 If NSAID continuation is necessary, after ulcer healing offer long-term gastric protection or consider substitution to a newer Cox-2-selective NSAID.
- 2 Use a carbon-13 urea breath test, stool antigen test or, when performance has been validated, laboratory-based serology.
- 3 Use a PPI, amoxicillin, clarithromycin 500 mg (PAC<sub>500</sub>) regimen or a PPI, metronidazole, clarithromycin 250 mg (PMC<sub>250</sub>) regimen.  
Follow guidance found in the *British National Formulary* for selecting second-line therapies.  
After two attempts at eradication manage as *H. pylori* negative.
- 4 Perform endoscopy 6–8 weeks after treatment. If re-testing for *H. pylori* use a carbon-13 urea breath test.
- 5 Offer low-dose treatment, possibly used on an as-required basis, with a limited number of repeat prescriptions.
- 6 Review care annually, to discuss symptoms, promote stepwise withdrawal of therapy when appropriate and provide lifestyle advice. In some patients with an inadequate response to therapy it may become appropriate to refer to a specialist.



## 5 Gastro-oesophageal reflux disease, peptic ulcer and non-ulcer dyspepsia

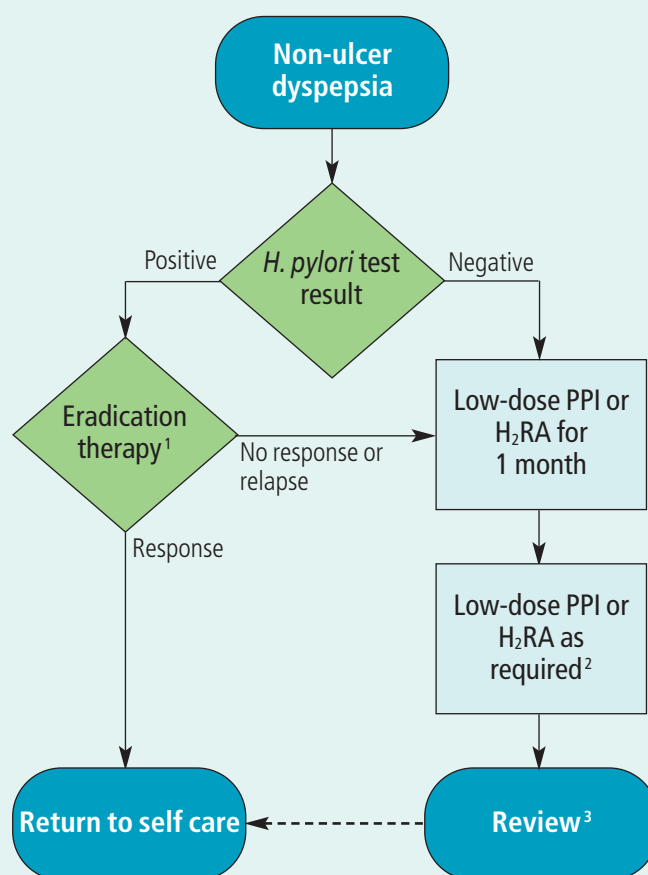
### Management flowchart for patients with duodenal ulcer



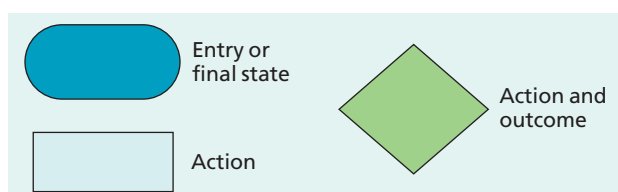
- 1 If NSAID continuation is necessary, after ulcer healing offer long-term gastric protection or consider substitution to a newer Cox-2-selective NSAID.
- 2 Use a carbon-13 urea breath test, stool antigen test or, when performance has been validated, laboratory-based serology.
- 3 Use a PPI, amoxicillin, clarithromycin 500 mg (PAC<sub>500</sub>) regimen or a PPI, metronidazole, clarithromycin 250 mg (PMC<sub>250</sub>) regimen.
- 4 Use a carbon-13 urea breath test.
- 5 Follow guidance found in the *British National Formulary* for selecting second-line therapies.
- 6 Offer low-dose treatment, possibly on an as-required basis, with a limited number of repeat prescriptions.
- 7 Consider: non-adherence with treatment, possible malignancy, failure to detect *H. pylori* infection due to recent PPI or antibiotic ingestion, inadequate testing or simple misclassification; surreptitious or inadvertent NSAID or aspirin use; ulceration due to ingestion of other drugs; Zollinger Ellison syndrome, Crohn's disease.
- 8 Review care annually, to discuss symptoms, promote stepwise withdrawal of therapy when appropriate and provide lifestyle advice.

## 5 Gastro-oesophageal reflux disease, peptic ulcer and non-ulcer dyspepsia

### Management flow chart for patients with non-ulcer dyspepsia



- 1 Use a PPI, amoxicillin, clarithromycin 500 mg (PAC<sub>500</sub>) regimen or a PPI, metronidazole, clarithromycin 250 mg (PMC<sub>250</sub>) regimen. Do not re-test unless there is a strong clinical need.
- 2 Offer low-dose treatment, possibly on an as-required basis, with a limited number of repeat prescriptions.
- 3 In some patients with an inadequate response to therapy or new emergent symptoms it may become appropriate to refer to a specialist for a second opinion. Emphasise the benign nature of dyspepsia. Review long-term patient care at least annually to discuss medication and symptoms.



## 6 Reviewing patient care

### Recommendations

- Offer patients requiring long-term management of dyspepsia symptoms an annual review of their condition, encouraging them to try stepping down or stopping treatment\*.
- A return to self-treatment with antacid and/or alginate therapy (either prescribed or purchased over-the-counter and taken as-required) may be appropriate.
- Offer simple lifestyle advice, including healthy eating, weight reduction and smoking cessation.
- Advise patients to avoid known precipitants they associate with their dyspepsia where possible. These include smoking, alcohol, coffee, chocolate, fatty foods and being overweight. Raising the head of the bed and having a main meal well before going to bed may help some people.
- ~~Routine endoscopic investigation of patients of any age presenting with dyspepsia and without alarm signs is not necessary. However, for patients over 55, consider endoscopy when symptoms persist despite *H. pylori* testing and acid suppression therapy and when patients have one or more of the following: previous gastric ulcer or surgery, continuing need for NSAID treatment, or raised risk of gastric cancer or anxiety about cancer.~~
- *Routine endoscopic investigation of patients of any age, presenting with dyspepsia and without alarm signs, is not necessary. However, in patients aged 55 years and older with unexplained\*\* and persistent\*\* recent-onset dyspepsia alone, an urgent referral for endoscopy should be made.*

\* Unless there is an underlying condition or comedication requiring continuing treatment.

\*\* *In the referral guidelines for suspected cancer (NICE Clinical Guideline no. 27), 'unexplained' is defined as 'a symptom(s) and/or sign(s) that has not led to a diagnosis being made by the primary care professional after initial assessment of the history, examination and primary care investigations (if any)'. In the context of this recommendation, the primary care professional should confirm that the dyspepsia is new rather than a recurrent episode and exclude common precipitants of dyspepsia such as ingestion of NSAIDs. 'Persistent' as used in the recommendations in the referral guidelines refers to the continuation of specified symptoms and/or signs beyond a period that would normally be associated with self-limiting problems. The precise period will vary depending on the severity of symptoms and associated features, as assessed by the healthcare professional. In many cases, the upper limit the professional will permit symptoms and/or signs to persist before initiating referral will be 4–6 weeks.*

## 7 *Helicobacter pylori*: testing and eradication

### Recommendations

- *H. pylori* can be initially detected using a carbon-13 urea breath test or a stool antigen test, or laboratory-based serology where its performance has been locally validated.
- Re-testing for *H. pylori* should be performed using a carbon-13 urea breath test. (There is currently insufficient evidence to recommend the stool antigen test as a test of eradication.)
- Office-based serological tests for *H. pylori* cannot be recommended because of their inadequate performance.
- For patients who test positive, provide a 7-day twice-daily course of treatment consisting of a full-dose PPI, with either metronidazole 400 mg and clarithromycin 250 mg or amoxicillin 1 g and clarithromycin 500 mg.
- For patients requiring a second course of eradication therapy, a regimen should be chosen that does not include antibiotics given previously (see the *British National Formulary* for guidance).



## Implementation

Local health communities should review their existing practice in the treatment and management of dyspepsia against this guideline. The review should consider the resources required to implement the recommendations in Section 1 of the NICE guideline, the people and processes involved and the timeline over which full implementation is envisaged. It is in the interests of patients that the implementation timeline is as rapid as possible.

Relevant local clinical guidelines, care pathways and protocols should be reviewed in the light of this guidance and revised accordingly.

## Further information

### Quick reference guide

This quick reference guide to the Institute's guideline on managing dyspepsia contains the key priorities for implementation, the guidance, and notes on implementation.

### NICE guideline

The NICE guideline on dyspepsia contains the following sections: Key priorities for implementation; 1 Guidance; 2 Notes on the scope of the guidance; 3 Implementation in the NHS; 4 Research recommendations; 5 Other versions of this guideline; 6 Related NICE guidance; 7 Review date. The NICE guideline also gives details of the scheme used for grading the recommendations, Guideline Development Group, the Guideline Review Panel, and technical details on criteria for audit. The NICE guideline is available on the NICE website at [www.nice.org.uk/CG017NICEguideline](http://www.nice.org.uk/CG017NICEguideline)

### Full guideline

The full guideline includes the evidence on which the recommendations are based, in addition to the information in the NICE guideline. It is published by the Centre for Health Services Research, University of Newcastle upon Tyne. It is available from [www.nice.org.uk/CG017fullguideline](http://www.nice.org.uk/CG017fullguideline) and on the website of the National Electronic Library for Health ([www.nelh.nhs.uk](http://www.nelh.nhs.uk)).

### Information for the public

NICE has produced information describing this guidance for people with dyspepsia, their advocates and carers and the public. This information is available in English and Welsh from the NICE website ([www.nice.org.uk/CG017publicinfo](http://www.nice.org.uk/CG017publicinfo)). Printed versions are also available – see below for ordering information.

### Review date

The process of reviewing the evidence is expected to begin 4 years after the date of issue of this guideline. Reviewing may begin earlier than 4 years if significant evidence that affects the guideline recommendations is identified sooner. The updated guideline will be available within 2 years of the start of the review process.





#### **Ordering information**

Copies of this quick reference guide can be obtained from the NICE website at [www.nice.org.uk/CG017](http://www.nice.org.uk/CG017) or from the NHS Response Line by telephoning 0870 1555 455 and quoting reference number N0732 for the booklet version and N0689 for the poster version. Information for the public is also available from the NICE website or from the NHS Response Line (quote reference number N0690 for the English version and N0691 for a version in English and Welsh).

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