

Simple guide to the assessment and management of chronic cough in primary care (in adults)



Introduction

Chronic cough in adults is defined as a cough lasting longer than 8 weeks.¹ It is a common reason for primary care consultations and may become a long-term condition in its own right, driven by cough hypersensitivity and multiple treatable traits. Many patients experience repeated healthcare visits before receiving effective treatment. For those with refractory chronic cough (RCC),¹ the mean delay to diagnosis is approximately 8 years.²

Primary care plays a central role in the early identification, investigation and management of chronic cough. A structured approach can improve patient outcomes, reduce variation in care, avoid unnecessary referrals and support the timely detection of serious disease.

The British Thoracic Society (BTS) published a Clinical Statement on Chronic Cough in Adults in 2023,¹ including recommendations for primary care (Figure 1, page 2).³ The guidance advocates a treatable traits approach and recommends objective investigation wherever possible before initiating treatment.

Complementing this, the National CLEAR Programme⁴, working with the Respiratory Transformation Partnership (RTP)'s Elective Care Respiratory Pathways programme⁵, has developed a pathway describing best practice for the delivery of chronic cough services within integrated neighbourhood respiratory care systems (Figure 2, page 3). The CLEAR pathway promotes initial assessment within primary care, with onward referral to a neighbourhood respiratory hub. This is where the patients symptoms have not been resolved, they remain undifferentiated and before a formal referral to secondary/specialist care is made (where it's deemed necessary). They additionally support improved coding, fewer repeat appointments in primary care, funding for diagnostic tests and neighbourhood respiratory hubs, standardised referral criteria, access to multidisciplinary team specialists and close integration with neighbourhood services.

This resource provides a practical guide to managing adults with chronic cough in primary care.

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British
Thoracic
Society

This work has been informed by the British Thoracic Society (BTS) Clinical Statement for Chronic Cough in Adults (2023) and The National CLEAR Programme chronic cough pathway.

1.1 Causes of chronic cough

Traditionally, chronic cough has been attributed to a single underlying condition such as asthma. However, the 2023 BTS Clinical Statement for Chronic Cough in Adults promotes a 'treatable traits' approach, recognising that multiple contributing mechanisms may co-exist.² These include eosinophilic airway disease, upper airway disease, reflux, smoking-related airway irritation, bronchiectasis and cough hypersensitivity.

Figure 3 (page 5) summarises the treatable traits associated with chronic cough.

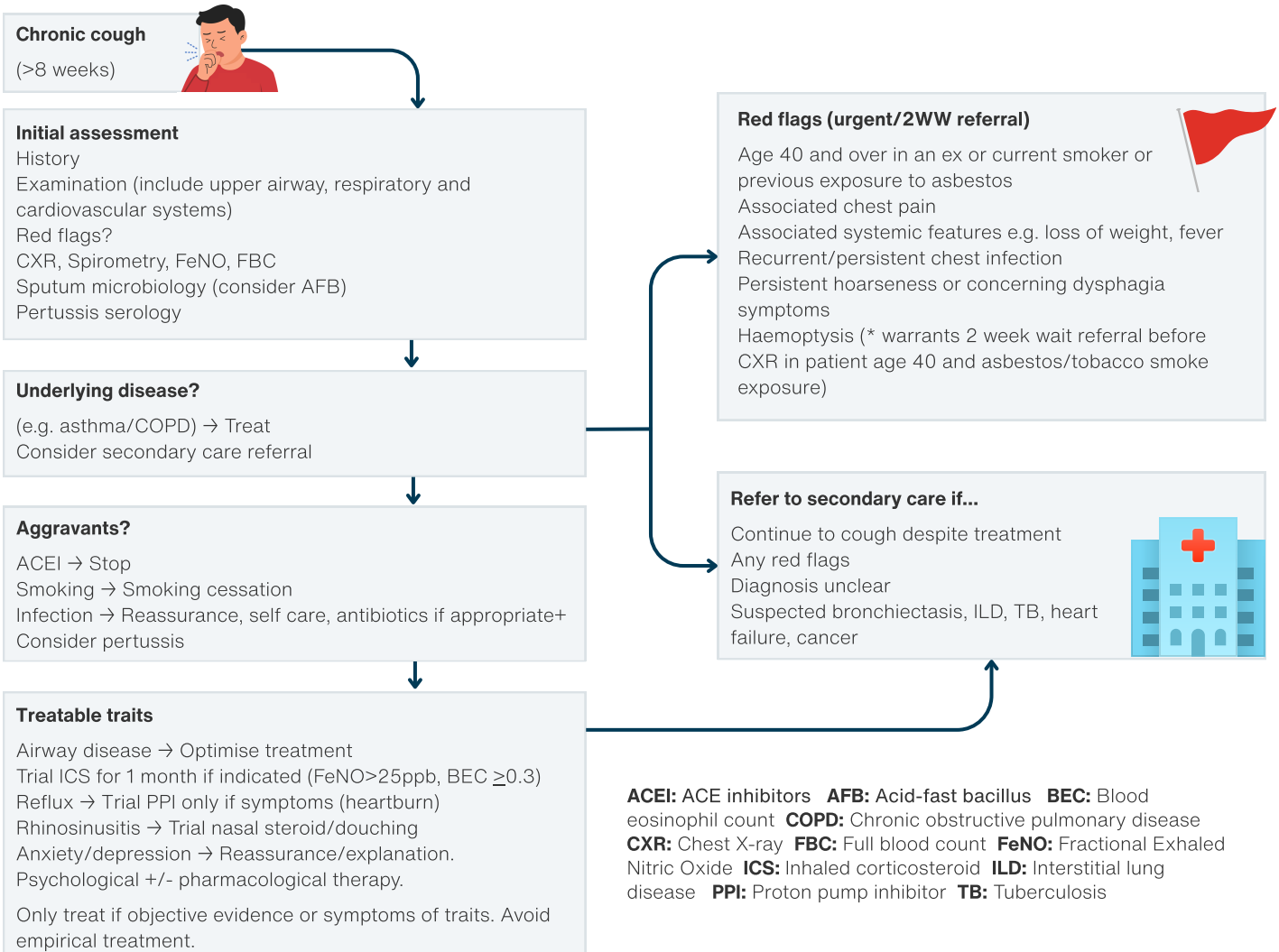
1.2 Why is it so important to get this right in primary care?

Chronic cough:

- affects up to 5% of adults in UK practice;⁶
- significantly impairs quality of life, causing sleep disturbance, social and psychological distress, urinary incontinence (50% of women with chronic cough) and cough syncope;¹
- frequently leads to repeated healthcare utilisation;
- may persist despite treatment of underlying disease due to cough hypersensitivity.

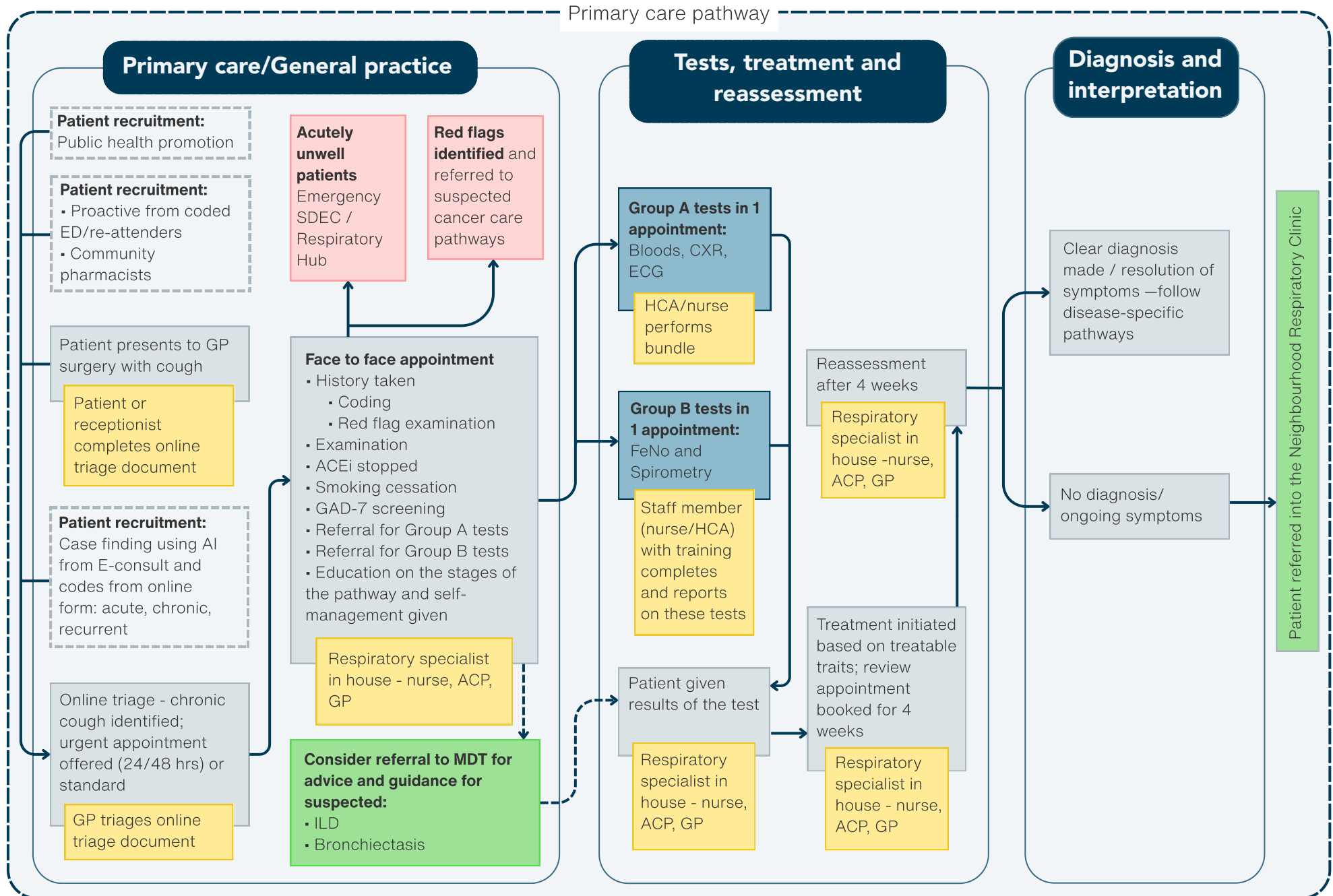
2. National pathways on the management of chronic cough

Figure 1: 2023 British Thoracic Society (BTS) Clinical Statement on chronic cough in primary care



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Figure 2: National CLEAR Programme chronic cough pathway



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graph TD
    subgraph Neighbourhood_Clinic [Neighbourhood clinic]
        direction TB
        A[Patient referred into the Neighbourhood Respiratory Clinic] --> B[Clinician refers patient into neighbourhood clinic]
        B --> C[Initial appointment in neighbourhood clinic:  
GP with specialist role / Community resp consultant / ANP — this role must be able to prescribe.  
• Explore results of tests  
• Prescribe medication if needed  
• Education and advice  
• Referral to 1+ clinic roles  
• Makes a referral to other role in clinic/ further testing, or discharges the patient]
        C --> D[Appointment with clinic member:  
• AHP  
• Psychology  
• Smoking cessation  
• Wellbeing & lifestyle coach  
• Specialist nurse  
• MDT member sees patient and assesses if further review or discharge is needed; refers back to initial clinician]
        D --> E[2nd review post-intervention:  
By a member of the neighbourhood clinic who is able to prescribe  
• Refers patient back into neighbourhood clinic/takes patient to MDT/makes a diagnosis  
• Referred back to another role within the clinic]
        E --> F[Discussed at MDT:  
Core - Respiratory consultant; Respiratory Physician +/-cardiac input; ANP.  
Nice to have - AHPs  
• Discussion at MDT, referral to neighbourhood clinic or secondary care]
        F --> G[Diagnosis of problem that is not respiratory]
    end

    subgraph Secondary_Care [Secondary care]
        direction TB
        H[Referral to secondary care for specialist care or advice & guidance  
• Patient is contacted to discuss next steps and referral into secondary care]
        I[Referral to specialist in secondary care or a specialist other service, plus advice and guidance  
• Patient is contacted to discuss next steps and referral into secondary care]
    end

    C --> H
    E --> I
    F --> H
    F --> I
    G --> I

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Neighbourhood clinic

Neighbourhood clinic workforce GPwER; ANPs; Specialist nurse; Pharmacist; AHPs

Patient referred into the Neighbourhood Respiratory Clinic

Clinician refers patient into neighbourhood clinic

Initial appointment in neighbourhood clinic:
GP with specialist role / Community resp consultant / ANP — this role must be able to prescribe.
• Explore results of tests
• Prescribe medication if needed
• Education and advice
• Referral to 1+ clinic roles
• Makes a referral to other role in clinic/ further testing, or discharges the patient

Appointment with clinic member
• AHP
• Psychology
• Smoking cessation
• Wellbeing & lifestyle coach
• Specialist nurse
MDT member sees patient and assesses if further review or discharge is needed; refers back to initial clinician

2nd review post-intervention:
By a member of the neighbourhood clinic who is able to prescribe
Refers patient back into neighbourhood clinic/takes patient to MDT/makes a diagnosis
Referred back to another role within the clinic

Discussed at MDT
Core - Respiratory consultant; Respiratory Physician +/-cardiac input; ANP.
Nice to have - AHPs
Discussion at MDT, referral to neighbourhood clinic or secondary care

Diagnosis of problem that is not respiratory

Referral to secondary care for specialist care or advice & guidance
Patient is contacted to discuss next steps and referral into secondary care

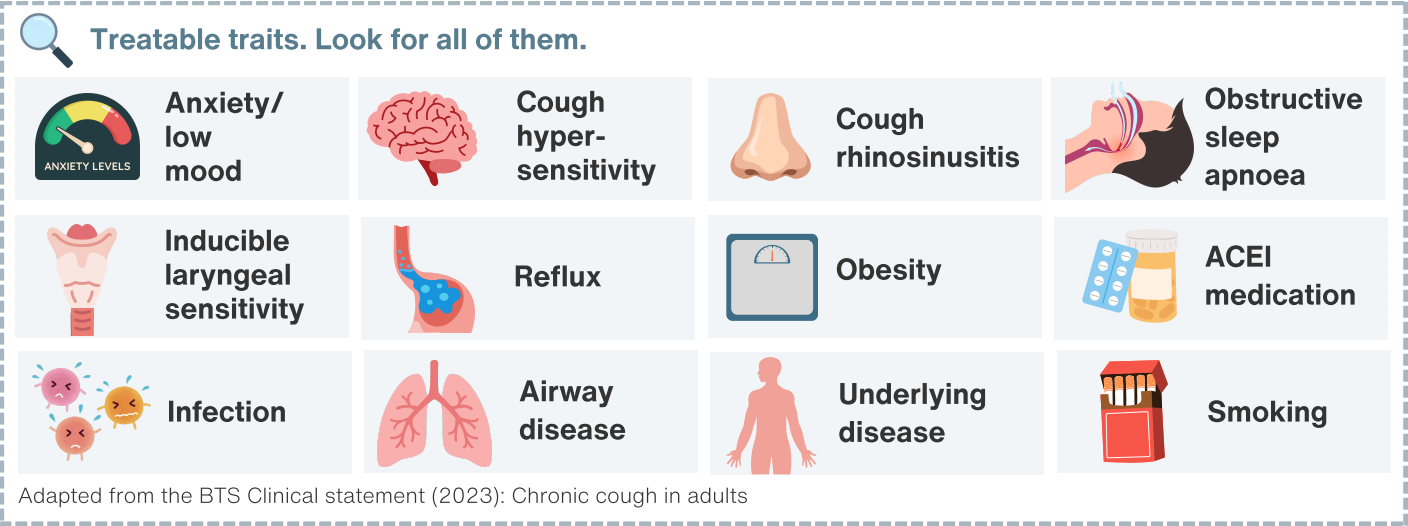
Referral to specialist in secondary care or a specialist other service, plus advice and guidance
Patient is contacted to discuss next steps and referral into secondary care

abx: antibiotics **ACP:** Advanced Clinical Practitioner **AHP:** Allied Healthcare Professional **ANP:** Advanced Nurse Practitioner **CXR:** Chest X-ray **ECG:** Electrocardiogram
FeNo: Fractional exhaled nitric oxide **GPwER:** GP with an Extended Role **HCA:** Healthcare Assistant **MDT:** Multi-disciplinary team **ILD:** Interstitial lung disease
SDEC: Same Day Emergency Care

Colour key

- Primary care/general practice
- Test bundle (Neighbourhood/primary care/CDC)
- Neighbourhood Clinic
- Secondary care
- Pathway step/workforce

Figure 3: Treatable traits in chronic cough



3. How should you assess and support someone presenting with chronic cough?

Presentation of someone with chronic cough

Individuals with chronic cough may present to a community pharmacist or primary care clinician. As recurrent or persistent cough is often initially reported as an acute cough, a careful history is needed to establish symptom duration.

Coding

The initial consultation of a patient with chronic cough should be SNOMED coded: **SNOMED 68154008** is chronic cough. Consistent coding makes the cohort searchable, supports case-finding among repeat attenders, and allows audit against the standard that most patients should have a diagnosis and management plan within six months of presentation.¹

Step 1: Initial assessment

History

This should direct questioning to highlight any red flags necessitating an urgent suspected cancer care referral (Table 1).

Table 1: Red flags (urgent suspected cancer care referral pathway)¹

RED FLAG	☐	Age 40 and over in an ex or current smoker or previous exposure to asbestos
	☐	Persistent chest pain
	☐	Unexplained loss of weight
	☐	Recurrent or persistent chest infection
	☐	Persistent fever
	☐	Persistent hoarseness or dysphagia
	☐	Haemoptysis (warrants urgent referral before chest X-ray if over 40 and asbestos/tobacco smoke exposure)
	☐	Finger clubbing

If no red flags are identified, a more detailed history should be taken including:

- Duration and pattern of cough.
- Whether the cough is dry or productive (a productive cough may indicate infection or airway inflammation).
- Smoking and vaping history.
- Occupational and addressable social environmental exposures/triggers (housing conditions, exposure to tobacco smoke, and indoor and outdoor air pollution. Identify practical opportunities to reduce exposure and consider referral to housing, occupational health, smoking cessation or social support services where appropriate).
- Current medications, particularly ACE inhibitors.
- Symptoms suggestive of asthma, chronic obstructive pulmonary disease (COPD), rhinosinusitis, reflux (especially heartburn), bronchiectasis or interstitial lung disease.
- Consider tuberculosis (TB) if recent travel in an endemic area or possible close contact.

The impact of cough on sleep, daily activities, work, social functioning and mental wellbeing should also be assessed by asking: "How does your cough affect your life?" Specifically enquire about urinary incontinence and cough syncope, as syncope must be reported to the DVLA.

Top tip

Red flags and urgent suspected cancer care pathway

People with chronic cough and red flag symptoms should be referred under the urgent suspected cancer care pathway.

Examination

- General: Looking for anaemia, signs of weight loss, finger clubbing
- Chest
- Upper airway: Looking for signs of nasal inflammation, including swollen inferior nasal turbinates
- Cardiovascular: If indicated from the history e.g. chest pain, breathlessness on exertion

Investigations in primary care

The 2023 BTS Clinical Statement for Chronic Cough in Adults recommends a basic pre-referral diagnostic bundle (where available), unless red flags are present:¹

- Chest X-ray
- Full blood count (FBC)
- Diagnostic spirometry
- Fractional exhaled nitric oxide (FeNO)

Additional investigations may be required depending on clinical suspicion. Sputum analysis should be considered if infection, including TB, is suspected. Some services may also provide direct access to CT imaging when bronchiectasis is suspected.

Top tip

Investigations

Individuals presenting with chronic cough should have chest X-ray, spirometry, full blood count (and FeNO if available), unless red flags are present (Table 1, page 5). Consider other investigations and sputum analysis if necessary.

Step 2: Address modifiable aggravants

Whilst awaiting investigation results, address any modifiable aggravants:

- ACE inhibitors: Cough may take up to 4 weeks to improve after discontinuation.
- Smoking and vaping: Offer smoking cessation support. Advise that the cough may initially worsen as cough reflex sensitivity returns. For more information and advice see: www.pcrs-uk.org/resource/current/become-quit-catalyst-very-brief-advice
- Occupational: Address any aggravants which may be occurring because of the person's occupation (ceramic/silica dust, etc).

Self-management advice

Provide concise self-management advice on trigger avoidance, hydration, smoking cessation and reduction of environmental irritants. This should include general measures such as posture, weight loss (if appropriate) and dealing with social and psychological distress. Cough patient guide: <https://adobe.ly/4jCrU4I>



Over the counter (OTC) medication

NICE recommends the use of honey-containing medications at all ages.⁷ Cough suppressants such as dextromethorphan may help, but individuals should be warned about potential side effects (drowsiness and dizziness).

Step 3: Review results of investigations and address treatable traits

- Refer to respiratory team: If initial investigations suggest further assessment is needed e.g. likely interstitial lung disease, bronchiectasis, abnormal chest X-ray.
- Address treatable traits: Management should be guided by objective findings wherever possible. Multiple treatable traits may coexist and require simultaneous treatment.

More common treatable traits are:¹

- Airways disease (asthma and COPD): Optimise in line with disease specific guidance^{8,9}.
- Upper airways cough syndrome: Consider a 4–8-week trial of intranasal steroids and saline intranasal douching if there are symptoms of nasal obstruction, post-nasal drip and evidence of swollen inferior nasal turbinates.
- Gastro-oesophageal reflux: Consider a trial of proton pump inhibitors e.g. lansoprazole 30mg bd (per day) or equivalent for 1 month for people with heartburn symptoms.
- Cough hypersensitivity and RCC: RCC is defined as a chronic cough that persists despite appropriate investigation and guideline-based treatment of recognised causes.¹⁰ It is considered a manifestation of cough hypersensitivity and is a diagnosis of exclusion. Patients with suspected RCC should be referred for specialist assessment where available. RCC should only be diagnosed when other cause of cough have been excluded/treated.

Symptoms for cough hypersensitivity/RCC include:

- A dry cough.
- A sensation of cough/“tickle” emanating from the throat.
- The cough worsening with low level stimuli such as fumes, smells, phonation, change in temperature and worse in the day.
- RCC should only be diagnosed when other cause of cough have been excluded/treated.

Mild cough hypersensitivity can be helped by self-management measures and over-the-counter cough remedies. Speech and language therapy can help.² Centrally acting agents such as morphine and gabapentin can be effective but may be associated with side effects. Peripherally acting agents are being developed for treatment of RCC.

Top tip

Trials of treatment

Only offer trials of treatment for objectively identified treatable traits and optimise airways disease such as asthma and COPD in line with national, disease specific, guidance.

Step 4: Review at 4 weeks after treatment initiation

Complete symptom resolution

- Record the underlying diagnosis (for example, asthma)
- Continue condition-specific management

If there is partial improvement

- Check adherence to therapy, and
- Consider a 4-week further trial of therapy but refer for specialist assessment if there is no improvement.

If there is no improvement

- Check adherence to therapy
- CONSIDER REFERRAL: This should include support for associated problems (depression, continence, etc)

When to refer for specialist assessment:

- Urgently (2-week wait pathway) if red flag symptoms are present
- If initial investigations suggest a condition requiring specialist management such as bronchiectasis, interstitial lung disease (ILD) or TB
- If there is no meaningful response to treatment of identified treatable traits after 4 weeks
- If the patient has complex multimorbidity or diagnostic uncertainty

Role of the multidisciplinary team

The National CLEAR Programme pathway promotes a neighbourhood-based multidisciplinary respiratory service comprising respiratory specialists (consultants, GPs with a special interest or specialist nurses), pharmacists, physiotherapists and speech and language therapists.

Where available, these teams can provide:

- Diagnostic assessment and support
- Specialist management advice, including virtual consultation
- Targeted interventions, such as speech and language therapy for cough hypersensitivity or physiotherapy

As service availability varies across regions, clinicians should identify local referral pathways and sources of specialist advice.

Local service information

Establish:

- The appropriate referral pathway for patients with chronic cough.
- Which specialist services are available locally, such as dedicated cough clinics, multidisciplinary respiratory teams or direct access to speech and language therapy

Top tip

Availability of specialist services

Establish which advice, diagnostic and management services are available for people with chronic cough in your locality by contacting the secondary care respiratory team i.e. “Who do I refer to in my locality?”

4. Top tips for the management of chronic cough in primary care



Code all patients with chronic cough (>8 weeks) at initial consultation e.g. **SNOMED 68154008** “chronic cough”.



People with chronic cough and red flag symptoms should be referred under urgent suspected cancer care pathway



Individuals presenting with chronic cough should have chest X-ray, spirometry, full blood count (and FeNo if available) unless red flags present. Consider other investigations and sputum analysis if necessary.



Only offer trials of treatment for objectively identified treatable traits and optimise airways disease such as asthma and COPD in line with national, disease specific, guidance.^{8,9}



Establish which advice, diagnostic and management services are available for people with chronic cough in your locality by contacting the secondary care respiratory team i.e. “Who do I refer to in my locality?”

Resources

Primary Care Respiratory Society (PCRS)

- Management of chronic cough in primary care – on demand webinar: www.pcrs-uk.org/resource/current/demand-webinar-management-chronic-cough-adults-within-primary-care
- Managing cough in primary care: www.pcrs-uk.org/resource/current/managing-cough-primary-care
- Become a quit catalyst: Very brief advice: www.pcrs-uk.org/resource/current/become-quit-catalyst-very-brief-advice

British Thoracic Society (BTS)

- Quality standards (2026): Chronic cough in adults: www.brit-thoracic.org.uk/clinical-resources/quality-standards/chronic-cough-in-adults/
- Clinical statement (2023): Chronic cough in adults: www.brit-thoracic.org.uk/clinical-resources/clinical-statements/chronic-cough-in-adults/

Resources (cont.)

National CLEAR Programme

- www.clearprogramme.org.uk

Health Innovation, Oxford

- Elective Care Respiratory Pathways programme: www.healthinnovationoxford.org/clinical-priorities/respiratory/elective-care-respiratory-programme/
- Optimising chronic cough management across the patient pathway: www.healthinnovationoxford.org/clinical-priorities/respiratory/elective-care-respiratory-programme/chronic-cough/

NHS England and Improvement

- Advice and Guidance (A&G) for chronic cough. These will be made available via GIRFT - <https://gettingitrightfirsttime.co.uk>

Respiratory Futures

- Cough: A library of free resources on cough: www.respiratoryfutures.org.uk/health-condition-resources/cough/

Patient information

- <https://patient.info/chest-lungs/cough-leaflet/chronic-persistent-cough-in-adults>

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9. National Institute for Health and Care Excellence (NICE). NG115. Chronic obstructive pulmonary disease in over 16s: diagnosis and management. December 2018. Available from: <https://www.nice.org.uk/guidance/ng115>
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