

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



Introduction

Chronic breathlessness in adults is defined as breathlessness lasting longer than 8 weeks.¹ It is among the most common reasons people consult in primary care, and it frequently becomes a long-term condition driven by multiple treatable traits rather than a single disease. Many patients attend healthcare settings repeatedly before an explanatory diagnosis and effective management plan are reached.

Primary care plays a central role in early identification, investigation and management. A structured approach improves outcomes, reduces variation, avoids unnecessary referrals and supports timely detection and treatment of serious disease.

The 2023 NHS England Adult Breathlessness Pathway (pre-diagnosis) diagnostic pathway support tool sets out recommendations for primary care (Figure 2, page 3).¹

Complementing this, the National CLEAR Programme, working with the Respiratory Transformation Partnership (RTP)'s Elective Care Respiratory Pathways programme, has developed a pathway describing best practice for the delivery of breathlessness services within integrated neighbourhood respiratory care systems (Figure 3, pages 4-5).^{2,3} 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 assessing and managing adults with chronic breathlessness in primary care.

Authors: Dr Anne-Marie Cole, GP; Nicola Standing Brown, Senior Nurse Educator



Health Innovation
Yorkshire & Humber



Acknowledgements: We are grateful to the Health Innovation Network, Oxford (HIN) for the provision of an education grant to support the production of this resource as part of the Elective Care Respiratory Pathways programme: www.healthinnovationoxford.org/clinical-priorities/respiratory/elective-care-respiratory-programme/.



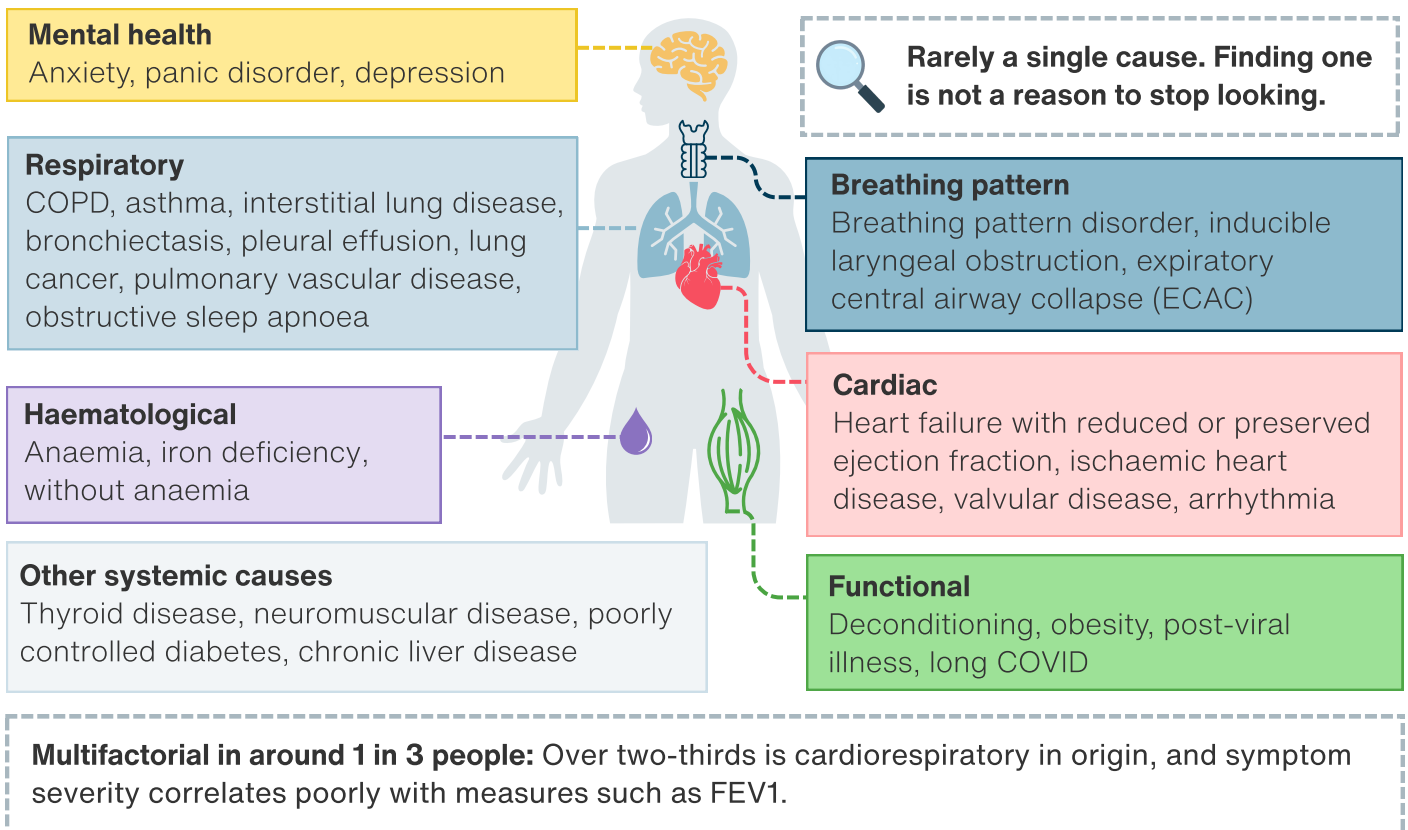
This work has been informed by the NHS England Adult Breathlessness Pathway (pre-diagnosis) diagnostic pathway support tool (2023), the PCRS position statement on breathlessness, and the National CLEAR Programme breathlessness pathway.

1.1 Causes of chronic breathlessness

More than two-thirds of chronic breathlessness is cardiac or respiratory in origin, and half of cases in adults over 40 years are explained by heart failure, chronic obstructive pulmonary disease (COPD), obesity, anaemia, anxiety or depression. However, the aetiology is multifactorial in about a third of people, and symptom severity correlates poorly with objective measurements such as forced expiratory volume (FEV₁).^{1,4}

A treatable traits approach is therefore more useful than a search for one diagnosis: identifying and addressing each contributing mechanism and address each, rather than treating only the dominant condition. Figure 1 (below) groups the causes by system. Figure 5 (page 10) summarises the treatable traits associated with chronic breathlessness.

Figure 1: Causes of chronic breathlessness, grouped by system.



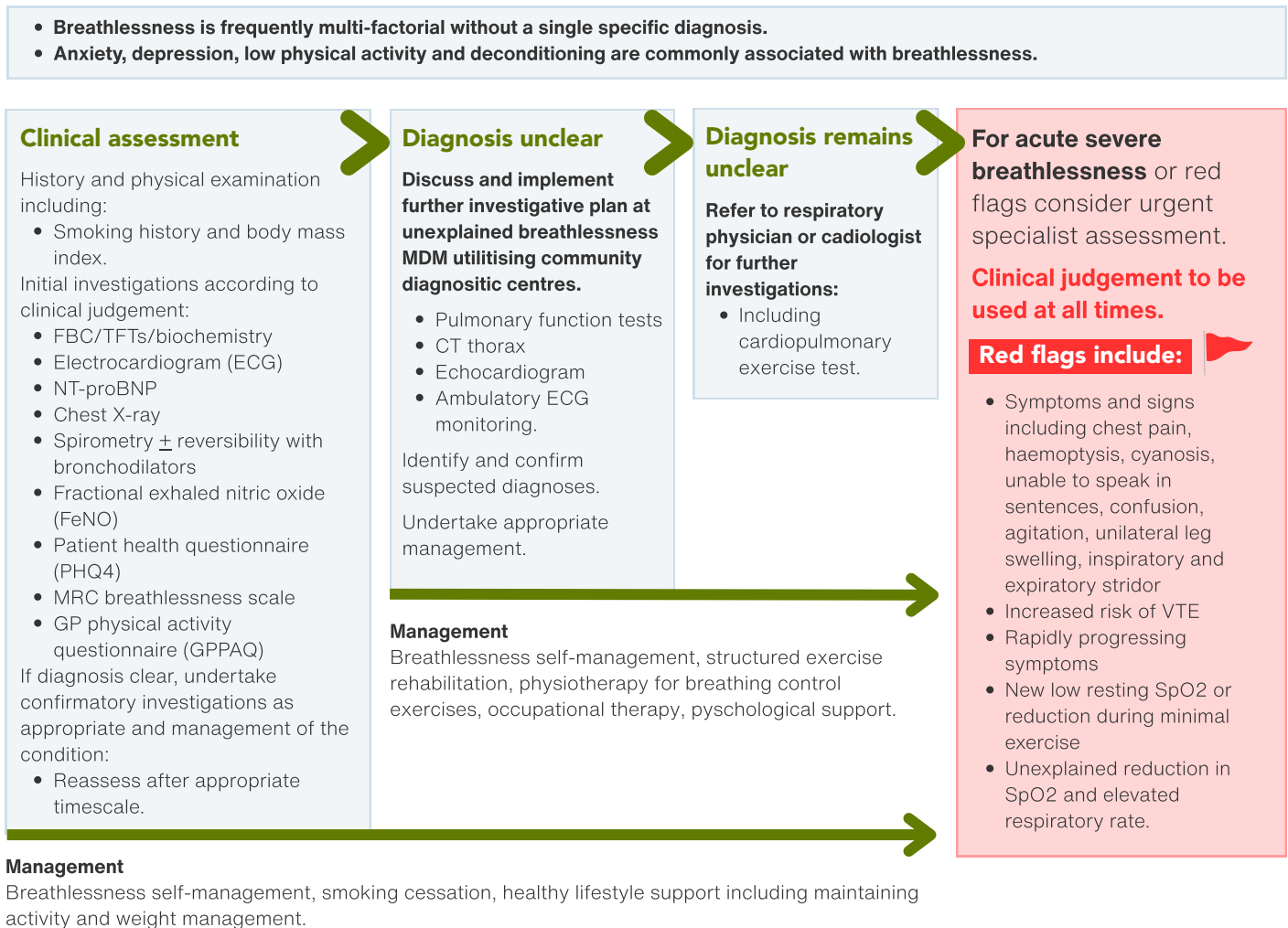
1.2 Why is it so important to get this right in primary care?

Chronic breathlessness:

- is reported by 9–11% of the general population, rising to 25% of people over 70;¹
- occurs unequally: one in four of the poorest fifth of the population is affected daily;⁵
- significantly impairs quality of life, causing loss of independence, social isolation;⁶
- drives high healthcare use, accounting for about 4% of GP consultations, 5% of emergency department presentations and reported by 12% of patients at medical admission;¹
- is frequently diagnosed late. Over half of people later diagnosed with COPD had presented with respiratory symptoms for more than five years beforehand.⁷ Heart failure is also diagnosed late: only a quarter of people with heart failure followed the correct diagnostic pathway and 79% were diagnosed during an emergency admission.^{8,9}

2. National pathways on the management of chronic breathlessness

Figure 2: NHS England Diagnostic pathway for patient presenting with chronic persistent breathlessness 2023 (>8 weeks duration)



FBC: Full blood count **TFTs:** Thyroid function tests **VTE:** Venous thromboembolism

Unexplained breathlessness Medical Decision Making (MDM): The assessment, diagnosis and management of breathlessness is hampered by its inherent complexity and a multidisciplinary approach should be taken, with the patient utilising a one-stop-shop approach at a local community diagnostic centre where this is available.

Adapted from NHSE <https://www.england.nhs.uk/wp-content/uploads/2023/04/diagnostic-pathway-diagram-scaled.jpg>

Figure 3: National CLEAR Programme Breathlessness Pathway

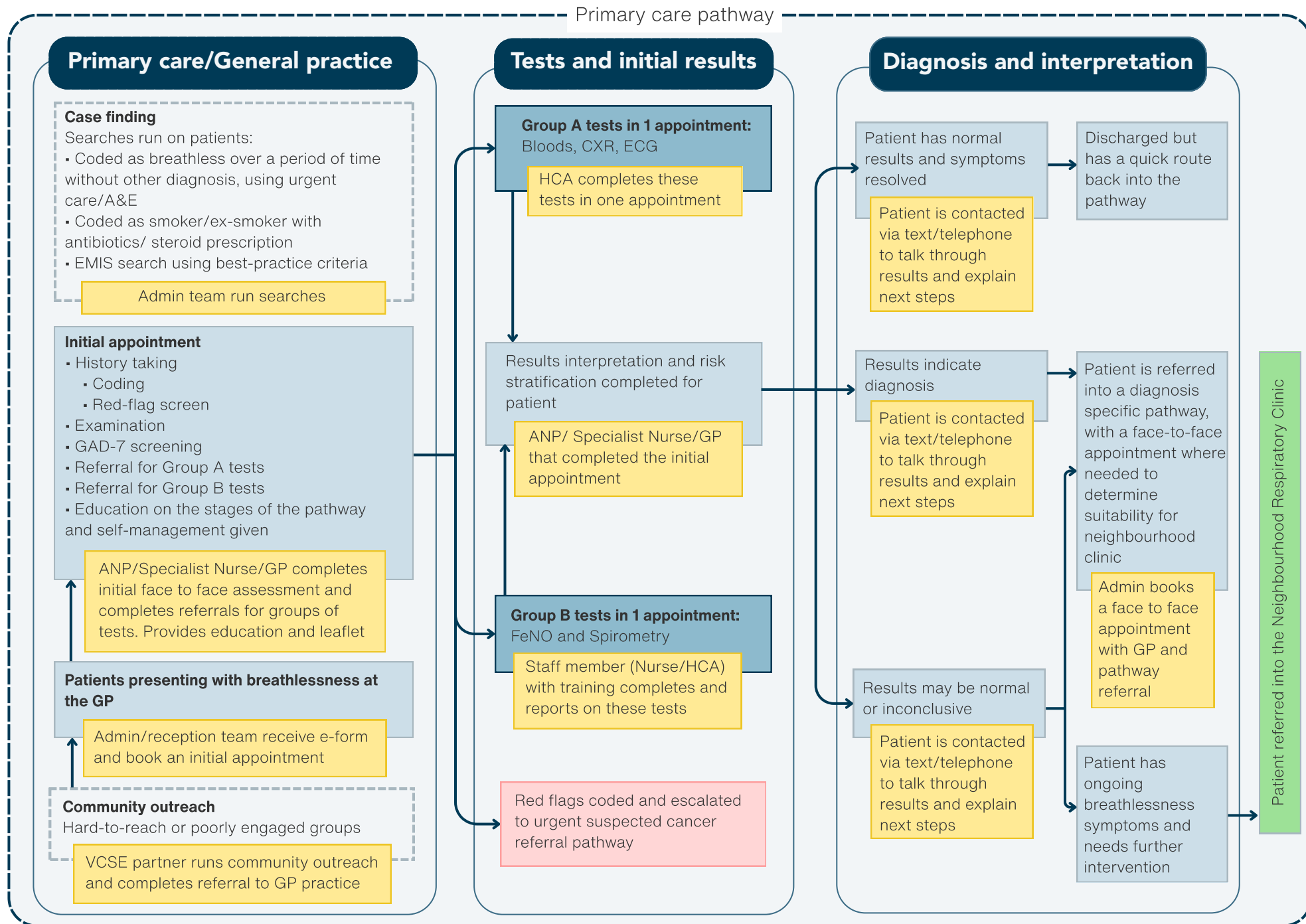
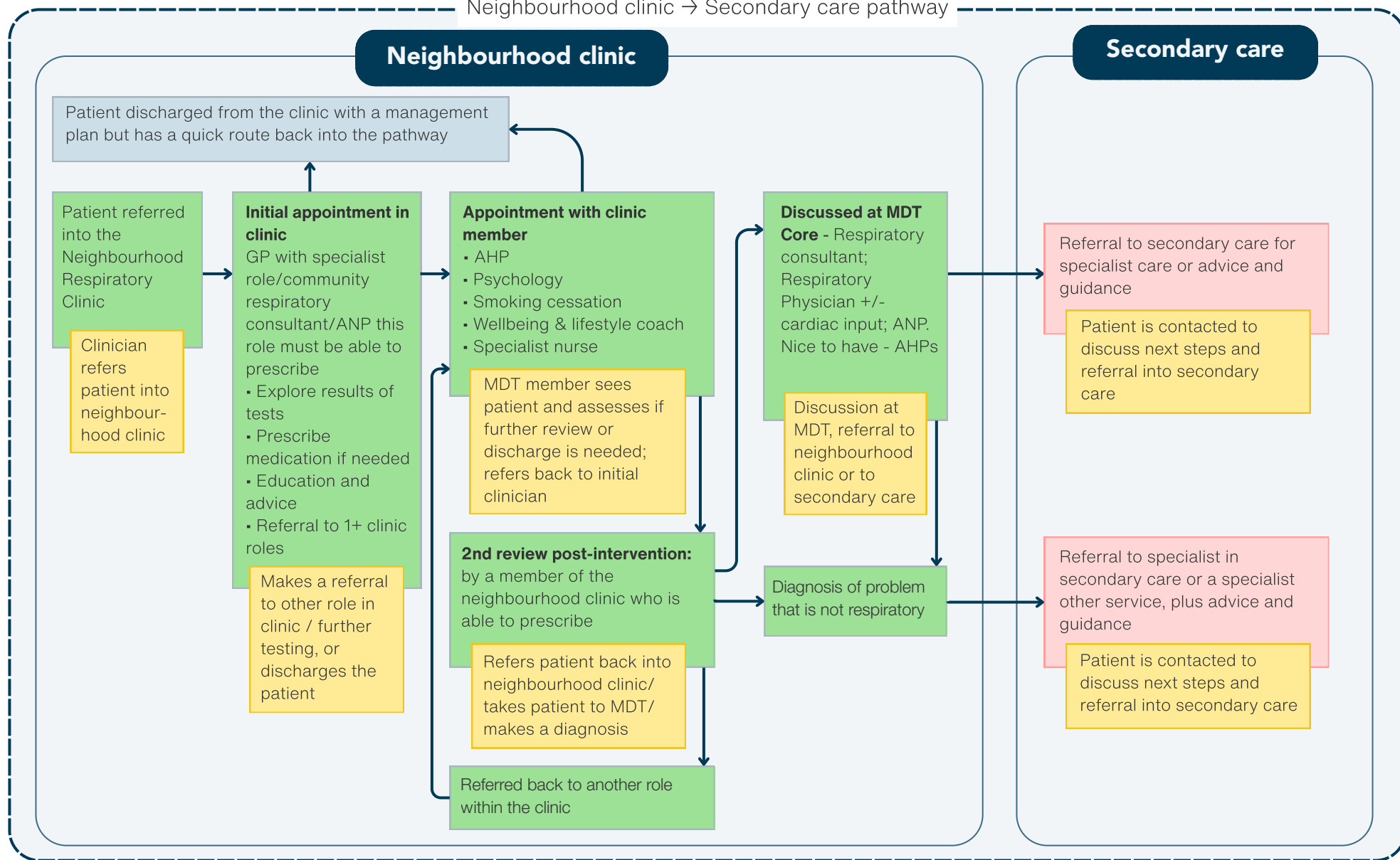


Figure 3: National CLEAR Programme Breathlessness Pathway (cont.)

Neighbourhood clinic → Secondary care pathway



abx: antibiotics **AHP:** Allied Healthcare Professional **ANP:** Advanced Nurse Practitioner **CXR:** Chest x-ray **ECG:** Electrocardiogram

FeNo: Fractional exhaled nitric oxide **HCA:** Healthcare Assistant **MDT:** Multi-disciplinary team **VCSE:** Voluntary, Community and Social Enterprise

Colour key Primary care/general practice

Test bundle (Neighbourhood/primary care/CDC)

Neighbourhood Clinic

Secondary care

Pathway step/workforce

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

Presentation of someone with chronic breathlessness

Breathlessness is often attributed by the patient to age, weight or unfitness and may not be reported spontaneously, so a careful history is needed to establish duration. Patients may not raise it repeatedly, and a proactive approach to reassessment is encouraged.¹

Coding

The initial consultation of a patient with chronic breathlessness should be SNOMED coded: **SNOMED 870535009** is chronic breathlessness lasting at least 8 weeks. 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 first exclude red flags requiring same-day or urgent referral (Table 1, below). People without a diagnosis need a face-to-face consultation so that physical examination can be performed.

Table 1: Red flags (urgent suspected cancer care referral pathway)¹⁰

 RED FLAG	ACTION
☐ Acute or rapidly worsening breathlessness	Same-day assessment. Consider pulmonary embolism (PE), pneumothorax, acute coronary syndrome, acute heart failure, sepsis
☐ Stridor, or unable to speak in full sentences	Same-day emergency assessment. Do not attempt spirometry
☐ New hypoxia, confusion, agitation or cyanosis	Same-day assessment. Includes a fall in saturations on minimal exertion
☐ Haemoptysis in anyone aged 40 or over	Urgent suspected cancer pathway referral, before chest X-ray, or following local guidelines
☐ Unexplained weight loss, night sweats or persistent fever	Investigate for malignancy or tuberculosis
☐ Persistent hoarseness, dysphagia or unexplained neck lump	Urgent suspected cancer pathway referral
☐ Exertional syncope or pre-syncope	Urgent cardiology referral. Consider aortic stenosis, pulmonary hypertension, arrhythmia. Advise on DVLA reporting
☐ N-terminal pro-B-type natriuretic peptide (NT-proBNP) above 2000 ng/L	Specialist assessment and echocardiography within 2 weeks
☐ Unilateral leg swelling, recent surgery, immobility or active cancer	Consider PE. Same day assessment
☐ Finger clubbing	Consider urgent chest X-ray (to be performed within 2 weeks) to assess for lung cancer in people aged 40 years and over

If no red flags are identified, take a more detailed history including:

- Duration, onset, pattern and variability of breathlessness.
- Associated cough, sputum, wheeze, chest pain, palpitations, ankle swelling and fatigue.
- Triggers such as exercise, cold air, allergens, emotional stress or posture.
- Orthopnoea and paroxysmal nocturnal dyspnoea.
- Smoking and vaping history, including cannabis and other inhaled substances.
- Occupational and environmental exposures.
- Current medication and recent changes in therapy.
- Comorbidities, previous venous thromboembolism, sleep quality and alcohol consumption.
- Mental health, especially anxiety and psychological distress.
- Carer support and informal networks, including social isolation.

Assess the impact on sleep, daily activities, work, social functioning and mental wellbeing by asking: “How does your breathlessness affect your life?” Severity should be recorded using the Modified Medical Research Council (MRC) dyspnoea scale (Table 2, below). Specifically enquire about exertional syncope or pre-syncope, as syncope must be reported to the DVLA.

Table 2: Modified Medical Research Council (MRC) dyspnoea scale

Grade	Degree of breathlessness related to activity
1	Not troubled by breathlessness except on strenuous exercise
2	Short of breath when hurrying on the level or walking up a slight hill
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace
4	Stops for breath after walking about 100 yards or after a few minutes on level ground
5	Too breathless to leave the house, or breathless when dressing or undressing

Top tip

Ask the patient what they have stopped doing

Patients often describe the limitation before they describe the breathlessness. Ask what they have stopped doing. It gives you the MRC grade, an insight into functional impact and a starting point for goal setting, all in one question.

Examination

- General: body mass index (BMI), signs of anaemia, weight loss, finger clubbing.
- Vital signs: blood pressure, pulse rate and rhythm, respiratory rate, temperature, oxygen saturation at rest and on exertion.
- Chest: breathing pattern and accessory muscle use, auscultation.
- Cardiovascular: heart sounds, peripheral oedema, jugular venous pressure.
- Musculoskeletal: quadriceps bulk as a marker of deconditioning; calf swelling or tenderness suggesting deep vein thrombosis.

Investigations in primary care

Investigations (tests) for breathlessness can be disjointed, causing delays. To avoid this, they should be bundled as outlined in Figure 4 (below). Offering a single-appointment approach, if operationally feasible, is ideal to reduce fragmentation and delay.

Figure 4: Initial investigation bundles, grouped for efficient delivery

GROUP A (One appointment)		HCA or trained nurse
<ul style="list-style-type: none"> • Full blood count • Thyroid function tests (TFTs) 	<ul style="list-style-type: none"> • 12-lead ECG • Renal, liver and bone profile 	<ul style="list-style-type: none"> • NT-proBNP • Chest X-ray
GROUP B (One appointment)		Nurse or HCA trained in the tests
<ul style="list-style-type: none"> • Spirometry +/-reversibility • Oxygen saturation at rest and on exertion 	<ul style="list-style-type: none"> • MRC dyspnoea grade • FeNO where airways disease is suspected 	<ul style="list-style-type: none"> • Height, weight, BMI, waist and neck • PHQ-4 or GAD-7
Consider (if the picture suggests it)		Requested by the assessing clinician
<ul style="list-style-type: none"> • Iron studies* • Sleep-disordered breathing screen 	<ul style="list-style-type: none"> • CT thorax, ambulatory ECG, full PFTs • D-dimer with Wells score 	<ul style="list-style-type: none"> • Echocardiography • Cardiopulmonary exercise testing
*Caution recommended regarding ferritin as this is an acute phase reactant and will be raised in infection/inflammation		



A note on sequencing

NHS England advises fractional exhaled nitric oxide (FeNO) before spirometry. Where FeNO is unavailable locally, do not hold up the rest of the bundle.



Important to note

A normal test does not mean a normal patient. Spirometry may be normal in asthma, NT-proBNP may be normal in heart failure with preserved ejection fraction (HFpEF), and a raised BMI can produce a restrictive pattern with no lung disease. Interpret the results together, explaining to the patient that normal initial tests do not always provide an answer and may mean that further investigation is needed.

NT-proBNP drives the referral timeframe for suspected heart failure, though local waiting times should be considered.

Above 2000 ng/L	Specialist assessment and echocardiography within two weeks
400–2000 ng/L	Assessment within six weeks
Below 400 ng/L	Makes heart failure less likely, though it does not exclude heart failure with preserved ejection fraction. ¹¹

Top tip

Bundle the investigations

Bloods, chest X-ray and ECG as one appointment; spirometry, FeNO and physical measurements as another. Fragmenting tests is the main cause of delay.

Step 2: Address modifiable aggravants

While awaiting investigation results, address any modifiable aggravants or contributors rather than waiting for a diagnosis:

- Smoking and vaping: offer tobacco dependency treatment at every contact. This is the single most effective intervention across almost every cause on the list.
- Medication review: consider rate-limiting drugs, drugs causing fluid retention and drug-induced interstitial lung disease. Check inhaler technique and adherence where inhaled therapy is already prescribed.
- Deconditioning: encourage graded, paced activity rather than rest. Do not wait for investigations to finish before starting.
- Weight: refer to local weight management where appropriate and consider obesity-related appropriate and restrictive physiology and obstructive sleep apnoea.
- Environmental exposure: damp and mould, occupational dusts and fumes, and indoor and outdoor air quality.
- Add suspected clinical code where possible, for example: asthma suspected 394967008, COPD suspected 204991000000107.

Top tip

Think multifactorial

Finding one cause is not a reason to stop looking, and a normal test does not mean a normal patient.

Self-management advice

From the initial presentation, provide self-management advice, address lifestyle issues and support mental health where appropriate.¹ This should include breathing control, pacing, the handheld fan for episodes of breathlessness, and community resources that help people learn to breathe better such as walking groups, swimming, yoga, pilates or tai chi. Personal care plans should include these options.



Top tip

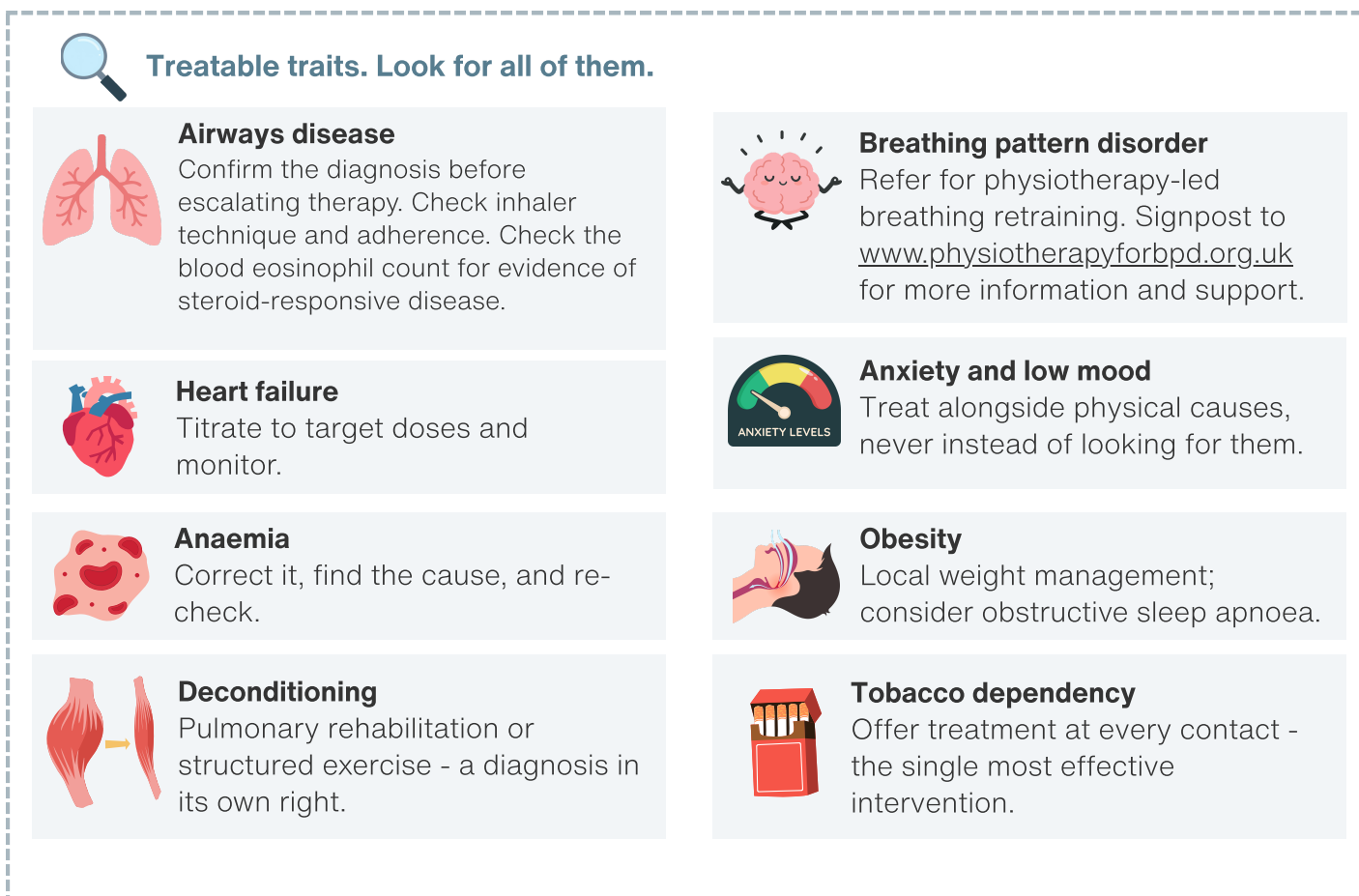
Discuss the fear-avoidance cycle

Address the fear-avoidance cycle directly. Many patients restrict activity out of fear, which causes deconditioning, which worsens breathlessness on exertion. Explaining that breathlessness is usually not harmful and encouraging graded activity alongside referral to rehabilitation can be as valuable as pharmacological optimisation.

Step 3: Review results of investigations and address treatable traits

- Refer to the respiratory or cardiology team: where initial investigations suggest further assessment is needed, for example likely interstitial lung disease, bronchiectasis, an abnormal chest X-ray, or a raised NT-proBNP.
- Address treatable traits: management should be guided by objective findings wherever possible. Multiple treatable traits commonly coexist and require simultaneous treatment (Figure 5, page 10).

Figure 5: Treatable traits in chronic breathlessness



Where investigations are normal but symptoms persist, do not stop. Deconditioning, breathing pattern disorder, obesity and anxiety are positive diagnoses with specific treatments, not labels applied when tests are unremarkable. Anxiety and breathlessness reinforce one another through hyperventilation, so screen explicitly rather than either dismissing symptoms as ‘just anxiety’ or ignoring anxiety once a physical cause is found.

When to refer for specialist assessment:

Immediately or same day where acute severe breathlessness or same-day red flags are present. Urgently, on the suspected cancer pathway, where relevant red flags are present. Where initial investigations suggest a condition requiring specialist management, such as interstitial lung disease, bronchiectasis or heart failure. Where there is no meaningful response to treatment of identified treatable traits after 4–8 weeks. Where the diagnosis remains unclear, symptoms are disproportionate to the findings, or there is complex multimorbidity or diagnostic uncertainty. Where the patient, carer or family remains concerned.

Top tip

Availability of specialist services

Establish what advice, diagnostic and management services are available for people with breathlessness in your locality to inform referral for specialist assessment. This could be via your secondary care teams.

4. Top tips for the management of breathlessness in primary care



Code all patients with chronic breathlessness (over 8 weeks) at the initial consultation, using **SNOMED 870535009** “chronic breathlessness”.



Bundle the investigations. Bloods, chest X-ray and ECG as one appointment; spirometry, FeNO and physical measurements as another. Fragmenting tests is the main cause of delay.



Ask a breathless patient what they have stopped doing and name the fear-avoidance cycle out loud.



Think multifactorial. Finding one cause is not a reason to stop looking, and a normal test does not mean a normal patient.



Establish what advice, diagnostic and management services are available for people with breathlessness in your locality to inform referral. This could be via your secondary care teams.

Resources

Primary Care Respiratory Society (PCRS)

- Management of chronic breathlessness in primary care – On demand webinar: www.pcrs-uk.org/resource/current/demand-webinar-management-chronic-breathlessness-adults-within-primary-care
- PCRS Position Statement - Chronic breathlessness www.pcrs-uk.org/resource/current/pcrs-position-statement-chronic-breathlessness
- Spirometry: www.pcrs-uk.org/spirometry
- FeNO: www.pcrs-uk.org/feno
- Breathing, Thinking, Function Model to Support the Management of Breathlessness: www.pcrs-uk.org/resource/current/breathing-thinking-functioning-model-support-management-breathlessness
- Podcast – The impact of respiratory disease on mental health: www.pcrs-uk.org/resource/current/podcast-impact-respiratory-disease-mental-health

NHS England and Improvement

- Adult breathlessness pathway (pre-diagnosis) and chronic breathlessness e-learning via Respiratory Futures: www.england.nhs.uk/long-read/adult-breathlessness-pathway-pre-diagnosis-diagnostic-pathway-support-tool
- Advice and Guidance (A&G) for breathlessness. These will be made available via GIRFT: <https://gettingitrightfirsttime.co.uk>

Resources (cont.)

The 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/
- Scaling breathlessness pathways in primary and secondary care: www.healthinnovationoxford.org/clinical-priorities/respiratory/elective-care-respiratory-programme/breathlessness

Asthma + Lung UK

- Breathlessness information: www.asthmaandlung.org.uk/symptoms-tests-treatments/symptoms/breathlessness

International Primary Care Respiratory Group (IPCRG)

- Desktop Helper No.17 - Breathlessness in adults: A practical guide for primary care clinicians www.ipcrg.org/DTH17

References

1. NHS England. Adult breathlessness pathway (pre-diagnosis): diagnostic pathway support tool. 2023. Available at: <https://www.england.nhs.uk/long-read/adult-breathlessness-pathway-pre-diagnosis-diagnostic-pathway-support-tool/> (Accessed 5 August 2026).
2. The National CLEAR Programme. Breathlessness pathway. 2026. Available at: link
3. Respiratory Transformation Partnership (RTP). Elective Care Respiratory Pathways programme. Available at: <https://www.healthinnovationoxford.org/clinical-priorities/respiratory/elective-care-respiratory-programme/>
4. Müllerová H, Lu C, Li H, Tabberer M. Prevalence and Burden of Breathlessness in Patients with Chronic Obstructive Pulmonary Disease Managed in Primary Care. PLOS One 2014;9(1):e85540. <https://doi.org/10.1371/journal.pone.0085540>
5. Asthma & Lung UK. Breathing unequal. July 2023. Available at: <https://www.asthmaandlung.org.uk/breathing-unequal> (Accessed 5 August 2026).
6. Kochovska S, Chang S, Morgan DD, et al. Activities forgone because of chronic breathlessness: a cross-sectional population prevalence study. Palliative Medicine Reports 2020;1(1):166–70. <https://doi.org/10.1089/pmr.2020.0083>
7. Jones et al: Jones RC, Price D, Ryan D, Sims EJ, von Ziegenweidt J, Mascarenhas L, Burden A, Halpin DM, Winter R, Hill S, Kearney M, Holton K, Moger A, Freeman D, Chisholm A, Bateman ED; Respiratory Effectiveness Group. Opportunities to diagnose chronic obstructive pulmonary disease in routine care in the UK: a retrospective study of a clinical cohort. Lancet Respir Med. 2014 Apr;2(4):267–76. doi: 10.1016/S2213-2600(14)70008-6. Epub 2014 Feb 13. PMID: 24717623
8. Bottle A, Kim D, Aylin P, Cowie MR, Majeed A, Hayhoe B. Routes to diagnosis of heart failure: observational study using linked data in England. Heart 2018;104(7):600–5. <https://doi.org/10.1136/heartjnl-2017-312183>
9. Bachtiger et al that is a more recent reference from 2023. Bachtiger P, Kelshiker MA, Petri CF, Gandhi M, Shah M, Kamalati T, Khan SA, Hooper G, Stephens J, Alrumayh A, Barton C, Kramer DB, Plymen CM, Peters NS. Survival and health economic outcomes in heart failure diagnosed at hospital admission versus community settings: a propensity-matched analysis. BMJ Health Care Inform. 2023 Mar;30(1):e100718. doi: 10.1136/bmjhci-2022-100718. PMID: 36921978; PMCID: PMC10030479.

References (cont.)

10. National Institute for Health and Care Excellence. Suspected cancer: recognition and referral. NICE guideline NG12. London: NICE. 2021. Available at: <https://www.nice.org.uk/guidance/NG12/>
11. National Institute for Health and Care Excellence. Chronic heart failure in adults: diagnosis and management. NICE guideline NG106. London: NICE. 2018. Available at: <https://www.nice.org.uk/guidance/ng106>

Other information sources used

- Bestall JC, Paul EA, Garrod R, Garnham R, Jones PW, Wedzicha JA. Usefulness of the Medical Research Council (MRC) dyspnoea scale as a measure of disability in patients with chronic obstructive pulmonary disease. *Thorax* 1999;54(7):581–6. <https://doi.org/10.1136/thx.54.7.581>
- Fisk M, McMillan V, Brown J, et al. Inaccurate diagnosis of COPD: the Welsh National COPD Audit. *Br J Gen Pract* 2019;69(678):e1–e7. <https://doi.org/0.3399/bjgp18X700385>
- Frostad A, Søyseth V, Andersen A, Gulsvik A. Respiratory symptoms as predictors of all-cause mortality in an urban community: a 30-year follow-up. *J Intern Med* 2006;259(5):520–9. <https://doi.org/10.1111/j.1365-2796.2006.01631.x>
- Johnson MJ, Yorke J, Hansen-Flaschen J, et al. Towards an expert consensus to delineate a clinical syndrome of chronic breathlessness. *Eur Respir J* 2017;49(5):1602277. <https://doi.org/10.1183/13993003.02277-2016>
- National Institute for Health and Care Excellence. Chronic obstructive pulmonary disease in over 16s: diagnosis and management. NICE guideline NG115. London: NICE. 2019. Available at: <https://doi.org/www.nice.org.uk/guidance/ng115>
- National Institute for Health and Care Excellence. Breathlessness. Clinical Knowledge Summary. 2022. Available at: <https://cks.nice.org.uk/topics/breathlessness>
- Karsanji U, Lawson CA, Petherick E, et al. Time to diagnosis and long-term outcomes for adults presenting with breathlessness. *Thorax* 26;81:61–70. Available at: <https://doi.org/10.1136/thorax-2024-222795>