

Guidelines for Diagnosing COPD in Primary Care

NHS Calderdale CCG, NHS Greater Huddersfield CCG, NHS North Kirklees CCG, NHS Wakefield CCG, Mid Yorkshire Hospitals NHS Trust and Calderdale and Huddersfield NHS Foundation Trust



Consider a diagnosis of COPD in those over 35 years if:

- Breathlessness that is progressive over time, worse with exercise, persistent chronic cough that may be intermittent or unproductive,
 - Smoker or Ex-smoker
 - Occupational exposure to dust and fumes
 - Chronic sputum production
- and have no clinical features of asthma (see table overleaf)**



If considering COPD, perform quality controlled Spirometry (see Spirometry guidance)

Airflow obstruction is defined as post bronchodilator **FEV₁/FVC <0.7**.

At diagnosis post bronchodilator recording is defined as measurement 20 minutes after administration of 400mcg salbutamol via a spacer during a period of stability. (i.e. no chest infection for 6 weeks)



History and Spirometry confirm

- Chest x-ray
- Full blood count
- Body Mass Index
- Enter diagnosis in electronic record Including classification (see overleaf), MRC Dyspnoea Score, and number of exacerbations in past 12 months
- Start treatment (refer to stable management guidance)

If any of these indicators are present

If in doubt about diagnosis consider the following pointers

Asthma may be present if:

- There is a >400ml increase in FEV₁ in response to bronchodilators
- Serial peak flow measurements show significant diurnal or day to day variability of 15% or more
- There is a >400ml increase in FEV₁ in response to (plain) prednisolone, at least 30mg daily for 2 weeks
- Clinically significant COPD is not present if FEV₁/FVC ratio returns to normal with drug therapy

Refer for more detailed investigations if needed.



If still in doubt

Make a provisional diagnosis and start empirical treatment.



Reassess diagnosis in view of response to treatment. If still in doubt consider referral criteria

Refer to specialist if:

**E-consultation /
Advice & Guidance should be
utilised if available**

- Persistent symptoms and/ or 4 or more exacerbations despite treatment
- Diagnostic uncertainty (e.g. suspected pulmonary hypertension, suspected very severe COPD,
- FEV₁ <30% predicted, aged under 40 years or a family history of alpha1-antitrypsin deficiency)
- A typical symptoms (e.g. haemoptysis, weight loss, night sweats or signs of bronchiectasis or structural lung disease)
- Few features of either asthma or COPD
- Co-morbidities present
- Asthma COPD Overlap Syndrome (ACOS) (see next page)
- Symptoms disproportionate to lung function deficit

References:

Chronic obstructive pulmonary disease in over 16s: diagnosis and management July 2019
<https://www.nice.org.uk/guidance/NG115>

Global Initiative for Chronic Obstructive Lung Disease. 2019 Report.
https://goldcopd.org/wp-content/uploads/2018/11/GOLD-2019-v1.5-FINAL-04Nov2018_WMS.pdf

NICE COPD Quality Standards <https://www.nice.org.uk/guidance/qs10/resources/chronic-obstructive-pulmonary-disease-in-adults-pdf-2098478592709>

Classification of COPD based on airflow limitation (FEV₁ % predicted)

Read Code	Mild FEV ₁ /FVC < 70% FEV ₁ > or equal to 80% predicted	Moderate FEV ₁ /FVC < 70% FEV ₁ between 50% and 80% predicted	Severe FEV ₁ /FVC < 70% FEV ₁ between 30% and 50% predicted	Very Severe FEV ₁ /FVC < 70% FEV ₁ < or equal to 30% predicted
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Asthma COPD Overlap Syndrome (ACOS)

- A significant minority of patients who present with symptoms of a chronic airways disease have features of both asthma and COPD.
- Patients with features of both asthma and COPD experience frequent exacerbations, have poor quality of life, a more rapid decline in lung function and higher mortality than asthma or COPD alone.
- Concurrent clinician diagnosed asthma and COPD has been reported in between 15% and 20% of patients.
- Distinguishing asthma from COPD can be problematic, particularly in smokers and older adults.
- ACOS is characterised by persistent airflow limitation with several features usually associated with asthma and several features usually associated with COPD.

Feature if present suggests:	Asthma	COPD
Age of onset	Under 20 years old	Over 35 years old
Pattern of symptoms	Variation over minutes, hours or days Worse during the night or early morning Triggered by exercise, emotions including laughter, dust or exposure to allergens	Persistent despite treatment Good and bad days but always daily symptoms and exertional dyspnoea Chronic cough and sputum preceded onset of dyspnoea, unrelated triggers
Lung function	Record of variable airflow limitation (Spirometry, Peak Flow)	Record of persistent airflow limitation (FEV ₁ /FVC < 0.7 post Bronchodilation)
Lung function	Maybe normal between symptoms	Maybe abnormal between symptoms
Past history and family history	Previous clinician diagnosed asthma Family History of Asthma or other allergic conditions (allergic rhinitis, eczema)	Previous clinician diagnosis of COPD, chronic bronchitis or emphysema Heavy exposure to risk factor, tobacco smoke, biomass fuels, occupation
Time course	No worsening of symptoms over time Varied symptoms either seasonally or from year to year May improve spontaneously or have an immediate response to bronchodilators or inhaled corticosteroid over weeks	Symptoms slowly worsening over time (progressive course over years) Rapid acting bronchodilator treatment provides only limited relief
Chest Xray	Normal	Severe hyperinflation

These features distinguish between asthma and COPD. Several positive features (3 or more) for either asthma or COPD suggest that diagnosis. If there are similar numbers for both asthma and COPD, consider a diagnosis of ACOS.

ACOS Treatment should be selected to ensure that:

Patients with features of asthma receive adequate controller therapy including inhaled corticosteroids, but not long-acting bronchodilators alone (as monotherapy), and

Patients with COPD receive appropriate symptomatic treatment with bronchodilators or combination therapy, but not inhaled corticosteroids alone (as monotherapy).

Initial recognition and treatment of ACOS may be made in primary care, referral for confirmatory investigations is encouraged, as outcomes for ACOS are often worse than for asthma or COPD alone.

E-consultation/Advice & Guidance should be utilised if available.

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