The ICST COPD Management and Prescribing Guideline

Find out more here

COPDhub England

Get your patients to download COPDhub app which features a personalised COPD care plan and inhaler technique videos

Asthma+ Lung UK

More patient resources here

CORE PRINCIPLES

People aged over 35 years who present with one or more features from the COPD likelihood checklist should have post-bronchodilator spirometry.

Once diagnosis is confirmed, start with high-value non-pharmacological interventions (step 3).

Inhaled therapy is prescribed according to the patient's disease severity (step 4).

STEP 1: ASSESSMENT

COPD likelihood checklist

Signs and symptoms:

- ☑ Smoking history (>20 pack years)
- ☑ Other exposures (Pollution, biomass fuel burning, other noxious fume exposure)
- ☑ Exertional breathlessness
- ☑ Chronic cough
- ☑ Regular sputum production
- ☑ Wheeze
- ☑ Ankle swelling

Perform investigations

- ☑ Post-bronchodilator spirometry
- ☑ Chest X-ray (CXR)
- ☑ Full Blood Count (FBC)
- ☑ Oxygen Sats (SpO2)
- ☑ α-1 anti-trypsin (if early onset, minimal smoking or family history)

Any red flag symptoms?
Perform CXR and refer as urgent suspected cancer

STEP 2: DIAGNOSIS

Post-bronchodilator
FEV1/FVC ratio <0.7

STEP 3: NON-PHARMACOLOGICAL INTERVENTIONS

- ☑ Provide a self-management plan
- ☑ Offer current smokers support to quit smoking
- ☑ Offer pulmonary rehabilitation if MRC>3
- ☑ Vaccination - Flu - COVID - Pneumococcal
- ☑ Anxiety/ mood management
- ☑ Diet/ exercise/ nutrition advice to maintain healthy BMI and active lifestyle

STEP 4: PRESCRIBE

From the list of inhalers provided, choose the most suitable for the patient, considering inpiratory flow and inhaler technique. Choose a dry powder inhaler preferentially to reduce the carbon footprint, unless the patient cannot use one.

Mild COPD	Moderate to Severe COPD with NO steroid responsive features	Moderate to Severe COPD WITH steroid responsive features
Prescribe SABA PRN	**Prescribe LABA + LAMA**	**Prescribe Triple therapy**
Review exacerbation frequency and SABA use regularly Step up to LABA + LAMA if exacerbations or needing regular SABA	Review exacerbation frequency and symptom severity regularly Escalate to triple therapy if indicated, considering other physical/ mental health conditions that might worsen symptoms	If continued exacerbations or breathlessness, review adherence, inhaler technique and non-pharmacological interventions Consider referral (see below)

STEP 5: REVIEW

Review annually if COPD is well controlled

Referral criteria to secondary care:

- Diagnosis age <50 years
- Uncertain diagnosis
- > 3 exacerbations per year or persistent breathlessness despite maximum inhaled therapy
- Oxygen saturations <92% for LTOT assessment
- Consider referral to palliative care team or breathlessness clinic where required.
- For consideration of LVRS/ roflumilast/ azithromycin

Manage exacerbations:

- Prescribe a SABA for rescue therapy
- Prescribe prednisolone (30-40mg once a day for 5 days)
- Prescribe antibiotic if increased sputum purulence, volume and breathlessness

Chronic productive cough?

- Consider one-month trial of mucolytic
- STOP if treatment ineffective

STEP 1 INFORMATION:
ASSESSMENT

Red Flag Symptoms

- Persistent cough in a smoker
- Haemoptysis
- Chest pain
- Unexplained weight loss
- Clubbing in a smoker
- Abnormal CXR

BD: Twice a day
CAT: COPD Assessment Test Score
CXR: Chest X-ray
DPI: Dry Powder Inhaler
FBC: Full Blood Count
GWP: Global warming potential
ICS: Inhaled Corticosteroid
LABA: Long-acting Beta$_2$ Agonist
LAMA: Long Acting Muscarinic Antagonist
LLN: Lower limit of normal
LVRS: Lung Volume Reduction Surgery
MRC: Medical Research Counsel Dyspnoea Scale
OD: Once daily
pMDI: pressurised Metered Dose Inhaler
SABA: Short-acting Beta$_2$ Agonist
SpO$_2$: Oxygen Saturations

STEP 4 INFORMATION:
PRESCRIBE

Mild COPD

Mild occasional symptoms (MRC 1-2 and CAT <10) and infrequent exacerbations (0-1 per year and no hospitalisations)

Moderate to Severe COPD with NO steroid responsive features

- Moderate-severe symptoms (MRC 3-5 and/or CAT ≥10)
- AND infrequent exacerbations
- OR frequent exacerbations (≥2 per year) or ≥1 hospitalisation AND low eosinophils (<0.1 x10^9/mL)

Moderate to Severe COPD WITH steroid responsive features

- Moderate-severe symptoms (MRC 3-5 and/or CAT ≥10)
- AND frequent exacerbations (≥2 per year) or ≥1 hospitalisation AND high eosinophils (>0.3 x10^9/mL)

One-month trial of mucolytic

- Consider a one month trial if chronic productive cough
- Acetylcysteine 600mg once daily or carbocisteine 750mg three times daily for 2 weeks then twice daily
- STOP if treatment ineffective (no symptomatic improvement)

Find out more about this guideline

DID YOU KNOW?

NHS England has set a target to reduce the proportion of high global warming potential (GWP) inhalers

PRESCRIBE A DPI PREFERENTIALLY UNLESS THE PATIENT CANNOT USE ONE

Learn more here

STEP 4 INFORMATION:
PRESCRIBE

Inhaler principles

- Always prescribe by brand to ensure consistent device
- Choice of inhaler is based on patient's preference and observed inhaler technique
- Whenever possible choose a device with low global warming potential
- Prescribe inhalers of the same type; do not mix MDIs and DPIs
- MDIs should be used with a spacer such as AeroChamber Plus Flow-Vu

Prescribe SABA

Below are options in this category

Easyhaler Salbutamol
100 micrograms
2 puffs PRN
Quick and deep

Bricanyl Turbohaler
500 micrograms
1 puff PRN
Quick and deep

Salamol pMDI
100 micrograms
2 puffs PRN
Slow and steady via spacer

Salamol Easi-Breathe
100 micrograms
2 puffs PRN
Slow and steady

Prescribe a (LABA + LAMA)

Below are options in this category

Duaklir Genuair
340/12
1 dose BD
Quick and deep

Anoro Ellipta
55/22
1 dose OD
Quick and deep

Spiolto Respimat
2.5/2.5
2 doses OD
Slow and steady

Bevespi Aerosphere pMDI
7.2/5
2 doses BD
Slow and steady via spacer

Prescribe triple therapy (ICS + LABA + LAMA)

Below are options in this category

Trelegy Ellipta
92/55/22
1 dose OD
Quick and deep

Trimbow NEXThaler
88/5/9
2 dose BD
Quick and deep

Trimbow pMDI
87/5/9
2 doses BD
Slow and steady via spacer

Trixeo Aerosphere pMDI
5/7.2/160
2 doses BD
Slow and steady via spacer

Version: 1.0
Publication date: February 2024

Designed by The Institute of Clinical Science & Technology