COPD - Management and Prescribing

CONFIRM COPD DIAGNOSIS

COPD diagnosis requires the following:

- History
  - Age ≥ 35 years
  - ≥ 10 pack year smoking history
- Symptoms
  - Progressive breathlessness
  - Cough
  - Sputum production
- Spirometry
  - Obstructive spirometry (FEV1/FVC or FEV1/VC < 0.70)
  - Airflow obstruction can be missed if the patient does not blow out completely. Compare FEV1 to both forced and relaxed VC

CONSIDER ALTERNATE DIAGNOSIS

Primary or co-existent asthma?
- Smoking history < 10 pack years
- Onset before age 35 years
- Atopy
- Night-time wakening with cough or wheeze
- Symptom variability
- Substantial variation in FEV1 over time
- Large response to bronchodilators or oral prednisolone 30mg for 14 days (400+ ml improvement in FEV1)

Primary or co-existent bronchiectasis?
- Frequent infective exacerbations
- Regular mucopurulent sputum
- High sputum volume
- Pseudomonas in sputum culture

The most effective and important treatments for COPD are NOT inhaled therapies.

- Smoking cessation
  - Smoking causes further lung damage, more regular exacerbations and reduces treatment benefits
- Vaccinations
  - Pneumococcal, annual influenza, COVID-19
  - Vaccinations save lives
- Exercise programmes
  - Promote physical activity in all patients
  - Self-directed – 30 minutes, 5 times per week
  - Sport and Leisure classes
- Pulmonary Rehabilitation (PR)
  - Consider referral for all
  - myCOPD offers digital 6 week class via app
- Nutrition
  - BMI < 18.5 – referral to dietician
  - BMI < 21 – 3 meals and 3 snacks per day
  - BMI > 30 – advice and referral to local service
- Check oxygen saturations
- Consider trial of different inhaler/device
- Referral to Pulmonary Rehabilitation
- Address deconditioning
- Consider alternative diagnoses (e.g. asthma, cardiac)
- Dyspnoea
- Exacerbations
- Oxygen therapy if < 92% on 2 separate occasions
- Night time awakening with cough or wheeze
- CXR to assess for other pathology (e.g. lung cancer)

INHALED THERAPIES

See page 2 for prescribing inhaled therapies

COPD TREATABLE TRAITS

Dyspnoea
- Consider alternative diagnoses (e.g. asthma, cardiac)
- Consider FBC blood test (anaemia and eosinophilia)
- Address deconditioning
- Refer to Pulmonary Rehabilitation
- Consider trial of different inhaler/device
- Check oxygen saturations – refer for long-term oxygen therapy if < 92% on 2 separate occasions

Exacerbations
- Smoking cessation
- Vaccinations
- Pulmonary rehabilitation
- Avoid cold and flu contacts particularly in winter
- CXR to assess for other pathology (e.g. lung cancer)

REFERRAL TO SECONDARY CARE

Consider referral to secondary care for the following reasons:

- Diagnostic uncertainty
- Co-existent bronchiectasis suspected (for HRCT)
- Rapid decline in symptoms or FEV1 (where available)
- Bullous lung disease (hyperinflation on CXR) who may benefit from lung volume reduction (e.g. symptomatic and possibly a surgical candidate)
- COPD in patients < 40 years old
- Severe disease – particularly < 60 years old
- Suspected dysfunctional breathing (for specialist physio input)
COPD - Management and Prescribing

SABA (Short Acting Beta-2 Agonist)
Salbutamol or Terbutaline inhaler as required to alleviate symptoms of breathlessness.
Continue at all stages.
Maintain DPI (dry powder inhaler) or pMDI (pressurised meter dose inhaler) consistency.

Combination LAMA + LABA (Long Acting Muscarinic Antagonist and Long Acting Beta-2 Agonist)

Dry Powder Inhaler
Anoro Ellipta
55/22 micrograms
One puff once daily
£32.50

Meter Dose Inhaler
SipioTo Respimat
2.5/2.5 micrograms
Two puffs once daily
£32.50

Stop, Think and Review
Patient using SABA daily with continued breathlessness or exacerbations

Stop, Think and Review
Patient had ≥2 moderate exacerbations OR 1 severe exacerbation (hospitalisation)

Stop, Think and Review
Patient has continued breathlessness WITHOUT exacerbations

Stop, Think and Review
No improvement in symptoms
No Improvement on Triple Therapy
If there is no response to triple therapy, consider stepping down and/or referral to Respiratory.

Stop, Think and Review
No additional therapy
Patient is unlikely to benefit from additional inhaled therapy.
Review COPD management pearls.

Special prescribing notes (costs above are for 30 days supply):
- Prescribe by brand to ensure correct device
- Shelf-life of devices:
  - Ellipta device (Anoro, Trelegy) after opening the tray the in-use shelf-life is 6 weeks
  - Trimbow pMDI (120 dose) in use shelf-life is 4 months
  - Respimat device (Spiriva, Spiolto) in use shelf-life is 3 months
- Other inhaler therapy for COPD may be considered if intolerance to guidance recommended treatments – see formulary for further options
- If features of asthma-COPD overlap, consider treating asthma component as per NHS Grampian Respiratory MCN Asthma guidance

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All guidance will routinely be reviewed every 24 months from the “last review” date. Information contained in this document is intended as guidance of best practice.
Greener Respiratory Care

Inhaler therapies account for approximately 3% of the total carbon footprint of the NHS. The majority of the carbon emissions from inhaler therapies is from reliever SABA medications in a pMDI.

The MCN do not feel that the carbon footprint of different inhaler therapies should be a significant factor in deciding which medications should be included on prescribing guidance but will continue to review the available evidence and support greener respiratory care in principal. There are some simple steps that can be taken which help to reduce the carbon footprint if inhalers that the MCN would support:

- Improve symptom control – results in a reduction in the excess use of SABA pMDI devices and thus reduce CO₂ emissions
- Prescribe either a DPI SABA (if suitable) or generic pMDI - Ventolin has twice the amount of CO₂ emissions as other pMDI Salbutamol and should avoid prescribing as brand name. Ensure spacers are used with pMDI to increase effectiveness
- Consider whether SABA is required as a repeat item – this may encourage over-ordering by patients or automated ordering services
- Encourage patients to return all inhalers to community pharmacies for either recycling schemes or incineration