Grampian Guidance | NHS Grampian

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

COPD Management Pearls

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

Psychological Support

- CBT or behavioural change management
- PHQ-4 questionnaire

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)

Inhaled Therapies

See page 2 for prescribing inhaled therapies

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)

STOP, THINK AND REVIEW

STOP, **THINK** and **REVIEW** before stepping up treatment:

- Check CAT score
- Check inhaler technique/adherence
- Refer to pulmonary rehabilitation
- Consider smoking status and smoking cessation advice
- Optimise co-morbidity treatments
- Consider self-management advice
- Assess if suitable for oxygen therapy

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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 metered dose inhaler) consistency.

STOP, THINK and REVIEW
Patient using SABA daily with continued breathlessness or exacerbations

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

Soft Mist Inhaler

Spiolto Respimat
2.5/2.5 micrograms
Two puffs once daily
£32.50

STOP, THINK and REVIEW
Patient had ≥ 2 moderate exacerbations OR 1 severe exacerbation (hospitalisation)

STOP, THINK and REVIEW
Patient has continued breathlessness WITHOUT exacerbations

TRIPLE THERAPY LAMA + LABA + ICS
(LONG ACTING MUSCARINIC ANTAGONIST, LONG ACTING BETA-2 AGONIST AND INHALED CORTICOSTEROID)

STOP combination LAMA + LABA

Dry Powder Inhaler

Trelegy Ellipta
92/55/22 micrograms
One puff once daily
£44.50

STOP combination LAMA + LABA

Metered Dose Inhaler

Trimbow pMDI
87/5/9 micrograms
Two puffs twice daily
£44.50
(Prescribe with spacer)

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.

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 (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

Realistic Medicine – Shared decision making | **B**enefits of treatment | **R**isks of treatment | **A**lternative treatments | **N**o treatment

Version – 2	**Title –** COPD - Management and Prescribing	**Department –** Respiratory	**FINAL**
Creator – Respiratory MCN	**Lead –** Respiratory MCN	**Last Review –** 12 June 2023	**Next Review –** 12 June 2025

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COPD - Management and Prescribing

Additional Prescribing Information

Nebulisers

Nebulisers are only indicated for patients:
- With significant dexterity issues
- For specialist medication as directed by secondary care
- Requiring high dose inhaled drug therapy in acute setting

Nebulisers are not recommended for routine treatment.

Clinicians have no obligation to prescribe nebules for patient purchased nebuliser devices and this should be discouraged.

Remember that pMDI used with spacer device delivers equivalent dose to a nebuliser.

Anticipatory Care Planning

Consider a proactive approach to the patients chronic disease management.

Consider open discussions for patients with history of multiple acute exacerbations, increasing frailty or significant co-morbidity.

Having meaningful conversations with patients and families when they are well regarding their wants, needs and enabling them to make an informed decision.

Patient can think of the care they would like to receive either in their home or hospital.

Documentation and the sharing of information through updating KIS. This would be accessible for SAS, Emergency Care, GMED and Hospital in the Home teams.

Regular review of ACP and update as required.

Useful information can include:
- Baseline oxygen saturations
- Escalation of treatment plans (if in place)
- Rescue pack or nebuliser in house
- Smoking status and suitability for home oxygen (in case acute need)
- Any personalized approach to treatment that may prevent avoidable admission

Additional information such power of attorney.
ACP may also lead into conversations of DNACPR.

Greener Respiratory Care

NHS Scotland has committed to achieving net zero by 2045 and greener respiratory care is key to achieving this.

A Greener Respiratory Care Toolkit has been developed to support HCPs to deliver Greener Respiratory Care.

LAMA Monotherapy Advice

Spiriva Handihaler (Tiotropium) has been in use for COPD for many years in Grampian and is still prescribed in large numbers. However, it is no longer an MCN recommended inhaler as newer devices have equal clinical benefit but are easier to use and reduce the risk of patient error. Spiriva Respimat and Eklira Genuair replaced the Spiriva Handihaler on previous guidance as LAMA Monotherapy options.

Our updated prescribing guidance no longer recommends LAMA monotherapy for patients and instead recommends LAMA/LABA therapy.

We recognise that undertaking inhaler switches can be time consuming and is not always readily accepted by patients. Therefore for patients who are prescribed a LAMA Monotherapy device we would recommend the following actions:

- Patient on LAMA **AND** ICS + LABA – **Switch to triple therapy**
- Patient on LAMA monotherapy – **Switch to Combination LAMA + LABA**

Additional Therapies

Azithromycin
Consider sending SCI Request for Advice letter to Respiratory if 3 or more exacerbations despite maximal inhaled therapy.

Mucolytics
Consider mucolytic drug therapy for people with a chronic cough productive of sputum. Only continue mucolytic therapy if there is symptomatic improvement (for example, reduction in frequency of cough and sputum production). Do not routinely use mucolytic drugs to prevent exacerbations in people with stable COPD.

Consider 6 month trial of Carbocisteine 750mg three times daily, dose can be reduced to 375mg twice daily if sputum too watery or gastrointestinal upset occurs. Can also use NACSYS® 600mg once daily.

More prescribing guidance is available here

Inhaler Technique Videos
- RightBreathe
- Asthma + Lung UK | How to use your inhaler

Self Management
- My Lungs My Life | Self-Management Toolkit
- Asthma + Lung UK
- myCOPD | The COPD app for controlling your symptoms

Guidelines for HCPs
- NICE | COPD Diagnosis and Management
- Global Initiative for Chronic Obstructive Lung Disease

Realistic Medicine – Shared decision making | **B**enefits of treatment | **R**isks of treatment | **A**lternative treatments | **N**o treatment

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