Guidelines for the diagnosis and management of COPD

NHS North Yorkshire Clinical Commissioning Group | NHS Vale of York Clinical Commissioning Group | NHS Harrogate and District NHS Foundation Trust | NHS York Teaching Hospital NHS Foundation Trust

Confirm diagnosis
Consider HF, bronchiectasis, asthma, FEV_1/FVC ratio <70%

Patient identification by:
Risk assessment – Post bronchodilator spirometry for all patients >age of 35 with a smoking history of 15+ pack years
Opportunistic assessment – Spirometry for all patients with regular cough, sputum and recurrent winter bronchitis

General management for all patients with COPD

- Smoking cessation
- Assess for pulmonary rehabilitation & encourage activity
- Review of inhaler technique
- Pneumococcal vaccination and annual influenza vaccination
- Self management plan
- Psychosocial assessment
- Dietary Advice BMI<20 or BMI>30
- COPD Assessment Test (CAT) Score MRC and exacerbation history

All eco-friendly inhalers have been marked with the symbol:

Step 1 [less symptoms -CAT<10 & MRC 1-2 and low risk of exacerbation]
First line: SABA, assess response after 4 weeks

- **Salamol® 100mcg MDI** 1-2 doses prn + spacer
  200 dose inhaler £1.50
- **Salbutamol 100mcg Easyhaler** 2 doses prn
  200 dose inhaler £3.31
- **Ipratopium bromide 20mcg MDI** 1-2 doses prn 3-4 times daily + spacer
  200 dose inhaler £5.56

Step 2a— Persistent symptoms in the absence of exacerbations [More symptoms - CAT> 10 & MRC 3-5]
First line: LABA/LAMA Combination

- **Anoro Ellipta 55/22mcg** 1 dose daily
  30 dose inhaler £32.50
- **Spiolto Respimat 2.5/2.5mcg** 2 doses daily
  60 dose inhaler £32.50

Step 2b— If still symptomatic before adding an inhaled corticosteroid stop and reconsider diagnosis, comorbidities, adherence, inhaler technique
Consider ICS/LABA for patients with a confirmed diagnosis of COPD and:

- Have asthmatic features such as substantial variation in FEV_1 (>400mls) or PEF (20%) or elevated eosinophil levels
- Have clinician confirmed exacerbations of COPD

Remember to counsel the patient about the higher risk of pneumonia and document in the patients medical record.

Fostair 100/6mcg MDI 2 doses BD
120 dose inhaler £29.32

Fostair NEXThaler 100/6mcg 2 doses BD
120 dose inhaler £29.32

Relvar Ellipta 92/22mcg 1 dose OD
30 dose inhaler £22.00

Step 3— > 2 exacerbations & >1 admission in the past year despite adherence to LABA/LAMA
Assess response after 12 weeks, if no benefit stop ICS and revert back to LABA/LAMA

- **Trelegy Ellipta 92/55/22mcg** 1 dose daily
  30 dose inhaler £44.50
- **Trimbow pMDI 87/5/9mcg** 2 doses BD + spacer
  120 doses inhaler £44.50

SABAs may be continued at all stages of the pathway. Consider mucolytic (NACSYS or Carbocisteine) for productive cough. Stop/switch after 4 weeks if ineffective

Is it COPD? Is it asthma?

A diagnosis of asthma may be suspected if the patient has:

- Variable symptoms
- Exceptional clinical response to bronchodilators (>400mls increase in FEV_1)
- A history of wheeze pre-dating 20 pack years

Patient review

- FEV_1 >50% MRC 1-3 at least annually
- FEV_1 -50-30% MRC 2-5 at least twice a year
- FEV_1 <30% and/or MRC score 3-5 at least four times a year

At each review assess:

- Spirometry
- Inhaler technique - Aim for all devices to have the same delivery system (be either DPI or pMDI)
- Check inspiratory flow fits the device prescribed
- Consider withdrawal of ICS and document reason for continuation
- Oxygen saturation levels – refer if <92% when clinically stable
- Smoking status and desire to quit
- Anxiety and depression
- BMI
- Concordance and understanding of medication
- MRC scale/CAT
- Coping mechanisms of patient and carer
- Access to benefits
- Consider referral for pulmonary rehabilitation (MRC 3-5). Patient must be motivated to attend

Self management plans

Give to all COPD patients – include:

- Exacerbation recognition and management
- List of respiratory medication
- Contact number for respiratory nurse
- Smoking status including pack years
- Target oxygen saturation
- Encourage home/gym based exercise MRC 1-2 and pulmonary rehabilitation MRC 3-5
- Follow as per COPD Template (S1 or EMIS)

Specialist referral

Refer to Respiratory Team for:

- Consideration for Pulmonary Rehabilitation
- Uncontrolled symptoms despite optimum treatment
- Frequent admissions and co-morbidities (Cor Pulmonale)
- Referral for nebuliser trial/home oxygen
- Diagnostic uncertainty
- Assessment for lung surgery
- Rapid decline in FEV_1
- Azithromycin prescribed by Respiratory Specialist only

Palliative care

Would you be surprised if this patient died in the next year from COPD?

If the answer is no then:

- Offer end of life discussion with patient and family including DNACPR
- Consider Gold Standards Framework
- Discuss Preferred Priorities for care
- Consider fan therapy/opiates/benzodiazepines for symptom relief
- Consider referral to specialist palliative care team

Remember

- Prescribing by **brand names** is recommended to ensure consistent supply of inhaler device
- This describes a pragmatic and simplified approach to COPD management
- The preferred therapies listed are based on
  - Ease of use of inhaler device
  - Clinical trial data of safety and efficacy
  - Cost
- Consideration of switching to lower carbon inhalers
  https://www.nice.org.uk/guidance/ng115