Blackburn with Darwen NHS Teaching Care Trust Plus | East Lancashire Hospitals NHS NHS Trust | East Lancashire NHS Teaching Primary Care Trust

# Management of COPD in Primary Care

## Step 1 — Symptom Management

Start on **Salbutamol MDI** or **Ipratropium MDI** when required
Review symptoms after 4 weeks (ask questions in panel 8).
If not controlled move to Step 2. Remember to confirm diagnosis.

## Step 2

| $FEV_1 \geq 50\%$ of predicted | $FEV_1 < 50\%$ of predicted |
|---|---|
| **Add long acting therapy and review in 4 weeks** | **Add long acting therapy plus inhaled corticosteroid and review in 8 weeks** |
| **OPTION 1** | **OPTION 1** |
| **Easyhaler® Formoterol**<br>One inhalation twice daily<br>**OR**<br>**Atimos Modulite®**<br>One inhalation twice daily | **Symbicort Turbohaler 400/12®**<br>(formoterol/budesonide)<br>One inhalation twice daily*<br>**OR**<br>**Seretide Accuhaler 500®**<br>(salmeterol/fluticasone)<br>One inhalation twice daily* |
| **(Continue prn salbutamol or ipratropium)** | **(Continue prn salbutamol or ipratropium)** |
| **OPTION 2** | **OPTION 2** |
| **Tiotropium (Spiriva®)**<br>1 inhalation daily<br>*Only prescribe the device once and then put the capsules on repeat*<br>**Plus prn salbutamol MDI**<br>(*Remember to stop the ipratropium*) | **If inhaled corticosteroid is declined, add in Tiotropium**<br>**Review in 4 weeks**<br>(If no benefit at all then stop this inhaler) |
| **If no response at all, then switch to alternative option** | *ONLY if patient is unable to use either device consider **Seretide® 250 MDI** 2 puffs twice daily via spacer – Evohaler® is unlicensed in COPD and 50% more expensive than licensed products. |

## Step 3 — If still symptomatic, and diagnosis is confirmed

| | |
|---|---|
| **Add** in inhaled corticosteroid by switching to a combination inhaler – Symbicort® 400/12 or Seretide® 500 Accuhaler only.<br>**Review in 8 weeks**<br><br>**If inhaled corticosteroid is declined or not appropriate, and patient not on Tiotropium, add in Tiotropium**<br>Review in 4 weeks<br>(If no benefit at all then stop last inhaler) | **Add** to Option 1 a long acting muscarinic antagonist<br><br>**Tiotropium (Spiriva®)**<br>1 inhalation daily<br>*Only prescribe the device once and then put the capsules on repeat*<br>(*Remember to stop the ipratropium*)<br><br>**Review in 4 weeks**<br>(If no benefit at all then stop last inhaler) |

## Step 4 — If still symptomatic

☑ **C**onsider oral theophylline
☑ In very severe COPD if oral corticosteroid (prednisolone 5mg tablets) treatment cannot be stopped after exacerbation, keep dose as low as possible. Monitor for osteoporosis & offer prophylaxis.
***If still symptomatic and severe consider:***
☑ **C**onsider pulmonary rehabilitation
☑ **R**eferral to respiratory physician
☑ **C**onsider nebuliser assessment
☑ **C**onsider palliative care issues
☑ **C**onsider referral for O2 assessment

Follow up: annual review for mild to moderate; at least 6mthly for severe and very severe
Reviews to include spirometry. Ensure recall date is highlighted to patient and coded on system

## 1 Lifestyle Advice

- Smoking cessation advice at every opportunity
- Dietary advice - If BMI < 18 or > 30 (For obesity grading I – III refer to dietician)
- Exercise – promote gentle exercise

## 2 Immunisation

Influenza, *annually*
Pneumococcal, *as per green book*

## 3 Enhanced COPD Care Service

Address social and Occupational Therapy issues

## 4 Anxiety & Depression

Screen for depression and anxiety and offer treatment

## 5 Pulmonary Rehabilitation

If MRC score is 3 or more refer to pulmonary rehabilitation

## 6 Chronic productive cough

Consider a 4 week trial of a mucolytic Carbocisteine 375mg - 2 capsules 3 times/day reducing to 2 capsules twice daily if good response. Continue **only** if symptomatic benefit. Do **not** use to prevent exacerbations.

## 7 Oxygen Therapy

For all patients if O2 sats < 92% REFER to Primary Care Oxygen Service for Oxygen Assessment

## 8 Assess treatment

- Has the treatment made a difference to you?
- Is your breathing easier in any way?
- Has your sleep improved?
- Can you do some things that you could not do before or do the same things faster?
- Are you less breathless than before when doing things?
- Record MRC scale & BORG scale

# Diagnosis

**Consider**
Consider diagnosis of COPD in any one > 35 and who is a smoker / ex smoker with the following symptoms:

- **Chronic cough**
- **Breathlessness on exertion**
- **Regular sputum production**
- **Wheeze**
- **Frequent winter bronchitis**
- **No clinical features of asthma**

**Do post bronchodilatory Spirometry (absolute & % predicted)**
**Chest X-ray**
**Full blood count**
**BMI**
**Assess severity**

**Severity based on $FEV_1$ % of predicted**

| | |
|---|---|
| **Mild:** | **>80%** |
| **Moderate:** | **50 - 79 %** |
| **Severe:** | **30 - 49 %** |
| **Very Severe:** | **<30%** |

For ALL people with COPD, ensure that the diagnosis is highlighted using active coding, and record spirometry

# Exacerbations

**Step 1** **Are there any features to suggest hospital management?**

- Severe breathlessness
- Cyanosis
- Worsening level of consciousness
- Acute confusion
- Receiving Long term oxygen therapy
- Worsening peripheral oedema
- Poor / deteriorating general condition
- Unable to cope at home/ lives alone
- Significant co morbidity e.g. CVD, diabetes
- Rapid onset of breathlessness $O_2$ sat < 90%

**YES** → **Consider treatment in hospital**

**Step 2** **↑ Breathlessness**

- Increase frequency of short acting bronchodilator MDI i.e. Salbutamol or Ipratropium via spacer
- Prednisolone tablets 30mg each morning for 7-14 days

**Step 3** **Purulent sputum production**

1st line: Amoxicillin 500mg three times a day for 5 days (if allergic, Clarithromycin 500mg twice a day for 5 days)
2nd line: Doxycycline 200mg on 1st day then 100mg on days 2 - 5
**Prophylactic antibiotics are NOT recommended**

**ACTION**

- **Give safety netting advice**
- **Optimise treatment**
- **Review patient if needed**
- **If more than 3 courses of oral steroids given in 1 year and over 65 consider assessing for osteoporosis risk**

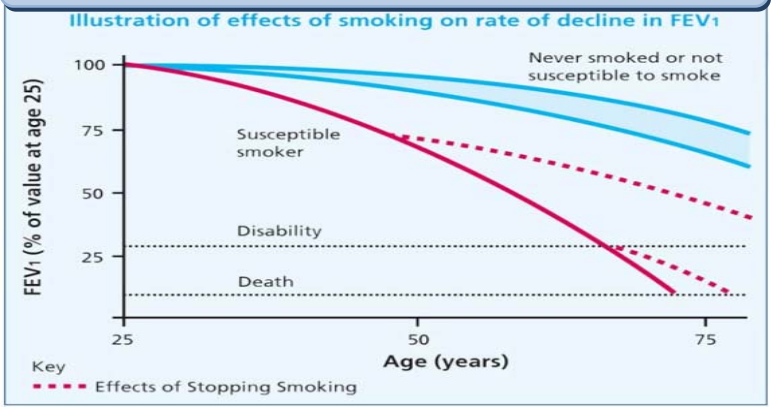
RESCUE MEDICATION RECOMMENDED: suitable patients should antibiotic and steroid stock in the house for use as per Clin. Man. Plan

## Referral to specialist

When there is:

- Diagnostic uncertainty
- Uncontrolled severe COPD
- Onset of cor pulmonale
- Nebuliser assessment
- Assessment for surgery: bullous lung disease
- Rapid decline in $FEV_1$
- Aged < 40 or FH of alfa 1 antitrypsin deficiency
- Symptoms don't match lung function tests
- Frequent infection
- Haemoptysis

## Fletcher and Peto Curve




## Resources

NICE: www.nice.org.uk
Patient information leaflets: www.patient.co.uk
British Thoracic Society: www.brit-thoracic.org.uk
GOLD: www.goldcopd.com
GP airways group: www.gpiag.org
Fletcher C, Peto R, Br Med J, 1:1645-1648, 1977
Green Book, can be found in Publications on www.dh.gov.uk
Antimicrobial Guidelines for Primary Care can be found on www.elmmb.nhs.uk

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