NHS
Greater Glasgow and Clyde

# CLINICAL GUIDELINES

# Chronic Pulmonary Disease Guideline, Primary Care

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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| **Approval Group:** | Medicines Utilisation Subcommittee of ADTC |

**Important Note**:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

# NHSGGC Primary Care COPD Guidelines

## Identification and Diagnosis

- Persistent cough, sputum and/or breathlessness, in people over 35 who have a risk factor (generally smoking history).
- Arrange chest X-ray and Full Blood Count at initial presentation to look for other causes of symptoms.
- Outreach spirometry recommended if available.
- Following spirometry patients with $FEV_1$/FVC <70% post bronchodilator can be diagnosed with COPD and should be offered annual review.
- Patients with $FEV_1$/FVC <70% post bronchodilator; and $FEV_1$ >80% predicted post bronchodilator should only be diagnosed with COPD if they have consistent symptoms.
- Consider asthma, and remember COPD and asthma can overlap.

### Consider asthma as a possible diagnosis particularly:

- Non-smoker, age under 35
- If pattern of symptoms suggest asthma e.g. wheeze, nocturnal wakening, atopy, diurnal variation.
- Raised eosinophils on FBC (any previous level >0.3).
- >200ml or 12% improvement of $FEV_1$ or significant (20%) variability in PEFR.
  See GGC Asthma Primary Care Guideline for further information.

or pulmonary fibrosis in patients with dyspnoea, dry cough and crackles.

## Initial Assessment and Annual Review When Stable

- Functional ability / MRC grade and COPD Assessment Test (CAT) score.
- Pulse oximetry.
- Smoking status - offer Smokefree Services (GGC), or local pharmacy cessation services.
- Ask about occupational dust or fume exposure.
- BMI – record – if >25 advise as appropriate (see Treatment section below).
- If BMI <20 or MUST questionnaire positive, refer to dietician (see below if unexplained).
  https://www.mdcalc.com/malnutrition-universal-screening-tool-must
- Medication review (see Treatment section) including a visual check of inhaler technique.
- Discuss referral for pulmonary rehabilitation if MRC>3 and not had within last 2 years. **Reinforce potential benefits to patient.** Refer via Sci Gateway.
- Consider chest x-ray.
- Consider DEXA referral:
  - In patients maintained on inhaled steroid dose >800 microgram/day beclometasone equivalent for 10 years and a 10 year risk of major fracture >10%. (Use Qfracture http://www.qfracture.org/index.php)
  - Any COPD patient aged over 50 who has had a low trauma fracture (defined as occurring after a fall from standing height or less) within the previous 3 years. There is evidence that asthma/COPD is associated independently with fracture risk.
- Assess co-morbidities:
  - Osteoporosis, cardiovascular disease, anxiety and depression, skeletal muscle dysfunction, metabolic syndrome and lung cancer all occur more commonly in COPD patients. These conditions may influence mortality and admissions, and should be looked for routinely and treated appropriately.
- Reinforce action to be taken if acute exacerbation, including self management plan if appropriate. CHSS "traffic lights for COPD" self-management plan available to order here. Scroll down to traffic lights for COPD. For the pdf information please see COPD exacerbation medicines, supply via PGD.
- Consider self-referral to new COPD digital support service https://support.nhscopd.scot.
- Ensure appropriate patient education, both verbal and written: http://mylungsmylife.org/.
- Consider Key Information Summary and ACP. Adding resting oxygen sats when well to this is extremely helpful.
- Encourage patients to return empty inhalers to pharmacy for disposal to reduce environmental impact.

## Hospital Outpatient Referral

### Consider hospital outpatient referral if:

- Age <40 years.
- Never smoked/occasional smoker.
- Diagnostic uncertainty e.g. symptoms disproportionate to lung function at initial assessment or follow up.
- Severe symptoms or signs of cor pulmonale (e.g. ankle swelling, MRC 4/5; $FEV_1$ <30%, oxygen saturation <92%).
- Any new concerning symptoms warranting referral via cancer referral pathway
  http://www.cancerreferral.scot.nhs.uk/lung-cancer/
- If considering nebulised treatments or Oxygen Flight assessment is only indicated in patients with oxygen saturation <94%. Only refer for LTOT assessment if sats <92
- Frequent exacerbations/persisting purulent sputum to exclude bronchiectasis.

## Pharmacological Treatment

**The Inhaler Patient Information Leaflets can be accessed via this link: GGC Medicines: Prescribing Resources**

- Ensure adequate inhaler technique.
- See GGC formulary and NHSGGC COPD inhaler device guides GGC Medicines: Prescribing Resources
- Patients should not be started on nebulised treatments unless agreed with consultant.
- All inhalers, other than Salbutamol metered dose inhaler (MDI), should be prescribed by brand name.
- Drugs started for symptom relief should be reviewed after 1 month and discontinued if no benefit to patient
- Make an assessment of asthma features. Raised eosinophils, atopic tendency, or any other features suggesting asthma overlap make patients more likely to respond to inhaled corticosteroids independent of $FEV_1$.
- Consider de-escalation of inhaled steroids or switch if pneumonia, inappropriate original indication, or lack of response to ICS, as long as no asthmatic features. PCRS document provides guidance. https://www.pcrs-uk.org/sites/pcrs-uk.org/files/SteppingDownICS_FINAL5.pdf
- **BEFORE CHANGING MEDICATION** - Check inhaler technique and compliance, recheck diagnosis. Consider smoking status, co-morbidities. Suitable for pulmonary rehab or oxygen?
- If multiple recent courses of oral steroids (e.g. prednisolone ≥ 30mg for > 3 weeks within 3 months) or the patient is considered at risk of adrenal suppression, consider reducing dose directly to 5mg. Gradual tapering of steroids from 40mg to 5mg is not recommended. Adrenal function can be assessed once on 5mg prednisolone which is a physiological replacement dose. Suspected Iatrogenic Adrenal Insufficiency Guidance
- If patient receiving frequent courses of oral steroids, or are taking high dose inhaled steroids, issue a steroid alert card. See link for guidance steroid alert cards

### Mucolytics

Consider trial of mucolytic if persistent productive cough. Review after 4 weeks and stop if no improvement. Reduce to maintenance dose if treatment continued. GGC Formulary

### Theophyllines

Consider theophyllines if persisting symptoms despite inhaled treatment. Refer to GGC Formulary for further information. Usually initiated by secondary care.

### Azithromycin

Long term Azithromycin or other long term macrolides should only be initiated by secondary care.

## Treatment of Exacerbation of COPD

**Defined as an acute onset of increase in breathlessness, cough or sputum production, or change in sputum colour, sustained for at least a day.**

- Step up current short acting beta-2 agonist.
- Initiate Prednisolone 30-40mg/day for 5 days.
- Antibiotic only if purulent sputum – 5 days of: Doxycycline 200mg once then 100mg daily. Use Amoxicillin 500mg three times daily or Clarithromycin 500mg twice daily if Doxycycline not tolerated and if no drug interactions. If you offer self-initiation of antibiotics and/or steroids, ensure a written plan reflecting the above

## General Health Measures

- Smoking cessation advice – see above.
- Annual flu immunisation.
- Pneumococcal immunisation.
- Encourage physical activity (can use Vitality or Live Active referral if need additional encouragement/support).
- Encourage weight management if BMI >25 and no unintentional weight loss (can use NHSGGC Weight Management Service).

## Palliative Care

- Patients may benefit from various non-pharmacological approaches, as well as the involvement of multidisciplinary palliative care teams.
- Opiates may be appropriate in patients with severe COPD for the palliation of breathlessness or cough unresponsive to other medical therapy. Benzodiazepines may help associated anxiety or panic.
- Consider creating an electronic palliative care summary.

For further detail and drug dosage advice see www.palliativecareguidelines.scot.nhs.uk sections on lung disease and breathlessness.

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