NHS GGC Primary Care COPD Guideline

Revised September 2013 **Review date August 2016**

IDENTIFICATION AND DIAGNOSIS

- Persistent cough, sputum and / or breathlessness.
- Outreach spirometry recommended if available.
- Arrange chest X-ray and Full Blood Count at initial presentation.
- Distinguish from asthma (see Note I below).

DISEASE REGISTER

- Following spirometry patients with FEV1 / FVC <70% post bronchodilator can be diagnosed with COPD and should be offered annual review.
- Patients with FEV1 ≥80% predicted post bronchodilator should only be diagnosed with COPD if they have consistent symptoms.

Classification – *as amended by NICE, 2010*

- Mild: FEV1 ≥80% predicted (if symptomatic).
- Moderate: FEV1 50-79% predicted.
- Severe: FEV1 30-49% predicted.
- Very severe: FEV1 <30% predicted.

All patients on register should have functional assessment (see Note 2 below) as this affects therapeutic decisions.

INITIAL ASSESSMENT AND ANNUAL REVIEW WHEN STABLE

- Functional ability / breathlessness scale (see Note 2 below).
- Ask about occupational dust or fume exposure.
- Smoking status - offer referral to Smoking Cessation Services when appropriate.
- BMI – record - advise as appropriate (see Treatment section below).
- Medication review (see Treatment section) including a visual check of inhaler technique.
- Consider chest x-ray and / or repeat lung function assessment if unexpected change in MRC grade (see Hospital Outpatient Referral section below).
- Reinforce action to be taken if acute exacerbation, including self management plan if appropriate (see Note 3 over).
- Consider psychological morbidity.
- Consider pulmonary rehabilitation if appropriate, and agreed with patient.
- Consider osteoporosis screening 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 WHO FRAX) www.sheffield.ac.uk/frax

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 grade 4 / 5; FEV1 <30%; Sa0 <92%).
- Unintentional weight loss – for chest X-ray (? lung Ca). Consider investigation to exclude other causes.
- If considering nebulised treatments or oxygen.
- Frequent exacerbations to exclude bronchiectasis.

TREATMENT

Pulmonary rehabilitation – Offer to all patients who are functionally disabled (≥ MRC grade 3).

General Health Measures

- Smoking cessation advice – see NHSGGC guidance.
- Annual flu immunisation.
- Once only pneumococcal immunisation.
- Encourage physical activity (can use exercise referral if need additional encouragement / support).
- Encourage weight management if BMI >25 and no unintentional weight loss (can use NHSGGC Weight Management Service or Shape Up.
- If BMI <20 or MUST questionnaire positive, refer to dietician.

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Oxygen

Initiation requires respiratory outpatient assessment – see Oxygen Guidelines and referral for cor pulmonale above.

Pharmacological: See NHSGGC Formulary

Order of introducing inhaler therapy for persisting symptoms (breathlessness or exacerbations) in COPD

Order	FEV1 ≥ 50% predicted	FEV1 < 50% predicted
1	SABA	SABA
2	LAMA or LABA	LAMA or LCCI*
3	LAMA + LABA	LAMA + LCCI*

SABA = short acting beta-2 agonist, LABA = long acting beta-2 agonist, LCCI = LABA and corticosteroid combination inhaler, LAMA = long acting muscarinic antagonist
**LCCI - Where patient has had 2 or more exacerbations in 12 consecutive months.*

- *Ensure adequate inhaler technique.*
- Metered dose inhalers (+/- spacer device) should be considered first for beta-2 agonist therapy
- See NHSGGC Formulary for individual choices.
- Patients should not be started on nebulised treatments unless agreed with consultant.

Mucolytics

Mucolytic drug therapy should be considered in patients with a chronic cough, productive of sputum. Carbocisteine 375mg capsules should be prescribed in divided doses initially as 2.25g daily and then reduced to 1.5g daily as condition improves. Patients should be reviewed after 4 weeks and if there is no benefit then mucolytic therapy should be discontinued. Do not routinely use mucolytic drugs to prevent exacerbations in people with stable COPD.

NOTE 1: DIAGNOSIS - COPD OR ASTHMA?

Consider asthma* as a possible diagnosis particularly if:

- Patterns of symptoms suggest asthma e.g. wheeze, nocturnal wakening, atopy diurnal variation.
- Non-smoker.
- >400ml improvement of FEV1 or significant (20%) variability in PEFR.

**See NHSGGC Asthma Primary Care Guideline for further information*

NOTE 2: FUNCTIONAL ABILITY / BREATHLESSNESS SCALE

It remains clinically helpful to assess breathlessness using MRC grading of 1 to 5. This is a validated measure of disease severity irrespective of patient's FEV1. Grade 3 and above - offer referral to Pulmonary Rehabilitation.

Grade 1: Not troubled by breathlessness except on strenuous exercise.
Grade 2: Short of breath when hurrying, or walking up a slight hill.
Grade 3: Walks slower than contemporaries on level ground because of breathlessness, or have to stop for breath when walking at own pace.
Grade 4: Stops for breath after walking about 100 metres or after a few minutes on level ground.
Grade 5: Too breathless to leave the house or breathless when dressing or undressing.

NOTE 3: 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.

1. Step up current short acting beta-2 agonist.
2. Initiate Prednisolone 30mg/day for 7 – 14 days.
3. Antibiotic only if purulent sputum – 5 days of: Amoxicillin 500mg t.d.s. or Doxycycline 200mg once then 100mg daily. Use Clarithromycin 500mg b.d. if doxycycline not tolerated and if no drug interactions.
4. If you offer self-initiation of antibiotics and / or steroids, ensure a written plan reflecting the above.

NOTE 4: TRIALS OF DRUGS FOR SYMPTOMATIC RELIEF

These drugs help some, but not all patients with COPD. An initial trial of one month is suggested with symptomatic assessment of response, e.g. 'Has your treatment made a difference to you?'

- If the patient reports clear benefit, continue treatment.
- If no clear benefit, withdraw treatments to test effects of withdrawal.

NOTE 5: PALLIATIVE CARE

For further detail and drug dosage advice see www.palliativecareguidelines.scot.nhs.uk sections on lung disease and breathlessness; or NHSGGC Palliative Care Guideline Handbook.

Patients may benefit from various non-pharmacological approaches, as well as the involvement of multidisciplinary palliative care teams.

Opiates may be appropriate in patents with severe COPD for the palliation of breathlessness or cough unresponsive to other medical therapy, including oxygen if hypoxic. Benzodiazepines may help associated anxiety or panic.

The Gold Standards Framework-Prognostic Indicator Guidance (GSF-PIG) can be used to identify those patients that may benefit from a holistic supportive / palliative care assessment. Such patients should be considered for the General Practice Palliative Care Register.