South East London Integrated Guideline for the Management of Chronic Obstructive Pulmonary Disease

Get the diagnosis right: clinical history and quality-assured diagnostic spirometry

Find patients at risk of COPD:

Age > 35yrs and current smoker or ex-smoker with 1 or more symptoms:

- Exertional breathlessness
- Chronic cough or wheeze
- Regular sputum production
- History of chest infections

Confirm diagnosis using quality assured post-bronchodilator spirometry

- COPD may be present if the post-bronchodilator FEV1/FVC (339m) is <0.7
- Request chest x-ray, full blood count, creatinine and electrolytes in all patients

Identify ex/current smokers with a co-existent diagnosis of asthma

- Could the diagnosis be COPD alone or could they have asthma *AND* COPD?

Assess for features of asthma:

- Seasonal or environmental triggers
- Nocturnal symptoms or variability in symptoms
- History or rhinitis, eczema or atopy
- Peripheral blood eosinophilia (≥0.3)
- Elevated Fractionated exhaled Nitric Oxide (FeNO)

Ensure highest value interventions are offered to all patients

Annual Review

- Review diagnosis of COPD. Has the patient had quality-assured spirometry?
- Record annual frequency of **EXACERBATIONS** (66yf) - ask patient and check clinical record
- Document the **MRC breathlessness score** and **COPD Assessment Test (CAT) score** http://www.catestonline.org/images/pdfs/CATest.pdf
- Check **oxygen saturation**. If patient is stable, but saturations are <92%, refer to Specialist Oxygen Assessment team
- Check and **correct inhaler technique**
- Identify and address **non-adherence** to medication
- Consider alternative or exacerbating **causes of breathlessness**
- Assess for and treat **anxiety and depression**
- Consider an **advance care plan**
- Optimise **weight and nutrition**. Refer to dieticians if BMI <20
- Agree a self-management plan, and if appropriate, offer a **RESCUE PACK**. Clear verbal and written information regarding appropriate rescue pack use must be given. http://www.respiratoryfutures.org.uk/media/69899/lrn-copd-action-plan-guidance-nov2016.pdf

Smoking cessation

- Treating tobacco dependence is an essential clinical intervention.
- Expired carbon monoxide monitoring is recommended by NICE as part of a structured review to support people to stop smoking and initiate treatment
- Very brief advice should be provided at every opportunity. Training and tools are available online https://london.stopsmokingportal.com/
- Drug therapies (Nicotine Replacement Therapy and varenicline) are safe and effective. Together with psychological support, they increase the likelihood of a successful quit so should be offered to all patients. Mental illness, regardless of severity, is not an exclusion to this. Support can be via general practice, community pharmacy or refer to your local smoking cessation service
- Other resources: how and why to record tobacco dependence as a cause of death

Pulmonary Rehabilitation

- Refer patients with ≥MRC 2, and/ or have had an exacerbation in the last 3 months, and can walk a minimum with 10 meters with or without a walking aid
- Can be offered to patients annually

Vaccination

- Annual influenza vaccination and once only pneumococcal vaccination

"Red Flags" for referral to a Respiratory Specialist:

- Diagnostic uncertainty
- Suspected severe COPD (FEV1 <30% predicted)
- ≥2 exacerbations in one year
- Significant sputum burden
- MRC ≥3
- Age < 40 years or family history of alpha 1-antitrypsin deficiency
- Oxygen saturations <92%
- Weight loss or haemoptysis via 2WW

Inhaler Technique

Adapted with permission from: http://simplestepseducation.co.uk/

1. Prepare inhaler device – e.g. remove cap
2. Prepare ("load") dose – e.g. shake inhaler, insert and pierce capsule or "click" the dose
3. Breathe out (not into inhaler) as far as is comfortable
4. Put lips around mouthpiece
5. Inhale correctly. This is the commonest error, but simply determined by the device *type*
    a. MDI or soft mist inhaler – inhale "Slow and steady"
    b. DPI – inhale "Quick and deep"
6. Remove inhaler from mouth and hold breath for 5-10 seconds or as long as is comfortable
7. Repeat as directed and finish

Prescribe appropriate pharmacological treatments in the right device for the patient

As Required Inhaled SABA THERAPY Short-Acting β2-Agonist:
Salbutamol *100mcg 1-2* puffs as required as a Metered Dose Inhaler (MDI), an easi-breathe (breath actuated MDI) or the Easyhaler (Dry Powder Inhaler - DPI)

COPD without features of asthma

MRC 1 and minimal symptoms: Regular inhaled LAMA
(Long-Acting Muscarinic Antagonist)

DPI	**EKLIRA Genuair** one puff BD *(aclidinium 322mcg)*	
	SEEBRI Breezhaler one puff OD *(glycopyrronium 44mcg)*	
	INCRUSE Ellipta one puff OD *(umeclidinium 55mcg)*	
SOFT MIST INHALER	**SPIRIVA Respimat** two puffs OD *(tiotropium 2.5mcg)*	

FOR MOST PATIENTS **Regular inhaled LABA/LAMA**
(Long-Acting β2-Agonist *and* Long-Acting Muscarinic Antagonist)

DPI	**DUAKLIR Genuair** one puff BD *(aclidinium 340mcg /12mcg formoterol)*	
	ULTIBRO Breezhaler one puff OD *(glycopyrronium 43mcg /indacaterol 85mcg)*	
	ANORO Ellipta one puff OD *(umeclidinium 55mcg /vilanterol 22mcg)*	
SOFT MIST INHALER	**SPIOLTO Respimat** two puffs OD *(tiotropium 2.5mcg / olodaterol 2.5mcg)*	

COPD with features of asthma

Regular inhaled ICS/LABA therapy:
(Corticosteroid and Long-Acting β2-Agonist)

DPI	**RELVAR Ellipta 92/22** one puff OD *(fluticasone furoate 92mcg / vilanterol 22mcg)*	
	FOSTAIR NEXThaler 100/6 two puffs BD *(beclomethasone 100mcg / formoterol 6mcg)*	
MDI	**FOSTAIR MDI 100/6** two puffs BD via spacer *(beclomethasone* 100mcg / *formoterol 6mcg)*	

Patients should be given an inhaled corticosteroid card (A pack of 100 cards can be ordered from Ashley Forms)

≥2 exacerbations/year or worsening breathlessness, seek advice from, or refer to a Respiratory specialist

Regular Inhaled Triple Inhaler Therapy:
(Long-Acting β2-Agonist, Long-Acting Muscarinic Antagonist and Inhaled Corticosteroid)

TRIMBOW MDI
Two puffs Twice daily via spacer
(formoterol 5mcg / glycopyrronium 9mcg / beclomethasone 87mcg)

TRELEGY Ellipta
One puff Once daily
(vilanterol 22mcg / umeclidinium 55mcg / fluticasone furoate 92mcg

FOSTAIR NEXThaler 100/6
Two puffs Twice Daily
(beclomethasone 100mcg / formoterol 6mcg)
+ any LAMA

Treatments initiated by specialists only:
- Nebulised bronchodilators
- Nebulised mucolytics
- Azithromycin
- Roflumilast

Rescue pack (Acute Prescription Only)
- 30mg prednisolone for 5 days **plus** doxycycline 200mg on the first day, then 100mg for a further 4 days, if no improvement in symptoms or doxycycline allergy refer to NICE NG114 for choice of antibiotics and prescribing considerations

Prescribe **oral mucolytic therapy** in copious, thick and difficult to clear sputum
- Send a sputum specimen for MC&S
- Give a 4 week trial of carbocisteine 750mg TDS, continue **only** if improvement

Consider **bone protection** if >2 courses of prednisolone in last year

Good respiratory practice
- ✓ Ask patients to demonstrate how they use their inhaler at every opportunity
- ✓ Refer patients to Community Pharmacist for New Medicines Service to reinforce optimal inhaler technique & to support adherence, encourage reviewing inhaler technique video via RightBreathe
- ✓ Prescribe inhaler by brand; **caution** some inhalers have similar name e.g. Spiriva®, Spiolto®, Striverdi®
- ✓ An inhaler device should be chosen using patient preference & capability. If possible give one *type*
- ✓ Do not change an inhaler without patient agreement - 'switching' may lead to deterioration & anxiety
- ✓ Before changing medication, recheck diagnosis

South East London Integrated Medicines Optimisation Committee (SEL IMOC). A partnership between NHS organisations in South East London: South East London Clinical Commissioning Group (covering the boroughs of Bexley/Bromley/Greenwich/ Lambeth/Lewisham and Southwark) and GSTFT/KCH /SLaM/ Oxleas NHS Foundation Trusts and Lewisham & Greenwich NHS Trust

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