

Treatment of **tobacco dependence** is an important clinical intervention in these (and all) patients. Ask about smoking at every opportunity, offer very brief advice [http://www.ncsct.co.uk/publication\\_very-brief-advice.php](http://www.ncsct.co.uk/publication_very-brief-advice.php) and Carbon Monoxide (CO) measurement when appropriate. Patients are significantly more likely to quit if treated with drug therapy and psychological support. Quit smoking therapies (including varenicline) are safe and effective in patients with mental illness but may need more careful monitoring (eg patients with a history of psychiatric illness such as schizophrenia, bipolar disorder and major depressive disorder, or depression). Useful resources are available at: <http://www.londonsenate.nhs.uk/helping-smokers-quit/>

- All patients with an MRC score  $\geq 3$  (see below) and/or have had an exacerbation in the last 3 months will benefit from **Pulmonary Rehabilitation**
- All patients should be asked to demonstrate their **inhaler technique** regularly and **adherence** be established *before* stepping up therapy
- All patients should have a written **self-management plan**, instructions for/access to a **rescue pack** and when indicated, an **inhaled corticosteroid card** (annotated with the symbol  $\Psi$  below)

All patients should have their FEV<sub>1</sub>, FEV<sub>1</sub> % predicted and FEV<sub>1</sub>/FVC ratio recorded accurately and **reviewed annually**

Step up if patient's breathlessness worsens			Consider referral to specialist in line with local policy
Acute therapy	Initial regular therapy	Dual bronchodilation	
<b>As Required SABA (Inhaled Short-Acting <math>\beta_2</math>-Agonist)</b>  <b>Salbutamol MDI</b> 100mcg one - two puffs PRN +/- aerochamber plus®  <b>Salbutamol Easyhaler®</b> 100mcg one - two puff PRN  <b>Salbutamol breath actuated device</b> 100mcg one - two puffs PRN	<b>Regular LAMA (Inhaled Long-Acting Muscarinic Antagonist)</b>  <b>Seebri Breezhaler®</b> ▼ Glycopyrronium 44mcg one capsule od  <b>Eklira Genuair®</b> ▼ Aclidinium 322mcg one puff bd  <b>Incruse Ellipta®</b> ▼ Umeclidinium 55mcg one puff od  <b>Spiriva Handihaler®</b> Tiotropium 18mcg one capsule od	<b>Add Regular LABA (Inhaled Long-Acting <math>\beta_2</math>-Agonist)</b>  <b>Ultibro Breezhaler®</b> ▼ Indacaterol/Glycopyrronium 85/43mcg one capsule od  <b>Duaklir Genuair®</b> ▼ Aclidinium/Formoterol 340/12mcg one puff bd  <b>Anoro Ellipta®</b> ▼ Vilanterol/Umeclidinium 22/55mcg – one puff od  Choose from devices above based on inhaler technique	
<b>Exacerbations</b> should be coded appropriately and their frequency reviewed as part of the patient's annual assessment <b>Oxygen</b> saturation should be checked at <b>each</b> review. If <92% on air and/or signs of cor pulmonale, refer to specialist oxygen assessment team  Further Pharmacological therapy dependant on symptoms: <ul style="list-style-type: none"> <li>✓ A mucolytic (e.g. carbocisteine 375-750mg TDS) for copious, thick and difficult to clear sputum</li> <li>✓ Addition of an ICS to the LABA/LAMA can be considered for those with an FEV<sub>1</sub>&lt;50% predicted AND experiencing <math>\geq 2</math> exacerbations per year (e.g. <b>Fostair MDI®</b> Beclometasone/Formoterol 100/6mcg - two puffs bd via "aerochamber plus®" and a <b>LAMA</b> from the list OR <b>Relvar Ellipta®</b> ▼ Vilanterol/Fluticasone Furoate 22/92mcg one puff od<sup>u</sup> and <b>Incruse Ellipta®</b> ▼ Umeclidinium 55mcg one puff od)</li> </ul>			
<b>MRC breathlessness scale:</b> <ol style="list-style-type: none"> <li>1. Not troubled by breathlessness except on strenuous exercise</li> <li>2. Short of breath when hurrying or walking up a slight hill</li> <li>3. Walks slower than contemporaries on the level because of breathlessness, or has to stop for breath when walking at own pace</li> <li>4. Stops for breath after about 100 m or after a few minutes on the level</li> <li>5. Too breathless to leave the house, or breathless when dressing or undressing</li> </ol>			

This guideline aims to support responsible respiratory prescribing.

- ✓ A change in inhaler device should only occur upon consultation and agreement with the patient e.g. as part of their annual review. Unsupported “switching” may lead to loss of symptom control and unnecessary anxiety for the patient or their carer
- ✓ To avoid confusion, inhalers should be prescribed by brand. Where the device is comparable between brands (currently only seretide and sirdupla MDI), it may be more cost effective to prescribe the cheaper one, but this should still be by brand
- ✓ ICS cards are indicated for patients prescribed  $\geq 1000\text{mcg}$  beclometasone dipropionate or equivalent (annotated overleaf with the symbol  $\Psi$ )  
<https://www.networks.nhs.uk/nhs-networks/london-lungs/documents/high-dose-inhaled-corticosteroid-alert-card-order-form>

There are several common steps to all inhaler devices, but always ensure you are confident and competent to teach the devices you prescribe:

1. Prepare inhaler device – e.g. remove cap
2. Prepare (“load”) dose – e.g. shake inhaler, insert and pierce capsule or “click” the dose lever
3. Breathe out (not into inhaler) as far as is comfortable
4. Put lips around mouthpiece
5. Breathe in correctly. This is the commonest error, but simply determined by the device *type*. All inhalers are either an **aerosol** or a **dry powder** (see below)
6. Remove inhaler from mouth and hold breath for 5-10 seconds or as long as is comfortable
7. Repeat as directed and finish

Adapted with permission from: <http://simplestepeducation.co.uk/>

### Aerosol devices “Slow and Steady” inspiration

#### MDI



#### Aerochamber plus



#### Easi-breathe®



### Dry Powder devices “Quick and Deep” inspiration

#### Easyhaler®



#### Breezhaler®



#### Ellipta®



#### Genuair®



#### Handihaler®



**NOTE:** The inhaler colour will vary depending on content

Produced by the SEL Responsible Respiratory Prescribing Group. Approved by the SEL Area Prescribing Committee: May 2016. Review date: April 2018

South East London Area Prescribing Committee. A partnership between NHS organisations in South East London: Bexley, Bromley, Greenwich, Lambeth, Lewisham and Southwark Clinical Commissioning Groups (CCGs) and GSTFT/KCH /SLAM/ & Oxleas NHS Foundation Trusts/Lewisham & Greenwich NHS Trust

**Not to be used for commercial or marketing purposes. Strictly for use within the NHS.**