Partners in improving local health

NHS Cumbria Clinical Commissioning Group

Cumbria COPD Treatment Guide

Age >35years, Breathless → SPIROMETRY * (Post Bronchodilator)

**FEV1/FVC<70% (or Lower Limit of Normal)

Consider asthma if any evidence of: onset in childhood, diurnal variability, waking due to breathlessness, wheeze, atopy, <10 pack year smoking

YES → Consider asthma

NO → COPD

Intensive Smoking Cessation Support

Vaccination (pneumonia and flu)

Start short acting beta-agonist (SABA)(eg salbutamol) when required
If SABA ineffective, trial 1 month short acting muscarinic antagonists (SAMA)(eg ipratropium) and continue only if symptomatic relief

Pulmonary rehabilitation

Add long acting muscarinic antagonist (LAMA) (eg aclidinium) (STOP SAMA if LAMA initiated)

Continued breathlessness → Add long acting beta-agonist (LABA)(eg formoterol) if FEV1 >50% and no exacerbations

If FEV1 drops <50% or exacerbations

Continued breathlessness → Add LABA + inhaled cortico-steroid (ICS) combination (eg Fostair) if FEV1 <50% or frequent exacerbations

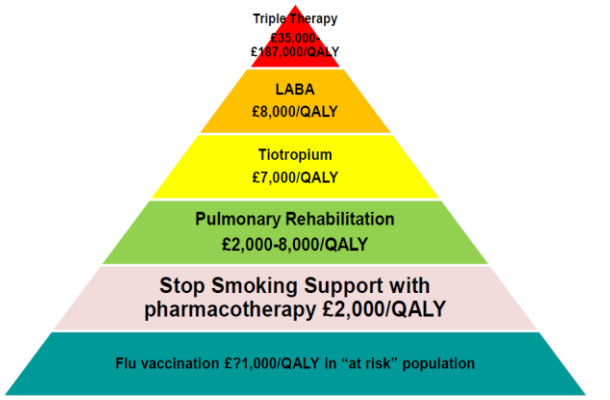
Consider oral therapy

- Diagnosis depends on clinical history and quality assured spirometry
- Monitor and coach inhaler technique at each visit and before treatment progression
- Monitor saturation: refer on if SaO2 <92% at rest or de-saturation on exercise
- Screen for anxiety and depression e.g. Hospital Anxiety & Depression (HAD) score (if ≥ 8 consider CBT)

***Spirometry**: Spirometers need to be maintained and calibrated regularly to ensure accuracy and tests must be carried out by trained professionals.

**A diagnosis of COPD requires demonstration of airflow obstruction with FEV1/FVC ratio <0.7 (or Lower limit of normal). Severity is defined by comparing FEV1 (post bronchodilator) to predicted normal values.

COPD 'Value' Pyramid
What we know so far…. Cost/QALY



ALL patients should have:

- **Intensive Smoking Cessation Advice**
- **Annual Flu Vaccination**
- **Inhaler Technique monitoring**
- **Personalised Patient Management Plan- especially patients prescribed a rescue pack**
- **Pulmonary rehabilitation if functionally limited by breathlessness and post discharge (NNT 3-6)**
- **Medications optimised not maximised**

Stopping smoking and flu vaccination are the most important interventions in COPD.

Drug group	Choice	Generic Name	Device	Brand name (for info only)	Further Information
SABA	1st	Salbutamol	pMDI DPI -Easyhaler		Nebulisers do not offer convincing advantages over MDIs given via a spacer device and are not routinely recommended.
	2nd	Terbutaline	DPI -Turbohaler		
SAMA	1st	Ipratropium	pMDI		Ipratropium can be used if SABA is ineffective. Give trial for one month and only continue if symptomatic relief.
LAMA Always stop SAMA if starting LAMA	1st	Umeclidinium	DPI	Incruse Ellipta	Once daily administration.
	2nd	Aclidinium	DPI	Eklira Genuair	Twice daily administration. LAMA is first line maintenance bronchodilator to improve breathlessness and reduce exacerbations.
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LABA	1st	Formoterol	DPI- Easyhaler		LABA can be added to LAMA if FEV1>50% and symptoms not fully controlled or used to replace LAMA if LAMA is ineffective.
	2nd	Salmeterol	pMDI or DPI		
LABA +LAMA	1st 2nd	Umeclidinium/Vilanterol Aclidinium/formoterol	DPI	Anora Ellipta Duaklir Genuair	For patients stabilised on constituent drugs
LABA + ICS	1st	Beclometasone +Formoterol	pMDI	Fostair	If FEV1<50% or frequent exacerbations then consider ICS/LABA combination to help reduce exacerbation frequency. Fostair is an extrafine particle and therefore is more potent, Beclometasone dose 100 micrograms in Fostair is equivalent to 250 micrograms in Clenil Modulite.
	2nd	Fluticasone furoate + vilanterol	DPI	Relvar Ellipta	Only fluticasone furoate 92 microgram/ vilanterol 22 microgram, licensed for use in COPD (both strengths licensed for asthma). (92mcg FF equivalent to 500mcg fluticasone propionate or 1000mcg CFC beclometasone)
Triple Therapy LAMA+LABA+ICS	Little evidence that triple therapy is any better than double therapy (DTB 20120:48(7):74) but may be worth a trial before oral therapy.				
Mucolytics	1st	Carbocisteine	May reduce sputum viscosity and reduce exacerbations in patients with chronic cough but stop if no benefit after 4 week trial. Not to be used for acute exacerbations.		
Rescue Packs for patients with FEV1<30% or frequent admissions or exacerbations	1st	Prednisolone 5mg 6 daily for 7 days ± Doxycycline 100mg OD or Amoxicillin 500mg TDS for 7 days	Patients should have personalised plans enabling them to initiate at home before seeing a GP or nurse in the practice. Frequent packs should prompt a review.		

References:
GP Update Manual 2014 www.gp-update.co.uk
NICE (2010) Chronic obstructive pulmonary disease-Management of COPD in adults in primary and secondary care (partial update) Nice Clinical Guideline101.2010
http://www.impressresp.com/index.php?option=com_docman&task=doc_view&gid=51&Itemid=82

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