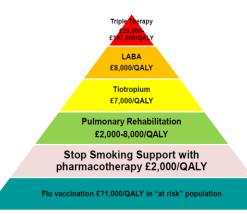


- \*Spirometry: Spirometers need to be maintained and calibrated regularly to ensure accuracy and tests must be carried
- \*\*A diagnosis of COPD requires demonstration of airflow obstruction with FEV1/FVC ratio <0.7 (or Lower limit of normal). Severity is defined by comparing FEV1 (post bronchodilator) to predicted normal values.

out by trained professionals.

## 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 Planespecially 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	1 <sup>st</sup>	Salbutamol	pMDI DPI -Easyhaler - Accuhaler	, ,	Nebulisers do not offer convincing advantages over MDIs given via a spacer device and are not routinely recommended.	
	2 <sup>nd</sup>	Terbutaline	DPI -Turbohaler			
SAMA	1 <sup>st</sup>	Ipratropium	pMDI		Ipratropium can be used if SABA is ineffective. Give trial for one month and only continue if symptomatic relief.	
LAMA	1 <sup>st</sup>	Aclidinium	DPI - Genuair	Eklira	Twice daily administration.	
Always stop SAMA if starting LAMA	2 <sup>nd</sup>	Glycopyrronium	Inhalation powder capsule - Breezhaler	Seebri	Once daily administration.  LAMA is first line maintenance bronchodilator to improve breathlessness and reduce exacerbations.	
		Tiotropium	Inhalation powder capsule pMDI - (Respimat®)			
LABA	1 <sup>st</sup>	Formoterol	DPI - Easyhaler - Turbohaler		LABA can be added to LAMA if FEV1>50% and symptoms not fully controlled or used to replace LAMA if LAMA is ineffective.	
	2 <sup>nd</sup>	Salmeterol	pMDI			
		Indacaterol	Inhalation powder capsule - Breezhaler	Onbrez		
LABA +LAMA	1 <sup>st</sup>	Glycopyrronium/ Indacaterol	Inhalation powder capsule - Breezhaler	Ultibro	For patients stabilised on constituent drugs	
LABA + ICS	1 <sup>st</sup>	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.	
	2 <sup>nd</sup>	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)	
		Budesonide/formoterol		DuoResp	160/4.5mcg equivalent to metered dose of 200mcg/6mcg 320/9mcg equivalent to metered dose 400/12mcg	
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 <u>www.gp-update.co.uk</u>

NICE (2010) <u>Chronic obstructive pulmonary disease-Management of COPD in adults in primary and secondary care</u> (partial update) Nice Clinical Guideline101.2010 <a href="http://www.impressresp.com/index.php?option=com/docman&task=doc/view&gid=51&Itemid=82">http://www.impressresp.com/index.php?option=com/docman&task=doc/view&gid=51&Itemid=82</a>