

Chronic Obstructive Pulmonary Disease Rescue Packs Guidance For Primary Care Healthcare Professionals

Document history:

Version	Date	Main Changes/Comments
1	September 2021	New document for KM CCG. Prepared by Chris Bridge and Yiki Chi Medicines Optimisation Pharmacists KMCCG. Presented at Respiratory clinical meetings and circulated to MFT/EKHFT lead respiratory consultants and primary care respiratory leads. Comments received and guidance adjusted accordingly.
2	September 2021	Removal of alternative antibiotic treatment as per Dr Banerjee recommendation, and font size reduced to make document more succinct for primary care.
2a	13 th September 2021	Altered as per comments from Dr Banik (Primary care respiratory lead EK)
3	30 th September 2021	Altered as per comments from JFG and further engagement required from antimicrobial colleagues.
4	11 th November 2021	Addition of community clinician statement as per JPC
5	9 th November 2023	Reviewed by Helen Ramsey and Cath Cooksey. No changes required. Taken to Dec IMOC for noting.

Chronic Obstructive Pulmonary Disease Rescue Packs Guidance For Primary Care Healthcare Professionals.

The following guidance has been developed to support practices to appropriately prescribe anticipatory oral corticosteroids and/or antibiotics ('rescue packs') to keep at home. They are to be used during COPD Flare-ups also known as COPD exacerbations – which are "acute worsening of respiratory symptoms that requires additional therapy"

When should rescue packs be considered?

NICE guideline NG115 and the Primary Care Respiratory Society (PCRS) recommend that patients diagnosed with COPD should be offered rescue medication at home if the patient:

- has had two or more exacerbations (or one exacerbation requiring hospital admission) in the last year and remains at risk of further exacerbations
- **and** has the understanding and confidence with using rescue medication and the associated benefits and risks
- **and** is able to notify their healthcare professional when they have used the medication and to request for replacement supplies.

Careful consideration of the suitability for rescue packs must be included in COPD management plans. Risk factors for frequent exacerbations should also be considered in order to ensure appropriate use of rescue medication whilst also reducing the need for hospitalisation.

Risk factors for frequent Flare-ups

- Smoking
- Increased age
- Severity of FEV1 impairment
- Frequent past exacerbations
- Frequent respiratory tract infections
- Daily cough and wheeze
- Persistent symptoms of chronic bronchitis
- Co morbid conditions: mainly cardiovascular disease

Commonly reported symptoms of a Flare-up are increased levels of:

- Breathlessness
- Cough
- Sputum volume or purulence and/or change in colour
- Wheeze
- Malaise/fatigue
- Temperature

Rescue pack treatment options

Symptoms	Treatment strategy	Treatment
Increased in sputum volume, purulence or change in colour	Start antibiotics	First line – amoxicillin 500mg TDS for 5 days If allergic to penicillins then: Doxycycline 200mg on day 1 then 100mg OD for 4 days (total duration 5 days) Or Clarithromycin 500mg BD for 5 days Alternative antibiotics may be required in resistant cases but should not be issued as rescue packs. See https://www.nice.org.uk/guidance/ng114/chapter/Recommendations for details.
Increased breathlessness, chest tightness or wheeze with no improvement on increasing use of bronchodilator	Start oral corticosteroids	Prednisolone (standard release*) 30mg OD for 5 days <i>(Note there is no need to taper steroid dose)</i> * no evidence of any benefit with enteric coated
Both symptoms of change in sputum and breathlessness	Start both antibiotics and oral corticosteroids	Treatment as above

Consider the following at the point of prescribing	
Prescribing advice	Patient counselling points
<ul style="list-style-type: none"> Check allergy status at the point of prescribing medication. Rescue medication must not be added to the repeat medication list, only prescribe on the acute list. Dosage instructions must make clear the intended use of rescue medication i.e. 'only for COPD Flare-ups'. Advise patient to contact GP practice when there has been a need to use one of the rescue medication to allow for the following: <ol style="list-style-type: none"> To record the episode of Flare-up: Acute exacerbation of COPD SNOMED 195951007 Or Acute infective exacerbation of COPD SNOMED 285381006 To replace the rescue medication used To discuss possible triggers or reasons for exacerbation, review current on-going treatment plan and adjust if needed. If re-issuing rescue packs occurs outside of a COPD review ensure to check for date of last review and date of last rescue pack issue. Consider if a steroid card should be issued to the patient, particularly if multiple courses of steroids have been issued in the last year. 	<ul style="list-style-type: none"> Explore smoking cessation options with patient (if applicable). Patient may require either antibiotics or steroids, not always both. Discuss symptoms and whether antibiotics and/or steroids should be used (be aware that a lot of anxiety can trigger breathlessness). <p>Antibiotics should be initiated during Flare-ups if sputum becomes purulent. Sputum culture can be useful to check for bacterial infection, especially if they have started the rescue medication and have not improved with the first 5 day course of treatment; or have had back to back Flare-ups within 4 weeks.</p> <p>Start oral corticosteroid therapy if increased breathlessness interferes with daily activities.</p> <p>Patients might start to take their prednisolone too early or too late, or they may think they always need to take their antibiotics and steroids together. Patients need to understand that sometimes they may only need to take the steroids to treat their breathlessness.</p> <ul style="list-style-type: none"> Provide a copy of Self-Management of Flare-ups guide (appendix 1) to ensure patients can follow the instructions including actions to take if experiencing severe symptoms. Advise to take the medication as instructed (including the need to complete the prescribed course). Discuss actions to take when symptoms worsen rapidly or significantly, or do not improve within 2 to 3 days (or other agreed time) or becomes systemically unwell (NEWS2 score). Symptoms may not be fully resolved following a course of antibiotics. Care is needed when using oral steroids in diabetics as significant hyperglycaemia can be triggered. Provide advice as appropriate. Patient should make contact with GP practice to inform them of starting the rescue pack. Advise to contact the GP practice for a full COPD review if poor response to rescue pack, or two rescue packs have been used within the last year. Current treatment should be reviewed including further action plan to help minimise exacerbation risk. Self-management plan (appendix 2) should be updated. Consider the possibility of differential diagnosis. (In particular an up to date Chest x-ray to exclude other lung pathology including lung cancer)

Community respiratory Clinicians

Community respiratory nurses may prescribe or recommend prescribing of rescue medication for an un-well patient. When this happens be assured that an assessment has been made to ensure the patients suitability. This should be recorded on the patient's notes as per the previously mentioned SNOMED code, and if the patient does not respond to the initial rescue course liaison with community teams may be required to assess treatment escalation and review of COPD management plan.

References

1. NICE guidelines. Chronic obstructive pulmonary disease in over 16s: diagnosis and management (NG115), Dec 2018.
2. NICE guidelines. Chronic obstructive pulmonary disease (acute exacerbation): antimicrobial prescribing, Dec 2018.
3. NICE pathways. Exacerbations of COPD. August 2020.
4. NICE guidelines – evidence reviews. Chronic obstructive pulmonary disease in over 16s: diagnosis and management (NG115) – Evidence reviews for the length of corticosteroid use during exacerbations, July 2019.
5. Primary Care Respiratory Society (PCRS). Winter 2020. Issue 21. <https://www.pcrs-uk.org/sites/pcrs-uk.org/files/pcru/articles/2020-Winter-Issue-21-Appropriate-Use-of-Rescue-Packs.pdf>

Appendix 1

Chronic Obstructive Pulmonary Disease (COPD) Self-Management of Flare-ups Guide

Patient name		Date of birth	
Clinician name		Signed	
Job title		Date	
GP practice		Practice Tel No.	

If you have COPD you are at risk of getting **Flare-ups** or chest infections when your symptoms get worse. Your COPD rescue medicines are a supply of standby medications to start if this happens before you are able to see your GP.

It is important to recognise the symptoms early as good treatment taken early can help you get better quicker and reduce further damage to your lungs. Always follow the directions on your medication.

WHEN YOU ARE WELL		
KNOW <ul style="list-style-type: none"> How much you can do each day How your breathing is at rest and during activity What makes your breathing worse How much you cough and if you produce sputum, what colour is your sputum How often you use your reliever (blue inhaler) 	LIFESTYLE TIPS <ul style="list-style-type: none"> Eat a balanced diet Stop smoking, avoid triggers Keep active, exercise as much as you can Take your medicines as prescribed Avoid running out of medication Ensure you have an annual review with your GP 	
WARNING SIGNS OF EXACERBATION		
SIGNS <ul style="list-style-type: none"> Breathlessness – more breathless than usual that interferes with daily activities Increased volume of sputum (phlegm), is thicker or stickier than normal or it has changed colour to yellow or green 	WHAT TO DO <ul style="list-style-type: none"> Monitor your symptoms closely Rest – allow more time for rest Drink extra fluids and eat regular meals Increase use of reliever inhaler to 2-4puffs every 4-6hours for 24hours 	IF NO RESPONSE AFTER 48HRS <ul style="list-style-type: none"> For breathlessness: start rescue medication – oral prednisolone For change in sputum: start rescue medication – antibiotics For both symptoms: start prednisolone and antibiotics <p>Contact your GP surgery if you have used your rescue medication</p>
SEVERE SYMPTOMS		
SIGNS <ul style="list-style-type: none"> Very short of breath with NO response to reliever inhaler Chest pain High fever (above 38°C) Feel agitated, panic or fear Confusion or drowsiness You develop any other symptoms of concern 	WHAT TO DO <p>Urgent GP appointment or contact 111 or 999</p>	
<p>If you are using your rescue medication:</p> <p>Continue with your usual medication and contact your GP surgery to book for a post-exacerbation review</p>		