



COPD rescue pack information

Prescriber's guide

Services provided by:

Barnsley Clinical Commissioning Group
South West Yorkshire Partnership Trust
Barnsley Healthcare Federation
Barnsley Hospital NHS Foundation Trust
Barnsley Primary Care

Chronic obstructive pulmonary disease (COPD) is the second most common cause of emergency admission to hospital nationally. The biggest predictor of admission is a previous admission, and moderate/severe exacerbations often rebound at 14 days when a bacterial infection hits in the wake of a virally induced flare up.

However, there is robust evidence that many admissions are avoidable.¹ Prompt therapy in exacerbations results in less lung damage, faster recovery and fewer admissions (and subsequent readmissions) to hospital.¹

NICE recommendations for self-management of COPD exacerbations

NICE clinical guidelines (CG101) for COPD² recommend:

- Patients at risk of having an exacerbation of COPD should be given self-management advice that encourages them to respond promptly to the symptoms of an exacerbation.
- Patients should be encouraged to respond promptly to the symptoms of an exacerbation by:
 - » starting oral corticosteroid therapy if their increased breathlessness interferes with activities of daily living (unless contraindicated)
 - » starting antibiotic therapy if their sputum is purulent
 - » adjusting their bronchodilator therapy to control their symptoms.
- Patients **at risk** of having an exacerbation of COPD should be given a course of antibiotic and corticosteroid tablets to keep at home for use as part of a self-management strategy
- The appropriate use of these tablets should be monitored.
- Patients given self-management plans should be advised to contact a healthcare professional if they do not improve.

We refer below to this stand-by supply of antibiotic and corticosteroid tablets for a COPD exacerbation as a COPD rescue pack.

Rescue packs of antibiotics and steroids are **NOT appropriate for all patients with COPD**³.

Other CCGs who have adopted the routine provision of rescue packs to all patients with COPD are finding that over-usage is occurring and consequently problems relating to antibiotic resistance and steroid side effects are being seen.

¹ Department of Health. An Outcomes Strategy for COPD and Asthma: NHS Companion Document. May 2012 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216531/dh_134001.pdf

² NICE. Chronic obstructive pulmonary disease: Management of chronic obstructive pulmonary disease in adults in primary and secondary care 2010 <http://www.nice.org.uk/guidance/CG101>

³ NICE. Quality Standard for chronic obstructive pulmonary disease. July 2011 <http://www.nice.org.uk/guidance/QS10/chapter/Quality-statement-7-Management-of-exacerbations>



Which patients should have rescue packs

- Patients should have a confirmed diagnosis of COPD (i.e. the presence of airflow obstruction has been confirmed by post-bronchodilator spirometry)

AND either have a history of:

- A previous admission to hospital with an exacerbation of COPD

Or:

- Two or more previous exacerbations per year of COPD managed by the primary care or community team

Patients who have not had previous exacerbations requiring steroids +/- antibiotics should not be offered home rescue packs.

***NB:** This guidance does not apply to patients on long-term prophylactic antibiotics for a respiratory condition.*

Patient education and advice

- Patients being given prescriptions for a rescue packs **MUST** have a flare up plan and have had this explained to them fully and understand:
 - » The signs and symptoms of a flare up
 - » When to commence:
 - Increase in bronchodilators
 - Steroids
 - Antibiotics
 - » When and who to contact for help
- Please advise patients:
 - » If significant increase in breathlessness or wheeze start prednisolone 5mg (plain) tablets - 40mg (8 tablets) daily for 5 days
 - » Adjust bronchodilator therapy to control symptoms by adding a large volume spacer and increasing frequency
 - » If purulent sputum, start amoxicillin 500mg three times a day for 7 days. If penicillin allergic, prescribe clarithromycin 500mg twice a day for 7 days or doxycycline 200mg daily for 1 day and then 100mg daily for 6 days
- Patients should be given a copy of the **patient home rescue pack information sheet and advised to keep this with the dispensed medications until they are required.**

There are many anecdotal reports that:

- Following supply of a COPD rescue pack, patients may later become confused as to what the medications were prescribed for and therefore take them inappropriately.
- Having used their supply of rescue medications many patients later forget they need to obtain a further supply.

To help support patients take these medications more effectively a COPD rescue pack information leaflet has been developed to accompany these prescriptions.

Review of patients

- Patients starting their rescue pack is not a substitute for clinical review – it just enables treatment to start quicker.
- Patients having an exacerbation should be advised to **contact their GP practice for an urgent review within 48 hours of commencing their rescue medications:**
 - » To confirm diagnosis of a 'true' exacerbation
 - » To ensure the correct management of current exacerbation
 - » To review the patient's overall management and strategy for future exacerbations
 - » To review if rescue medications have been started appropriately and whether it is appropriate to replenish the patient's supply
- If the patient fails to respond to the first line antibiotics, a sputum sample should be sent for culture and sensitivity test before commencing an alternative antibiotic.
- All patients having had an exacerbation of COPD should be offered **pulmonary rehabilitation.**
- **In line with NICE guidance all patients should also be reviewed two weeks after their exacerbation.**

Other factors to consider during the review:

- Re-assess for co-morbidity (for example malignant change), treatment adherence and inhaler technique.
- Consider bronchiectasis and check sputum for unusual organisms (sputum samples could be considered for symptomatic patients to exclude atypical organisms).
- Review regular medication. For patients who have had 2 or more exacerbations in 12 months consider LABA with an inhaled corticosteroid (ICS) in a combination inhaler if not already on one or LAMA in addition to LABA+ICS if having exacerbations despite taking LABA+ICS.
- Consider osteoporosis prophylaxis if the patient has taken ≥ 3 courses of oral prednisolone in 12 months.
- Consider whether a longer course of prednisolone is required (maximum of 14 days).

- The rescue pack should not be replenished until the patient has been reviewed
- **Rescue packs should not be available on repeat prescription**

Prescribing the rescue pack

- When issuing a prescription for a rescue pack please use the read code:
 - » Issue of COPD rescue pack – EMIS: 8BMW SystmOne: XaW9D
 - » COPD rescue pack declined – EMIS: 8IEZ SystmOne: XaZp7
- Please prescribe the items on a **separate prescription form** with obvious directions on the prescription e.g. COPD rescue pack medication - Take X tablets X times per day.

We will suggest community pharmacists:

- Separately bag the rescue pack medications
- Distinctly label this bag as “COPD rescue pack”

To help community pharmacists identify rescue pack medications it would be helpful if the items were issued on a separate prescription form.

- Please prescribe:
 - a. In line with GOLD guidelines 40mg prednisolone per day for 5 days.**AND**
 - b. In line with Barnsley antibiotic guideline the first line antibiotics for acute infective exacerbations of COPD:
 - » Amoxicillin 500mg tds for 7 days or
 - » Doxycycline 200mg stat then 100mg od for 6 days or
 - » Clarithromycin 500mg bd for 7 days

The **Option 1** antibiotic choice for COPD rescue pack is Amoxicillin.

Prescriptions for the **Option 1** COPD rescue pack should be written as follows:

Amoxicillin 500mg tablets x 21 Sig: COPD rescue pack antibiotic tablets, 1 three times daily until course complete. For COPD flare-up. Issue patient leaflet

Prednisolone 5mg tablets x 40 Sig: COPD rescue pack steroid tablets, 8 stat and then 8 mane for 4 days. For COPD flare-up. Issue patient leaflet

The **Option 2** antibiotic choice for COPD rescue pack is **Doxycycline**.

Doxycycline 100mg tablets x 8 Sig: COPD rescue pack antibiotic tablets, 2 stat and then 1 daily until course complete. For COPD flare-up. Issue patient leaflet

Prednisolone 5mg tablets x 40 Sig: COPD rescue pack steroid tablets, 8 stat and then 8 mane for 1 week. For COPD flare-up. Issue patient leaflet

Option 3 antibiotic of choice for COPD rescue pack is **Clarithromycin**.

Clarithromycin 500mg tablets x 14 Sig: COPD rescue pack antibiotic tablets, 1 tablet twice a day until course complete. For COPD flare-up. Issue patient leaflet

Prednisolone 5mg tablets x 40 Sig: COPD rescue pack steroid tablets, 8 stat and then 8 mane for 1 week. For COPD flare-up. Issue patient leaflet

Monitoring of COPD rescue packs

Practices should have a process in place for supply, monitoring and review of rescue medications.

Rescue packs should not be available on repeat prescription

Consider referral to respiratory specialist nurse if the patient has had three or more exacerbations in a 12 month period.

Pulmonary rehabilitation

Patients suitable for use of a rescue pack will probably also benefit from pulmonary rehabilitation and this should be offered to the patient. Referral forms are available on BEST website: <http://best.barnsleyccg.nhs.uk/>

When compared to usual care, pulmonary rehabilitation:

Reduces:

- Mortality
- Dyspnoea
- Fatigue
- Hospital admissions & LOS
- Readmissions (From 33% to 7%)
- Number of home visits

Increases:

- Exercise capacity
- Physical activity
- Self-reported measures of ADL
- Overall health status
- Physical wellbeing
- Self-efficacy & sense of control