Pharmacological management of chronic obstructive pulmonary disease (COPD)

Key recommendations

- Local commissioning bodies should ensure that up-to-date local guidance is in place for the management of COPD.
- Local guidance should direct prescribers to cost-effective products on the local formulary that will be suitable for most people. It should include a range of inhaler device options, so that the choice can be tailored to the individual's preference, ability to use the inhaler device and environmental considerations.
- The fundamentals of COPD care should be revisited at every review: stop smoking, once-only pneumococcal vaccine, annual influenza vaccine, pulmonary rehabilitation if indicated, co-develop a personalised self-management plan, optimise treatment for co-morbidities.
- Where inhaled therapy for COPD is needed for breathlessness and exercise limitation, offer a SABA or SAMA as needed.
- For people with spirometrically confirmed COPD who are limited by symptoms or have exacerbations despite using a short-acting bronchodilator, offer either:
  - LAMA + LABA inhaler, if they do not have asthmatic features or features suggesting steroid responsiveness, or
  - LABA + ICS inhaler, if they do have asthmatic features or features suggesting steroid responsiveness.
- Before escalating treatment to LAMA + LABA + ICS (triple therapy) inhaler, undertake a clinical review to ensure non-pharmacological treatments are optimised and worsening symptoms are not caused by another condition.
- Triple therapy with LAMA + LABA + ICS inhaler should be:
  - offered to people on LABA + ICS that continue to have, either symptoms that adversely impact quality of life or one severe or two moderate exacerbations within a year
  - considered for people on LAMA + LABA inhaler who have one severe or two moderate exacerbations within a year
  - considered for a three month trial for people on LAMA + LABA inhaler who do not fit the exacerbation criteria, but continue to have day to day symptoms that adversely impact on quality of life. Revert to LAMA + LABA inhaler if there is no improvement.
- Clinicians should minimise the number of inhalers and the number of different types of inhaler used by each person as far as possible.
- Consideration of adherence and a review of inhaler technique should be part of medication reviews for people with COPD. Importantly, these factors should be considered before concluding that current therapy is insufficient.
- Prescribe long-acting drugs by brand and device to ensure that people receive inhalers they have been trained to use.
- Do not routinely prescribe mucolytics to prevent exacerbations in people with stable COPD.
- Consider mucolytics for people with a chronic cough productive of sputum, commenced as a trial, with an acute prescription issue and planned review. Continue treatment only if there is symptomatic improvement. Prescribers should select the lowest cost preparation that is suitable for the individual.
- People who keep a short course of oral corticosteroids and/or antibiotics at home for use during an exacerbation should know to contact a healthcare professional if they start their self-management course and should be investigated if they use three or more courses in a year.
- Document the reason for continuing ICS in clinical records and review at least annually.
- Delay planned ICS withdrawal during the COVID-19 pandemic and review when updated NICE guidance for COPD or management of COPD during COVID is available.
- Be aware of, and be prepared to discuss with the person, the risk of side effects of ICS, including pneumonia.
- Ensure that steroid cards and steroid emergency cards are issued to appropriate people.[6] PrescQIPP resource: Implementing the NHS Steroid Emergency Card National Patient Safety Alert (NatPSA)
- Make use of community pharmacy services that can support people in getting the most from their COPD medication. Services include the New Medicines Service (NMS) in England, the NHS Medicines: Care and Review service in Scotland, and Discharge Medication Reviews (DMRs) in Wales.

Savings available

A 10% reduction in carbocisteine and acetylcysteine prescribing in primary care would represent an annual saving of £1.6 million across England, Wales and Scotland [NHSBSA (August-October 2021) and Public Health Scotland (July-September 2021)]. **This equates to £2,306 per 100,000 patients.**

Prescribing acetylcysteine generically as acetylcysteine 600mg sugar-free effervescent tablets is the least costly option. **If all acetylcysteine prescriptions were written as acetylcysteine 600mg sugar free effervescent tablets, this could produce an annual saving of £559,225 across England, Wales and Scotland** [NHSBSA (August-October 2021) and Public Health Scotland (July-September 2021)]. **This equates to £796 per 100,000 patients.**

Liquid preparations of azithromycin and carbocisteine are expensive compared to solid dosage forms. **Switching 50% of prescriptions for azithromycin and carbocisteine suspensions or solutions to capsules or tablets could save £566,650 annually across England, Wales and Scotland** [NHSBSA (August-October 2021) and Public Health Scotland (July-September 2021)]. **This equates to £806 per 100,000 patients.**

Carbocisteine tablets are available in 375mg and 750mg strengths. Prescribing the lower strength tablet is more cost effective. **Switching all carbocisteine 750mg tablets to two 375mg tablets could save £271,516 annually across England, Wales and Scotland** [NHSBSA (August-October 2021) and Public Health Scotland (July-September 2021)]. **This equates to £386 per 100,000 patients.**

Additional resources available	Bulletin	https://www.prescqipp.info/our-resources/bulletins/bulletin-283-copd/
	Tools	
	Data pack	https://data.prescqipp.info/?pdata.u/#/views/B283_COPDupdate/FrontPage?:iid=1

Support with any queries or comments related to the content of this document is available through the PrescQIPP help centre https://help.prescqipp.info

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