Primary Care Respiratory Update

Autumn/Winter 2024 Issue 29

Your members' magazine packed with useful features, clinical updates, educational updates, respiratory news and opinion.

Are you ready for the new asthma guideline?

Tailoring Inhaler Devices

Breathing Thinking Functioning Model

Obesity and Impact on Respiratory Health and Primary Care

Vaping and children and young people

Primary Care Respiratory Society

Acepiro®
600 mg Effervescent Tablets
Acetylcysteine

When you want a cost effective, once a day mucolytic, prescribe Acepiro® by brand

When you want a cost effective, once a day mucolytic, with a reliable supply for your patients, prescribe **Acepiro® by brand**[1].

At just £4.40 for 30 days treatment[2], prescribing **Acepiro® by brand** it is the least expensive way of prescribing a mucolytic even compared to prescribing by generic name[3].

Prescribing **Acepiro®** (Acetylcysteine 600 mg effervescent tablets) by brand could save £9.9m to the NHS when compared to generic Carbocisteine, Mucodyne®, generic Acetylcysteine and Nacsys®. (PACT data to July 2024).

We will also like to reassure you with a guarantee concerning our resilience and ability to supply Acepiro®. We have never been in an out-of-stock situation and will maintain our supply having over 317,000 packs of Acepiro® in the UK supply chain which is more than enough to fulfil the whole UK acetylcysteine requirements for 12months.

- **SIMPLE**
- **EFFECTIVE**
- **ECONOMICAL**

Acepiro® 600 mg effervescent tablets – Abbreviated Prescribing Information

Please refer to the Summary of Product Characteristics (SmPC) before prescribing Acepiro® 600mg effervescent tablets.

Each tablet contains 600 mg acetylcysteine. **Uses** Acepiro® is indicated in adults as a mucolytic agent for the treatment of respiratory tract diseases in which a reduction in bronchial secretion viscosity is required to facilitate expectoration. **Dosage and Administration** One tablet daily after food. Each tablet should be dissolved in half a glass of water. Duration of therapy should be determined by the treating physician. **Special Warnings and Precautions** Hypersensitivity to the active substance or to any of the excipients. Acepiro® should not be used by adolescents or children. Use with caution in patients with a history of asthma or bronchospasm. Should bronchospasm occur Acepiro® should be discontinued immediately. Very rarely, serious skin reactions such as Stevens-Johnson syndrome and Lyell syndrome have been reported. Patients should be advised to seek immediate medical advice in the presence of new skin or mucosal lesions. Administer with caution in patients with a reduced cough reflex for example elderly or frail patients. Postural drainage and broncho-aspiration should be performed in patients unable to cough up bronchial secretions effectively. Incompletely dissolved tablets present a risk of choking and aspiration, particularly to elderly patients. Use with caution in patients with a history of peptic ulcer disease or histamine intolerance. Hepatic and renal impairment can reduce clearance and increase systemic acetylcysteine plasma levels which may result in an increase in adverse drug reactions due to drug accumulation. **Contraindications** Hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption. **Interactions with other medicinal products** In vitro tests indicate that tetracycline, aminoglycosides and penicillin are inactivated when mixed directly with acetylcysteine. Where concomitant use of Acepiro® and oral antibiotics is required, separate administration by an interval of at least two hours. Acetylcysteine may potentiate the vasodilatory effect of nitroglycerine. Do not administer concurrently with antitussives. Acetylcysteine may reduce the bioavailability of certain heavy metal salts and should be taken separately at different times of the day. **Pregnancy fertility and Lactation** Administration of acetylcysteine during pregnancy and lactation should take place only after a strict risk benefit assessment. **Side Effects** The following events have been reported by at least one in a thousand and less than one in a hundred patients treated with acetylcysteine – hypersensitivity reactions, headache, tinnitus, tachycardia, stomatitis, abdominal pain, nausea, vomiting, diarrhoea, pruritus, urticaria, exanthema, rash, angioedema, pyrexia and lowered blood pressure. The incidence of facial oedema has not been established. **Overdose** There have been no reports of toxic overdose with oral acetylcysteine. In the case of an overdose of Acepiro®, management should be supportive. **Effects on the ability to drive and/or operate machines** Acepiro® has no effect on the ability to drive or operate machines.

Legal category: POM

Pack size: 20 or 30 effervescent tablets in strips of laminated aluminium paper foil.

Shelf life: 3 years.

NHS price: 20 effervescent tablets = £3.65
30 effervescent tablets = £4.40

Marketing Authorisation Holder: Stirling Anglian Pharmaceuticals Ltd, Hillington Park Innovation Centre, 1 Ainslie Road, Hillington Park, Glasgow G52 4RU

Marketing Authorisation Number: PL 42582/0015

Further information is available at **medinfo@stirlinganglianpharmaceuticals.com** or via the office number **0141 585 6352**

Date of preparation: 17 October 2024

Unique Code: 24-API-002 v1.0

Adverse events should be reported. Reporting forms and information can be found at **http://yellowcard.mhra.gov.uk** or downloaded from Google Play or the Apple App store. Adverse events should also be reported to JensonR+ on **01271 334609** or Stirling Anglian Pharmaceuticals on **0345 527 0680.**

24-ACE-016 v1.0 | Date of preparation: December 2024

References:
1. Acepiro Summary of Product Characteristics. Available at https://www.medicines.org.uk/emc/product/13849/. Date accessed December 2024
2. British National Formulary available at https://bnf.nice.org.uk/drugs/acetylcysteine. Date accessed December 2024
3. NHS England and Wales Drug Tariff March 2023 available at https://www.drugtariff.nhsbsa.nhs.uk/#/00834576-DD_1/DD00834564/Home. Date accessed December 2024

STIRLING ANGLIAN PHARMACEUTICALS

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Intended for UK Healthcare Professionals only

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25µg/125µg

25µg/250µg

Bioequivalent to Seretide® pMDI (salmeterol/fluticasone) across **all three strengths.**[1,2,3]

Up to 55% saving on the cost of category C (salmeterol/ fluticasone pMDI) on the UK Drug Tariff.[4]

Licensed in both children (25µg/50µg only) **and adults***†**

Flexibility and consistency for patients and prescribers, **every step of the way.**

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Combisal® (salmeterol/fluticasone) is a pressurised metered dose inhaler (pMDI) for the regular treatment of asthma where use of a combination product (long-acting ß2-agonist and inhaled corticosteroid) is appropriate for:[2]

- patients not adequately controlled with inhaled corticosteroids and 'as needed' inhaled short- acting β2 agonist

or

- patients already adequately controlled on both inhaled corticosteroid and long-acting β2 agonist

*Combisal® 25/50µg is licensed in children aged 4 and over. All three strengths licensed in adults and adolescents 12 years and older. †Use of an AeroChamber Plus® spacer device with Combisal is recommended in those who may have difficulties coordinating actuation with inspiration e.g. children <12 years. **Low dose fluticasone provides most of the clinical benefit for most patients with asthma. However, corticosteroid responsiveness varies between patients, so some may require medium dose or high dose fluticasone, particularly patients with severe asthma. Combisal 25µg/50µg is not appropriate for adults and adolescents with severe asthma.

References:
1. Combisal Summaries of Product Characteristics. Accessed October 2024
2. Seretide Evohaler Summaries of Product Characteristics. Accessed October 2024
3. Bioequivalence Data on File. 1010422379 v 4.0 August 2023
4. October 2024 UK Drug Tariff.

Combisal®

Salmeterol/Fluticasone

Meets the ups and downs of cost-effective asthma management

Combisal (Salmeterol/ Fluticasone) Prescribing Information (please refer to the full SmPC before prescribing)
Indications: Regular treatment of asthma where use of combination product (long-acting β2 agonist and inhaled corticosteroid) is appropriate: patients not adequately controlled with inhaled corticosteroids and 'as needed' inhaled short-acting β2 agonist or patients already adequately controlled on both inhaled corticosteroid and long-acting β2 agonist **Available strengths:** 25µg/50µg; 25µg/125µg & 25µg/250µg salmeterol/fluticasone per metered dose pressurised inhalation, suspension. **Dosage and method of use:** Inhalation use. Adults and adolescents 12 years and older: two inhalations twice daily. Children 4 years and older: two inhalations 25 µg/50 µg twice daily. Titrate to lowest dose at which effective control of symptoms is maintained and if long-term control maintained at lowest dose, consider testing inhaled corticosteroid alone or combination once daily. Combisal 25 µg /50 µg not appropriate for adults and children with severe asthma. Maximum licensed dose of fluticasone propionate in children is 100 µg twice daily. No data in children under 4 years. AeroChamber Plus® spacer device can be used. This may increase drug delivery to lungs with increase in risk of systemic adverse effects. Advise patients to rinse mouth out with water and spit out, and/or brush teeth after each dose of medicine to minimize risk of oropharyngeal candidiasis and hoarseness. **Contraindications:** Hypersensitivity to active substance or excipients. **Special warnings and precautions for use:** Do not use to treat acute asthma for which fast- and short-acting bronchodilator required or initiate Combisal during an exacerbation, or if asthma is significantly worsening or acutely deteriorating. Use with caution in patients with active or quiescent pulmonary tuberculosis and fungal, viral or other infections of the airway; severe cardiovascular disorders or heart rhythm abnormalities, diabetes mellitus, thyrotoxicosis, uncorrected hypokalaemia or predisposed to low levels of serum potassium. Discontinue if paradoxical bronchospasm occurs. Prolonged use of high doses of ICS may result in adrenal suppression and acute adrenal crisis. Consider additional systemic corticosteroid cover during periods of stress or elective surgery. Monitor patients transferring from oral steroids for impaired adrenal reserve. Safety and efficacy in COPD not established. Visual disturbance reported with steroid use – if blurred vision or other visual disturbances, consider referral to ophthalmologist for evaluation of possible causes e.g. cataract, glaucoma, central serous chorioretinopathy. If prolonged treatment in children, monitor height and ensure dose of inhaled steroid is lowest at which effective asthma control is maintained. Interactions: The following combinations should be avoided: Ritonavir, ketoconazole, itraconazole, cobicistat containing products or other potent CYP3A4 inhibitors, moderate CYP3A inhibitors e.g. erythromycin (if benefit outweighs risk, monitor for systemic steroid side effects); non- selective and selective β blockers; xanthine derivatives, steroids and diuretics in acute severe asthma. Other β adrenergic containing drugs can have an additive effect. **Pregnancy & Lactation:** Administer only if expected benefit to mother is greater than any possible risk to fetus. Not to be used during breastfeeding. **Side effects:** For full list of side effects consult SmPC. 'Very Common' 'Common' and 'Serious' side effects included in prescribing information. Very common (≥1/10) side effects: headache, nasopharyngitis. Common (≥1/100 to , <1/10) side effects: candidiasis of mouth and throat, pneumonia, bronchitis, hypokalaemia, throat irritation, hoarseness/dysphonia, sinusitis, contusions, muscle cramps, traumatic fractures, arthralgia, myalgia. Uncommon Serious (≥1/1000 to <1/100) side effects: cutaneous hypersensitivity reactions, dyspnoea, hyperglycaemia, anxiety, sleep disorders, tremor, cataract, palpitations, tachycardia, atrial fibrillation, angina pectoris. Rare serious (≥1/10,000 to <1/1000) side effects: oesophageal candidiasis, facial and oropharyngeal angioedema, bronchospasm, anaphylactic reactions including anaphylactic shock, Cushing's syndrome, Cushingoid features, adrenal suppression, growth retardation in children and adolescents, decreased bone mineral density, behavioural changes (psychomotor hyperactivity and irritability predominantly in children), glaucoma, cardiac arrhythmias, paradoxical bronchospasm. Serious side effects (unknown frequency): depression, aggression (predominantly in children), blurred vision. **MA number:** PL 36532/0001-0003. **Cost:** £13.50 for 25/50µg, £10.48 for 25/125µg, £13.99 for 25/250µg. **MAH:** Genetic S.p.A., Via G. Della Monica 26, 84083 Castel San Giorgio (SA), Italy. Distributed in the UK by: Aspire Pharma Ltd, Unit 4, Rotherbrook Court, Bedford Road, Petersfield, Hampshire, GU32 3QG. **Legal category:** POM. **Date reviewed:** March 2023 **Version number:** 1010422348 v 7.0

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Aspire Pharma Ltd on 01730 231148.

Primary Care Respiratory Update

Contents

Intended for UK healthcare professionals only.

Helping your patients live in harmony with creatures great and small

Ryaltris® 600 mcg 25 mcg

(olopatadine and mometasone furoate nasal spray)

Live like you

Ryaltris is indicated in adults and adolescents 12 years of age and older for the treatment of moderate to severe nasal symptoms associated with allergic rhinitis (AR).[1]

Ryaltris® is the **only** fixed-dose combination intranasal spray for **first-line treatment** of moderate to severe nasal symptoms associated with allergic rhinitis[1] – and can bring **symptom relief within 10-15 minutes**.[2-4*]

*Findings from one environmental exposure chamber study and two large randomised controlled trials.[2-4]

Ryaltris is **generally well tolerated**; the most commonly reported adverse reactions are dysgeusia, epistaxis and nasal discomfort.[1,2,5]

Find out more at **www.ryaltris.co.uk**

Scan to visit www.ryaltris.co.uk

Ryaltris Prescribing Information

Ryaltris (mometasone furoate and olopatadine hydrochloride) **Please refer to the Summary of Product Characteristics (SmPC) before prescribing.** One delivered dose contains mometasone furoate monohydrate equivalent to 25 microgram mometasone furoate and olopatadine hydrochloride equivalent to 600 micrograms olopatadine. **Indication:** treatment of moderate to severe nasal symptoms associated with allergic rhinitis in adults and adolescents 12 years of age and older **Posology and method of administration:** The usual recommended dose is two actuations in each nostril twice daily (morning and evening). *Children below 12 years:* Ryaltris is not recommended. Elderly: No dose adjustment required. *Renal and hepatic impairment:* there are no data in patients with renal and hepatic impairment, however no dose adjustment is expected to be required. **Contraindications:** Hypersensitivity to the active substances or to any of the excipients. Ryaltris should not be used in the presence of untreated localised infection involving the nasal mucosa, such as herpes simplex. Patients who have experienced recent nasal surgery or trauma should not use a nasal corticosteroid until healing has occurred. **Precautions:** *Local nasal effects:* nasal ulceration and nasal septal perforation have been reported in patients following intranasal antihistamines. Nasal septal perforation has been reported following intranasal corticosteroids. Patients using Ryaltris over several months or longer should be examined periodically for possible changes in the nasal mucosa. Ryaltris is not recommended in cases of nasal septum perforation. In clinical studies with mometasone furoate administered intranasally, the development of localised infections of the nose and pharynx with *Candida albicans* has occurred; may require treatment and discontinuation of Ryaltris. Patients using Ryaltris over several months or longer should be examined periodically for evidence of Candida infection or other signs of adverse effects on the nasal mucosa. *Visual disturbances* may be reported with systemic and topical corticosteroid use. Symptoms such as blurred vision or other visual disturbances should be considered for ophthalmologist referral for evaluation of possible causes including cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR). *Hypersensitivity Reactions* including instances of wheezing, may occur. Discontinue Ryaltris if such reactions occur. *Immunosuppression:* Chickenpox and measles, for example, can have a more serious or even fatal course in susceptible patients and those using corticosteroids. In children or adults who have not had these diseases or been properly immunized, particular care should be taken to avoid exposure. Corticosteroids should be used with caution, if at all, in patients with active or quiescent tuberculous infections of the respiratory tract, untreated local or systemic fungal or bacterial infections, systemic viral or parasitic infections, or ocular herpes simplex because of the potential for worsening of these infections. *Systemic Effects of Corticosteroids:* potential systemic effects may include Cushing's syndrome, Cushingoid features, adrenal suppression, growth retardation in children and adolescents, cataract, glaucoma and more rarely, a range of psychological or behavioural effects including psychomotor hyperactivity, sleep disorders, anxiety, depression or aggression (particularly in children). When intranasal steroids are used at higher than recommended dosages or in susceptible individuals at recommended dosages, systemic corticosteroid effects such as hypercorticism and adrenal suppression may appear. If such changes occur, the dosage of Ryaltris should be discontinued slowly, consistent with accepted procedures for discontinuing oral corticosteroid therapy. The concomitant use of intranasal corticosteroids with other inhaled corticosteroids could increase the risk of signs or symptoms of hypercorticism and/or suppression of the HPA axis. If there is evidence for higher than recommended doses being used, then additional systemic corticosteroid cover should be considered during periods of stress or elective surgery. The replacement of a systemic corticosteroid with a topical corticosteroid can be accompanied by signs of adrenal insufficiency, and some patients may experience symptoms of withdrawal. Patients previously treated for prolonged periods with systemic corticosteroids and transferred to topical corticosteroids should be carefully monitored for acute adrenal insufficiency in response to stress. In those patients who have asthma or other clinical conditions requiring long term systemic corticosteroid treatment, too rapid a decrease in systemic corticosteroids may cause a severe exacerbation of their symptoms. *Somnolence:* in isolated cases dizziness, lethargy, fatigue and somnolence may occur when using Ryaltris. In these cases, the ability to drive and use machines may be impaired. Alcohol and other CNS depressants may enhance this effect. *Antihistamine effects:* concomitant use of other antihistaminic drugs administered may increase the risk of antihistamine adverse effects. *Paediatric population:* It is recommended that the height of children receiving prolonged treatment with nasal corticosteroids is regularly monitored. If growth is slowed, therapy should be reviewed with the aim of reducing the dose of nasal corticosteroid if possible, to the lowest dose at which effective control of symptoms is maintained. *Excipients:* Ryaltris contains 0.02 mg benzalkonium chloride in each actuation. Benzalkonium chloride may cause irritation or swelling inside the nose, especially if used for a long time. **Adverse reactions:** *Common (≥1/100 to <1/10):* dysgeusia (unpleasant taste), epistaxis, nasal discomfort. *Uncommon (≥1/1,000 to <1/100):* dizziness, headaches, somnolence, nasal dryness, dry mouth, abdominal pain, nausea, fatigue. *Rare (≥1/10,000 to <1/1000)* bacterial vaginosis, anxiety, depression, insomnia, lethargy, migraine, blurred vision, dry eye, eye discomfort, ear pain, nasal inflammation, nasal mucosal disorder, oropharyngeal pain, sneezing, throat irritation, constipation, sore tongue, laceration. *Incidence not known (reported from use of corticosteroids):* pharyngitis, upper respiratory tract infection, hypersensitivity including anaphylactic reactions, angioedema, bronchospasm, and dyspnoea, cataracts, glaucoma, increased intraocular pressure, nasal septum perforation. **Marketing authorisation number:** PL 25258/0331 **Marketing Authorisation Holder and distributer:** Glenmark Pharmaceuticals Europe Limited, Laxmi House, 2B Draycott Avenue Kenton, Middlesex, HA3 0BU. United Kingdom **Legal classification:** POM **Cost:** £13.32. 1 bottle with 29 g suspension (240 actuations) **Date of preparation:** June 2021. **Job number:** PP-UK-RYAL-0001

Adverse events should be reported. Reporting forms and information can be found at https://yellowcard.mhra.gov.uk. Adverse events should also be reported to Glenmark Pharmaceuticals Europe Ltd medical_information@glenmarkpharma.com or call 0800 458 0383

References: 1. Ryaltris Summary of Product Characteristics. **2.** Gross GN, *et al.* Ann Allergy Asthma Immunol 2019;122:630–638. **3.** Patel P, *et al.* Ann Allergy Asthma Immunol 2019;122(2):160–166. **4.** Hampel FC, *et al.* Allergy Asthma Proc 2019;40(4):261–272. **5.** Segall N, *et al.* Allergy Asthma Proc 2019;40:301–310.

Date of preparation: November 2024 PP-UK-RYAL-0536

GLENMARK Respiratory

Glenmark A new way for a new world

Opening Editorial

Katherine Hickman, *Chair, PCRS Executive*

I have said it before, and I will say it again: those who have devoted their lives to respiratory care are among the most resilient and optimistic individuals I know. It's not always easy to maintain hope when faced with challenging statistics, such as the higher asthma death rates in the UK compared to other parts of Europe, the persistent gaps in diagnostic testing, and the ongoing inconsistencies in care. Yet, the release of the updated BTS/SIGN/NICE Guidelines for Asthma offers us a renewed sense of optimism. These guidelines bring with them an opportunity to address long-standing issues, fostering a more unified approach to diagnosing and treating asthma across the country. Now is the time for every clinician seeing patients with asthma or suspected asthma to ask if they are prepared for these changes and, if not, to explore the wealth of resources that the PCRS has put forward, such as those in the article *Are you ready for the new Asthma guideline?*

This is a crucial moment for the respiratory community, as it provides a chance to rally clinicians up and down the country around a common standard of care and embed the phenomenal resources that the PCRS has developed over the years into daily practice. The dedication of those in the respiratory community and the strength of these new guidelines, I believe, signal a potential turning point in asthma care. By embracing these resources and working together, we can move towards a future where asthma care in the UK is not only more effective but also more equitable, giving every patient the best chance of better care and outcomes.

This time of year always provides an opportunity to reflect on the achievements and challenges of the past months. I remain deeply inspired by the unwavering dedication of my colleagues, who work tirelessly behind the scenes to create resources, webinars, podcasts, and the conference that support our respiratory community. However, our mission is far from over. If you're reading this, I urge you to keep going - because this edition of PCRU may be one of our best yet. But its value depends on you: share it with your colleagues, leave it in the staff room, pop it into a pigeonhole, or place a copy in your own GP surgery.

Our work is not done; the mountain is steep, but together we can get closer to the top. We must continue spreading the word, championing these vital resources, and working tirelessly to improve the care of respiratory patients and transform their outcomes.

Are you ready for the new asthma guideline?

New BTS/SIGN/NICE Guideline on Asthma: diagnosis, monitoring and chronic asthma management 2024

On the 28th November the joint National Institute for Health and Care Excellence (NICE), British Thoracic Society (BTS) and Scottish Intercollegiate Guidelines Network (SIGN) will publish their long-awaited single guideline on asthma diagnosis, monitoring and management.

This update to the guideline is likely to represent a sea change in the management of asthma and will require significant change in primary care. Are you ready? This article provides links to relevant primary care-based tools to help you prepare. This list is not intended to be comprehensive but provides a starting point for helping you to prepare for and implement change in your practice in line with the new guidance.

FeNO

At a glance – FeNO testing in primary care

Making a business case for FeNO testing in practice

FeNo in Asthma – e-learning programme

Diagnostic tests

PCRS Consensus on how to calculate and interpret PEFR variability and reversibility for asthma diagnosis

PCRS Position statement: Spirometry in primary care

Treatment of asthma

Budesonide/ Formoterol as needed treatment

Budesonide/ Formoterol Maintenance and Reliever Treatment

Budesonide/ Formoterol Maintenance and Reliever Therapy Asthma Action Plan

Supporting people with asthma in the 21st Century online learning module

🔒 Member only resource

Treatment of asthma (continued)

Tailoring Inhaler Devices

Asthma Management – overcoming SABA over-reliance

Ensuring optimal treatment for asthma management

Reliever Reliance Test

A patient perspective: Identifying the best asthma treatment

High quality and low carbon asthma care

Monitoring

Assessing asthma control

Overcoming asthma myths

Common asthma myths and misconceptions

“Asthma is not a serious disease”

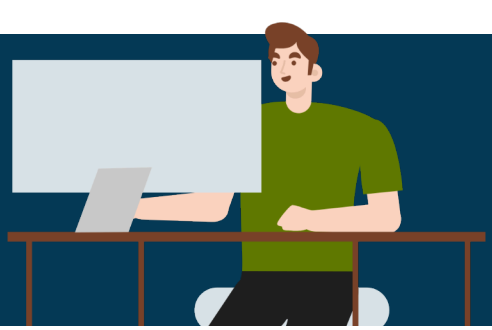
“Coughing is part and parcel of asthma”

“I only need my blue inhaler”

“I’m just allergic to some things …otherwise I’m OK”

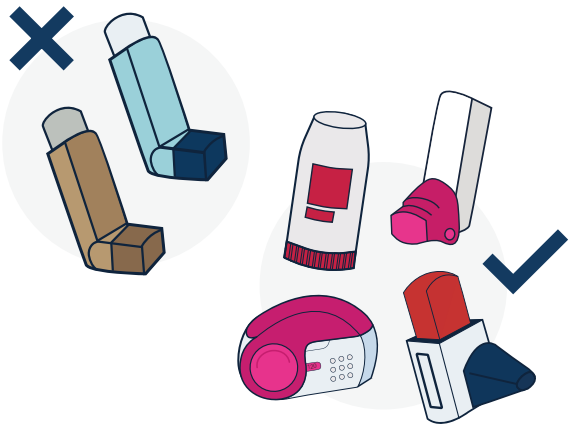
Scan the QR code to access an article, videos and podcasts on how to address asthma myths

Scan the QR code to browse all of our asthma resources



Now is the time to make MART moves for asthma

We have been using the **blue (reliever)** and the **brown (preventer)** inhalers for **far too long.**



The National Review of Asthma Deaths (NRAD) came out a decade ago, yet as a nation, we still have the highest asthma death rate in Europe - four times that of Italy or the Netherlands[1].

This is unsurprising, considering many patients still rely on their blue inhalers alone.

However:

- Blue inhalers don't treat inflammation
- Brown inhalers don't relieve symptoms quickly

First and foremost, **the best inhaler is the inhaler the patient will use** and identifying what this is should actively involve the patient. For more information on how to ensure this, see our patient-centred tip on page 2.

This article is intended for professionals caring for asthma patients 12 years and over.

The prescriber should check which inhalers are allowed for 12+ and which are for 18+.

We are grateful to Orion Pharma (UK) Ltd for sponsoring PCRS in developing resources for the Maintenance and Reliever Therapy (MART) in asthma project. The sponsor has had no input into the resource content.

MART is...

So, let us suggest why Maintenance and Reliever (MART) is the way forward **and the key points you could use to recommend it to your patients.**

1. Simple

MART offers a simple, effective regimen with patients needing only one inhaler to relieve symptoms, control asthma attacks, and reduce asthma deaths.

MART delivers on its promise!

2. Safe

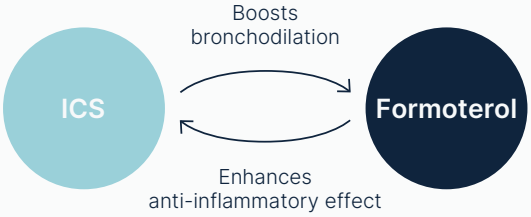
MART has been proven to reduce hospitalisation and asthma deaths[2].

MART reduces:

- Over-reliance on short-acting beta-agonists (SABA) alone, i.e. reduced risk of exacerbation
- Overall inhaled corticosteroids (ICS) dosage for asthma control, i.e. fewer side-effects and steroid burden for the majority of mild/moderate asthmatics.[3]

3. Effective

Prescribing ICS (beclometasone or budesonide) and formoterol together is more effective than ICS and SABA separately. Here's why[4]:



4. Greener

SABA use significantly contributes to the total inhaler carbon footprint in the UK.[5]

Combining ICS and formoterol in one device halves the CO2 emissions.

Choosing MART dry-powder inhalers (DPI) eliminates the need for a spacer, providing an added environmental benefit and supporting the NHS to meet its Net-Zero carbon footprint by 2045[6]. However, always remember the greenest inhaler is the one the patient will use effectively.

5. Patient-centred

A variety of MART ICS-LABA devices allows for tailored choices to suit your patient's needs and preferences.

PCRS has published an excellent guide on making patient-centred inhaler choices.

Using a single inhaler for both symptom relief and asthma control improves adherence because the patient only needs to learn one technique.

6. Cost-efficient

MART inhalers alleviate the burden on the NHS by reducing the risk of poor asthma control and asthma attacks.

Bonus: Patients only have to pay for one prescription item!

Use these tips, and accompanying MART action plan, to discuss and implement a MART regime for your asthma patients.

References

[1] The mortality rate shows the number of deaths per 100,000 people in the year 2019. The rate is age-standardised, providing a weighted average that controls for differing age distributions between countries. International Respiratory Coalition.

[2] Beasley R, et al. Evaluation of Budesonide-Formoterol for Maintenance and Reliever Therapy Among Patients With Poorly Controlled Asthma: A Systematic Review and Meta-analysis. JAMA Netw Open. 2022 Mar 1;5(3):e220615.

[3] Cameron A, Lowest ICS dose approach backed by adverse event study. August 2024. The Limbic online news.

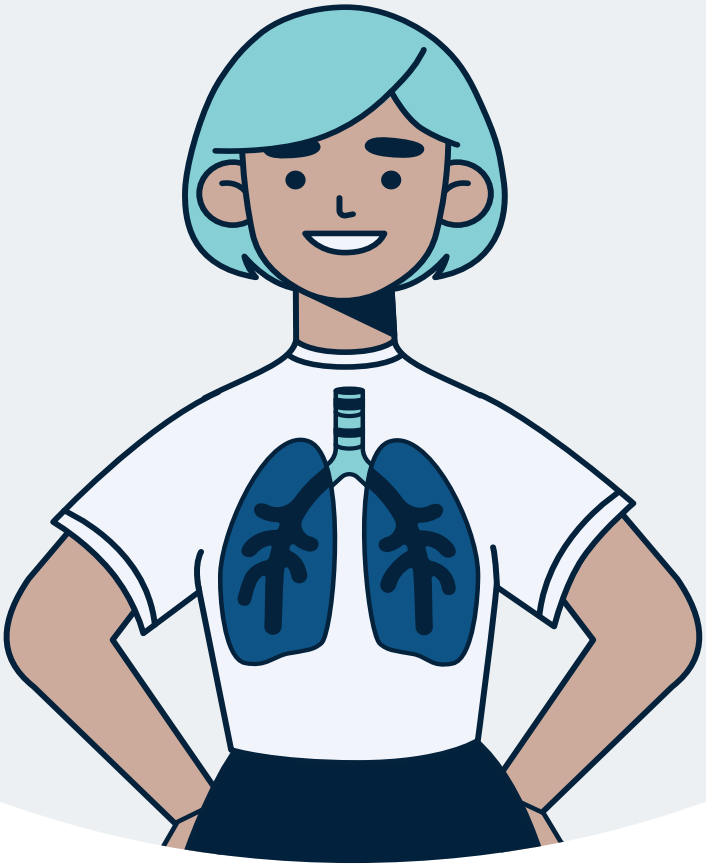
[4] Adapted from: Barnes PJ. Inhaled corticosteroids. Pharmaceuticals. 2010 Mar 8;3(3):514–40.

[5] Wilkinson A, et al. S26 An assessment of short-acting β2-agonist (SABA) use and subsequent greenhouse gas (GHG) emissions in five European countries and the consequence of their potential overuse for asthma in the UK. BMJ Thorax 2021 Jan 21

[6] Delivering a 'Net Zero' National Health Service. Oct 2020. Available at: https://www.england.nhs.uk/greenernhs/publication/delivering-a-net-zero-national-health-service/

PCRS · ASTHMA RIGHT CARE · ORION PHARMA

My MART Asthma Action Plan



First name:

Surname:

Surgery:

Nurse/doctor name:

Date completed:

/ /

MART inhaler type:

Usual daily dose:

Other asthma medication:

The Fostair NEXThaler 100/6, Luforbec 100/6 pMDI and Bibecfo 100/6 pMDI inhalers are licenced for MART at 1 puff twice a day plus added doses as needed (up to a maximum of 8). Any prescribing outside of this is off licence and at the prescribers discretion

What is asthma?

Asthma is a chronic inflammatory disease of the airways. The airways become sensitive and react to triggers. (see asthma triggers)

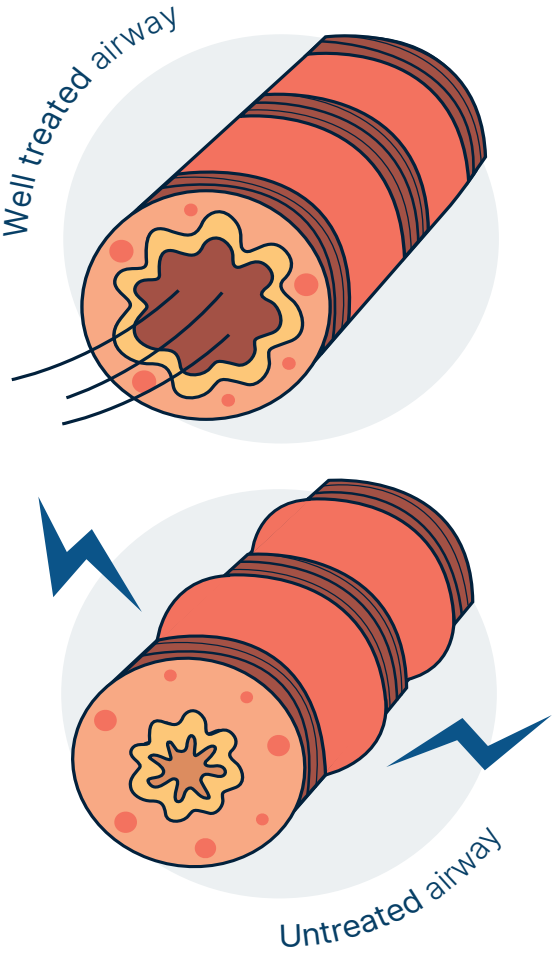
Symptoms include wheezing, breathlessness, chest tightness, and coughing.

Treat asthma using a single MART inhaler to reduce inflammation and open the airways.

Have a personalised asthma action plan

Management involves avoiding triggers where possible and taking inhalers as prescribed

Asthma control is good when I have no symptoms BUT I should still use my inhaler every day



What is a MART Plan?

A MART (Maintenance and Reliever Therapy) plan is a simple way to manage asthma with one inhaler:

One inhaler for everything
Daily treatment and quick relief of symptoms.

Convenient
Easy to remember and manage.

Combination inhaler
2 medicines, one to reduce inflammation and the other to open airways.

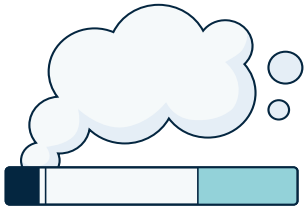
Personalised and tailored to your specific needs for better asthma control.

Asthma Triggers

Asthma triggers are things that can cause asthma symptoms or attacks. Tick the boxes to highlight your triggers.

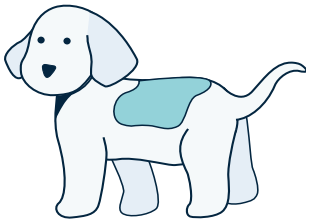
- [ ] Strong smells

- [ ] Smoke

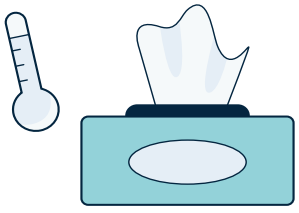


- [ ] Strong emotions

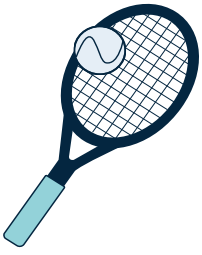
- [ ] Furry pets



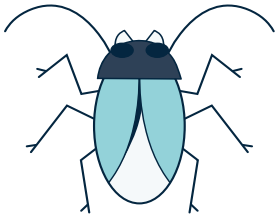
- [ ] Colds



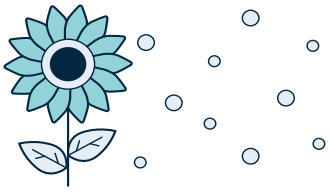
- [ ] Exercise



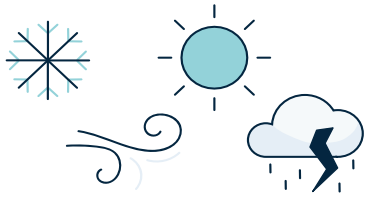
- [ ] Cockroaches



- [ ] Pollen

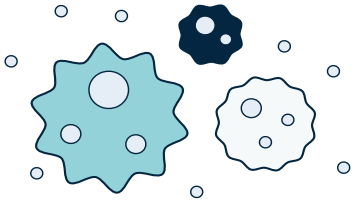


- [ ] Changes in the weather



- [ ] Cold weather

- [ ] Mould and mildew



- [ ] Food allergies

- [ ] Dust

- [ ] Other

My asthma is good

I don't have a cough or wheeze. I can exercise as usual and I'm sleeping well.

To keep my asthma under control: I take my normal treatment every day, even when I feel well. I use the same inhaler as a preventer (maintenance) and as a reliever.

I take __ puff(s) AM and __ puff(s) PM.

I use my inhaler as a reliever if I get asthma symptoms: I take one puff as needed.

My asthma is not good

I am breathless, I'm coughing, especially at night, I have difficulty sleeping (because of my asthma) or I need **extra puffs 3+ times a week.**

When my asthma is not good: I must continue taking my normal treatment every day AND:

- Take 1 extra puff as needed

My inhaler is:

- ☐ Budesonide + formoterol: I can take ____ additional puffs a day
- ☐ Beclometasone + formoterol: I can take ____ additional puffs a day
- Seek medical advice if I need more than 8 puffs in 24-hours, even if I'm feeling better

I am having an ASTHMA ATTACK

My inhaler is not helping despite increased doses of my inhaler. I am struggling to breath, have excessive coughing, a tight chest, I'm wheezy and unable to speak in full sentences.

Seek emergency medical advice – CALL 999

- Sit upright and keep calm
- Loosen tight clothing
- Take **1 puff** → Wait **1-3 minutes** → no improvement → take **1 puff**. Repeat up to a **maximum of 6 puffs.**

Even if I feel better I should see my doctor or nurse immediately after an asthma attack.

If help does not arrive, call 999 again

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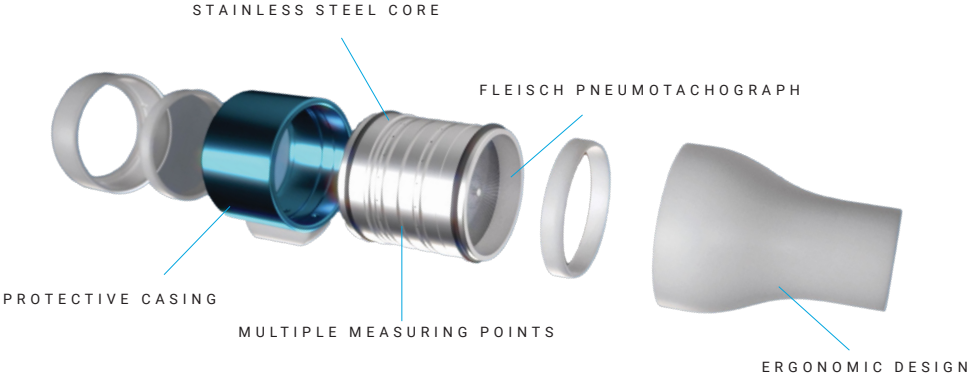

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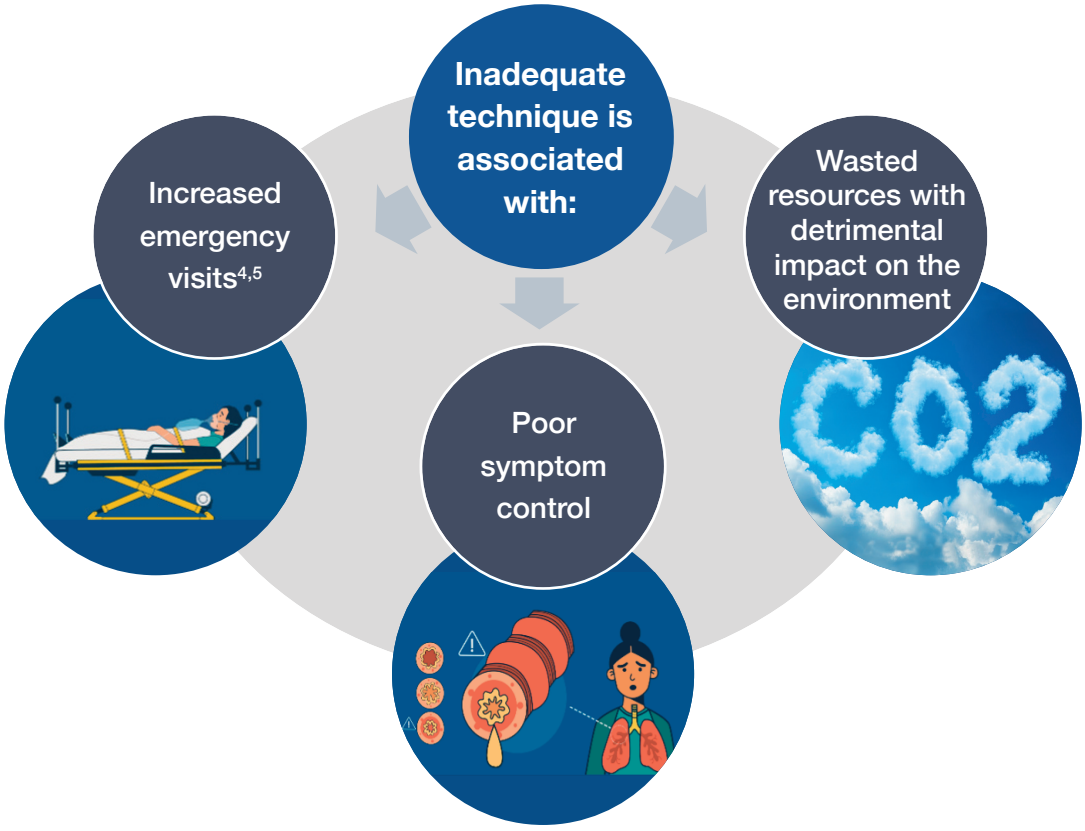
Tailoring Inhaler Devices

Darush Attar-Zadeh

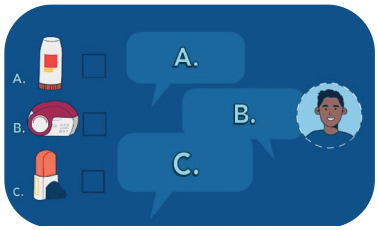
PCRS Conference Organising Committee Lead and Pharmacist (Medicines Optimisation)

Introduction

Inhalation is the main administration route of drugs for conditions such as asthma or chronic obstructive pulmonary disease (COPD). The advantage of administering drugs by inhaler is they are delivered directly to the site of action within the airways. The onset of action is then rapid and systemic adverse effects are minimised.[1] However, for an inhaler to be effective the correct drug must be prescribed, and the device must be used properly. Poor inhaler technique is common in people with obstructive lung diseases.[2,3]



Choosing a drug and a corresponding device from the large variety available is potentially confusing.[6] National guidance recommends that the people with respiratory conditions should have their ability to use the prescribed inhaler device (particularly for any change in device) assessed by a competent healthcare professional.[7] Unfortunately, inhalation of medicines can be complicated and difficult for many people, leading to suboptimal use and effect. The UK Inhaler Group have produced a set of standards to support healthcare professionals (HCPs).[8]



CHOICE OF INHALER

The choice of an inhaler device should be based on:-

The patient's ability to use the device they have been prescribed. Patients using pressurised metred-dose inhalers (pMDIs) must have excellent coordination of inspiration with inhaler activation to achieve optimum drug delivery.[9]

The patient's lifestyle and circumstances such as where and when the inhaler may be used. It is important that the device is compatible with the patient's needs.[8]

The patient's preference as part of shared decision making is important. If the patient does not like the device, they will not use it. Blanket switching of inhalers in not recommended.[10,11]

The age of the patient – this will influence their physical and cognitive ability.[9] Very young children or elderly patients may have problems using certain devices. Manual dexterity should be considered, and the aids provided, e.g. spacer devices

Patients' physical abilities can affect their use of inhalers. Conditions like rheumatoid arthritis can make operating pMDIs difficult due to the need for hand-breath coordination. Spacers can help by separating activation from inhalation, while breath-actuated pMDIs (e.g., Autohaler, Easi-Breathe) activate upon inhalation. For those able to inhale deeply over 2-3 seconds, DPIs may be a better option. Tailoring devices to patients' abilities improves ease of use and treatment outcomes.

Whether an inhaler indicates when it is running out of medication. Some inhalers have a dose counter to alert patients to order more medication.[12]

The cost and environmental impact of inhalers should also be considered. We need to remember the best inhaler is the one that contains the right drugs/molecules, which the individual patient is willing to, able to and does use correctly.[13,14]

Whether a combination inhaler is indicated. Combination inhalers can be helpful for patients who pay for their prescriptions or may not like taking inhaled steroids regularly. It also minimises the number of devices, reducing the risk associated with multiple inhalers and more frequent errors in inhaler technique.[14]

It is also worth considering if the device can be used in an exacerbation to delivery larger doses.[12] *A common misconception is that pMDIs are needed during worsening symptoms and exacerbations, whereas DPIs can be effective during exacerbations also.*[15,16,17]

Types of Inhaler

There are several different types of inhalers which include pressurised metered dose inhalers (pMDIs), breath actuated pMDIs, dry powder inhalers (DPIs) and soft mist inhalers (SMIs).

More information and video guidance on technique is available from the Asthma and Lung UK web page. Instructions are also provided in the Patient Information Leaflet with each device, but this should not be relied on, and training must be given by a qualified and appropriately trained HCP.

ASTHMA+ LUNG UK

There are 7 STEPS to good inhaler techniques set by the UK Inhaler Group (UKIG)
https://www.ukinhalergroup.co.uk

Table 1 gives the characteristics which might affect the choice of inhaler device for different patients.

It is helpful to know what drugs are available in each device – see https://www.rightbreathe.com/.

Right Breathe

DPIs & SMIs do not contain hydrofluoroalkane (HFA) propellants, giving them less global warming potential in comparison to traditional pMDIs and may be a preferred option if a person can use it. However, there are circumstances (e.g. in young children) where DPIs won't be appropriate.[18] Lower carbon pMDI options are being developed and these should be available by 2025.

Table 1. Characteristics of types of inhaler device

Inhaler type	Characteristics
Pressurised metered dose inhalers (pMDIs)	pMDIs require: • Good coordination between activating the device and inhaling the drug • Manual dexterity • Slow and steady inhalation over 3-5 seconds
Breath actuated pMDIs (BA pMDIs)	• Can help overcome coordination problems as they do not require the patient to coordinate actuation of the device and inhalation of the drug
Dry powder inhalers (DPIs)	• Can help overcome coordination problems • Require some manual dexterity depending on the device used • Require quick and deep inhalation over 2-3 seconds for maximum drug deposition
Soft mist inhalers (SMIs)	• May be easier for some patients as the aerosol is released over 1.5 seconds, so a slow gentle inhalation technique is important • Still require coordination when inhaling and actuating the device

Use of spacer devices

The effectiveness of pMDIs is generally improved if a spacer device is used in children and adults. Spacers (or holding chambers) act as a reservoir and 'hold' the medication. There should still be minimal delay between pMDI actuation and inhalation.

Spacer devices are useful when:

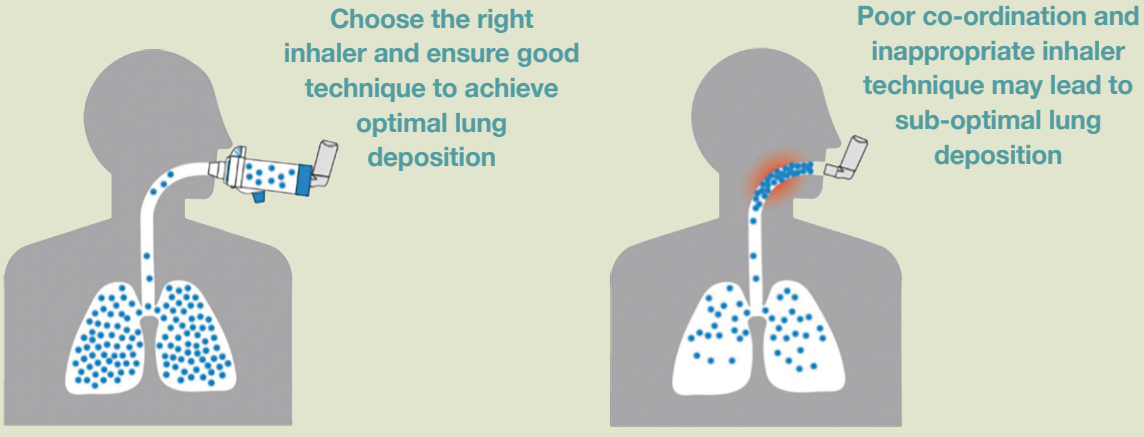
- The patient has poor coordination
- Inhaled corticosteroids are needed

Deposition of the drug in the mouth and throat can cause local side effects such as candidiasis or dysphonia from inhaled steroids. Spacers reduce the deposition in the mouth and oropharynx during inhalation and hence reduce these side effects.

In children 0-5 years, pMDI + a spacer is the preferred method of delivery. A facemask is required usually until the age of 3 until the child can breathe reproducibly using the spacer mouthpiece.[7] The BTS/SIGN guidelines suggest the following when using and caring for spacers:-

- Using a spacer compatible with the pMDI being used.
- The drug should be delivered using a single actuation of the pMDI into the spacer, followed by inhalation. If another dose is required, this is usually 60 seconds later.
- Tidal breathing is as effective as single deep breaths.
- Spacers should be cleaned monthly (not weekly) by washing in detergent and allowing to dry. The mouthpiece should be wiped clean of detergent before use.
- Static charge may reduce drug delivery via plastic spacers, other antistatic spacers are not affected in this way.
- Plastic spacers should be replaced at least every 12 months, but some may need changing more frequently.

The importance of appropriate inhaler technique *[Image copyright Trudell Medical International].*



Reviewing inhaler technique

- Inhaler devices may seem simple to use but are often used incorrectly by patients and HCPs alike.
- It is important to check that the patients can (and continue to) use their inhaler correctly because inadequate technique can be mistaken for lack of response to the drug.
- Video or Face to Face consultations are essential to watch a person using their inhalers and spacers.
- Inhalers should only be prescribed after a patient has received adequate training in the use of the device and has demonstrated a satisfactory technique.
- Ordering placebos from the manufacturer is recommended. These can be ordered from individual manufacturers.
- A number of training devices are available to assess inhaler technique. The clip-tone or flo-tone teaches patients to breathe in at the correct speed when using a pMDI. The in-check dial can do this for all device types.
- Many pharmacists undertake medicine review services and are trained in assessing inhaler technique. It is important to follow up patients if their inhaler device has been changed.

Organisational issues

It is essential that knowledge about treatment and inhalers is reinforced, and this should be incorporated into routine reviews undertaken by trained members of the practice team.

Please see our document, Fit to Care for information and advice on the key knowledge, skills and training required for healthcare professionals delivering respiratory care in primary care.

Table 2. Patient Education

Patients should not only be coached on their inhaler(s) additional information should be provided including:-

- **Safe storage of the device.**
- **Knowing when inhaler is empty (ideally finding an inhaler with a dose counter) and returning it for safe disposal at the community pharmacy.[13]**
- **How to clean the device.**
- **Some inhaler devices once removed from their packaging have a limited shelf life. Please check the Summary of Products and Characteristics (SPC) for each medication.**
- **The importance of rinsing the mouth and throat after using a steroid inhaler to minimise side effects such as oral candidiasis or dysphonia.**
- **When to use it. (Frequency and use of medication should be included in an action plan).**
- **Possible side effects, and any concerns the patient may have.**

Conclusion

There are many different inhaler devices available and it is an important element of shared decision making to discuss and agree inhaler options with the patient. It is important that inhaler technique assessment forms a regular part of respiratory consultations and reviews. The importance of education and training in inhaler device technique cannot be over-emphasised. The availability of unbiased, evidence-based training should be a pre-requisite of undertaking or delegating this task. Refer to a specialist professional for more advice if needed.

Acknowledgements

PCRS is grateful to Karen Heslop and Chris Loveridge, authors of the original PCRS opinion sheet from which this resource was edited and updated. Thank you to Alicia Piwko, Deborah Leese and Corinne Beirne for their input into the updated document.

Useful resources

- **IPCRG Question and Challenge Cards**

  https://www.ipcrg.org/sites/ipcrg/files/content/attachments/2024-06-27/COPD%20Right%20Care%20Question%20%26%20Challenge%20Cards%20SCREEN.pdf

  Accessed 11 September 224

- **Myth 3 – I only need my blue inhaler. Primary Care Respiratory Society**

  https://www.pcrs-uk.org/resource/asthma-myths-i-only-really-need-my-blue-inhaler

  Accessed 11 September 224

- **Inhaler technique optimisation and adherence through patient partnership: use of technology, coaching of soft skills and how medicine reviews can help this.** *Darush Attar Zadeh. Primary Care Respiratory Society*

  https://www.pcrs-uk.org/resource/current/demand-arc-webinar-inhaler-technique-optimisation-and-adherence-through-patient

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The Breathing Thinking Functioning Model to Support the Management of Breathlessness

Siobhan Hollier, *PCRS Respiratory Leaders Programme Lead, Clinical Specialist Respiratory Physiotherapist, East of England*

Introduction

Breathlessness is a common presenting symptom in primary care, and there are many causes. Early and accurate diagnosis is critical to ensuring patients receive the right treatment at the earliest opportunity. In May 2023, the NHS published a pathway to support the diagnosis of breathlessness:

Diagnostic pathway for patient presenting with chronic persistent breathlessness
(>8 weeks duration)

- **Breathlessness is frequently multi-factorial without a single specific diagnosis.**
- **Anxiety, depression, low physical activity and deconditioning are commonly associated with breathlessness.**

Clinical assessment

History and physical examination including:
- Smoking history and body mass index.

Initial investigations according to clinical judgement:
- FBC/TFTs/biochemistry
- ECG
- NT-proBNP
- Chest x-ray
- Spirometry ± reversibility with bronchodilators
- Fractional exhaled nitric oxide (FeNO)
- Patient health questionnaire (PHQ4)
- MRC breathlessness scale
- GP physical activity questionnaire (GPPAQ).

If diagnosis clear, undertake **confirmatory investigations** as appropriate and management of the condition:
- **Reassess** after appropriate timescale.

Diagnosis unclear

Discuss and implement further investigative plan at unexplained breathlessness MDM* utilising community diagnostic centres.
- Pulmonary function tests
- CT thorax
- Echocardiogram
- Ambulatory ECG monitoring.

Identify and confirm suspected diagnoses.

Undertake appropriate management.

Diagnosis remains unclear

Refer to respiratory physician or cardiologist for further investigations:
- Including cardiopulmonary exercise test.

For acute severe breathlessness or red flags consider urgent specialist assessment.

Clinical judgement to be used at all times

RED FLAGS INCLUDE:
- Symptoms and signs including chest pain, haemoptysis, cyanosis, unable to speak in sentences, confusion, agitation, unilateral leg swelling, inspiratory and expiratory stridor
- Increased risk of VTE
- Rapidly progressing symptoms
- New low resting SpO2 or reduction during minimal exercise
- Unexplained reduction in SpO2 and elevated respiratory rate.

Management
Breathlessness self-management, structured exercise rehabilitation, physiotherapy for breathing control exercises, occupational therapy, psychological support.

Management
Breathlessness self-management, smoking cessation, healthy lifestyle support including maintaining activity and weight management.

*MDM - see glossary for more details.

Source: NHS England: https://www.england.nhs.uk/long-read/adult-breathlessness-pathway-pre-diagnosis-diagnostic-pathway-support-tool/ Published April 2023.

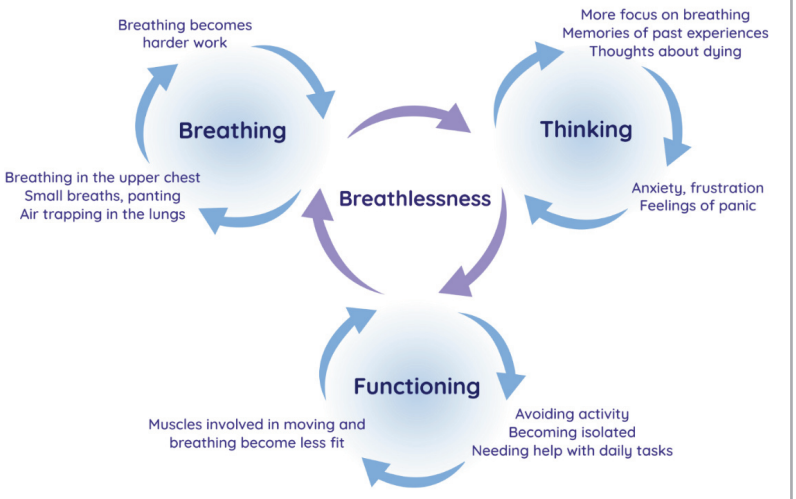
Whilst early diagnosis is critical, breathlessness can be an ongoing complex and challenging symptom for many long-term conditions that affect individuals' physical, emotional, and social well-being. Conditions such as chronic obstructive pulmonary disease (COPD), asthma, heart failure, and anxiety disorders frequently manifest in breathlessness, leading to significant morbidity.[1] Effective management requires addressing both physiological and psychological factors.

Where breathlessness cannot be cured it is important to provide tools and options to help patients effectively manage and mitigate breathlessness.

The Breathing Thinking Functioning (BTF) model is a research-based tool for healthcare professionals to help them to support patients with breathlessness developed through a collaboration with the Cambridge Breathlessness Intervention Service at Addenbrookes Hospital, Cambridge and the Primary Care Unity at the Department of Health and Primary Care at the University of Cambridge.

The tool offers a holistic approach that combines breathing techniques, cognitive interventions, and functional enhancement to improve the overall management of breathlessness[2] and represents a comprehensive approach to managing breathlessness through the integration of various therapeutic techniques. By addressing the multifactorial nature of dyspnoea, healthcare providers can enhance patient outcomes and improve the quality of life for those affected by this debilitating symptom.

The Breathing Thinking Functioning Model [3]



Reproduced with permission of the Cambridge Breathlessness Intervention Service.

Breathing

The "Breathing" component of the model emphasises techniques that can optimise respiratory function. Effective strategies include:

- **Diaphragmatic Breathing**: Engaging the diaphragm to promote deeper and more efficient breaths can reduce the perception of breathlessness.4
- **Pursed-Lip Breathing**: This technique slows down exhalation, which helps maintain airway patency and reduces respiratory rate.[5]
- **Breathing Exercises**: Structured exercises can enhance lung capacity and respiratory muscle strength, improving overall breathing efficiency.[6] This may include inspiratory Muscle training (IMT).
- **Positioning**: To ease the work of breathing, relax the shoulders and upper chest and optimise the use of the diaphragm.[7]

Thinking

The "Thinking" aspect focuses on cognitive strategies to manage the perception and emotional response to breathlessness:

- **Cognitive Behavioural Therapy (CBT)**: CBT can help individuals reframe negative thoughts associated with dyspnoea and reduce anxiety.[8]
- **Mindfulness, Relaxation and Distraction Techniques**: Mindfulness practices can decrease anxiety and improve coping mechanisms for managing breathlessness.[9]

Functioning

The "Functioning" component addresses the performance of practical aspects of daily life and aims to break the cycle of deconditioning:

- **Energy conservation techniques such as Activity Pacing**: Teaching patients to pace their activities can prevent overexertion and subsequent breathlessness.[2]

- **Exercise**: Pulmonary Rehabilitation is a highly clinically effective intervention to improve exercise capacity and empower patients to continue safe and effective exercise habits[10] .

- **Goal Setting**: Collaboratively setting achievable goals can empower patients and enhance their participation in daily activities.[11]

The BTF model provides a comprehensive framework for managing breathlessness through an integrated approach that targets physical, cognitive, and functional aspects. Findings from research studies conducted using the model[12] suggest that combining breathing techniques with cognitive strategies and functional training can lead to significant improvements in patients' ability to manage dyspnoea effectively. Future research should explore the long-term impacts of the BTF model and its applicability across diverse patient populations.

Where breathlessness continues or worsens healthcare professionals should always consider secondary causes of breathlessness and investigate accordingly. For example, evidence of the association between COPD and lung cancer development has been extensively observed in population-based studies.[13]

Further Information

The University of Cambridge and Cambridge University Hospitals NHS Trust have a helpful website dedicated to the Breathing Thinking Functioning Model available at https://www.btf.phpc.cam.ac.uk/. They host regular courses on the management of breathlessness.

Tips for Patients

Asthma and Lung UK provides helpful advice for patients on managing breathlessness including advice on breath control, seated, lying and standing positions to aid breathlessness, and patient videos providing help and advice - https://www.asthmaandlung.org.uk/symptoms-tests-treatments/symptoms/breathlessness/how-can-i-manage-my-breathlessness

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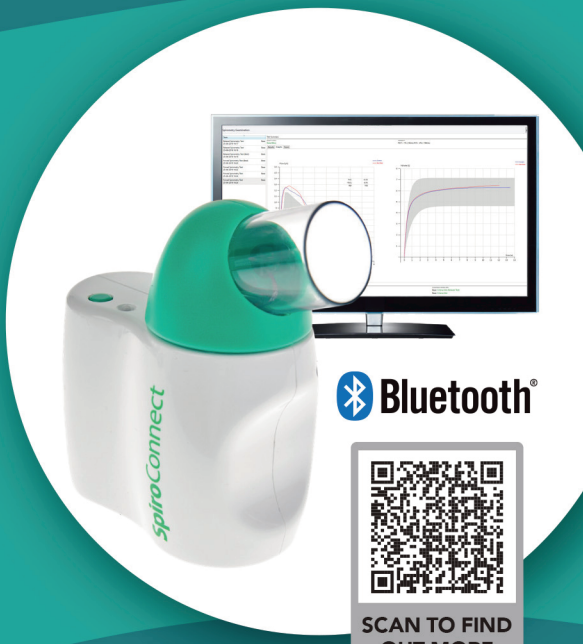
SpiroConnect is **fully integrated** with the **SystmOne, EMIS and Vision** clinical systems for safer, faster and easier spirometry testing.



For more information about SpiroConnect, please visit **numed.co.uk/spiroconnect** or telephone **0114 243 3896**

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PCRS

18th - 20th September 2025

Telford International Centre

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Obesity and its Impact on Respiratory Health and Primary Care

Introduction

A study published in *The Lancet* shows that, in 2022, more than 1 billion people in the world are living with obesity.[1] The relationship between obesity and respiratory health is complex, involving mechanical, inflammatory, and metabolic factors. New research continues to grow a body of evidence on the impact of obesity on lung function and respiratory conditions such as asthma.[2]

Prevalence of Obesity and Respiratory Disorders

The prevalence of obesity has escalated dramatically over the past few decades. The UK Parliament published a report in January 2023 estimating that 26% of adults in England are obese and a further 38% are overweight.[3] This rise in obesity has been accompanied by an increase in respiratory conditions such as asthma, obstructive sleep apnoea (OSA), and chronic obstructive pulmonary disease (COPD).[4]

Impact of Obesity on Respiratory Health

- **Asthma**: Obesity is a known risk factor for asthma, particularly in adults. Studies have shown that obese individuals are more likely to develop asthma and experience more severe symptoms.[5] The mechanisms behind this association include increased systemic inflammation, altered immune responses, and mechanical effects on lung function due to excess body weight.[6]
- **Obstructive Sleep Apnoea (OSA)**: OSA is characterised by repetitive episodes of airway obstruction during sleep, leading to disrupted sleep and various health issues. Obesity significantly increases the risk of developing OSA due to the deposition of fat in the upper airway, which can cause airway collapse.[7] A meta-analysis found that approximately 70% of individuals with OSA are obese.[8] OSA can exacerbate existing comorbidities, including cardiovascular disease and metabolic syndrome.
- **Chronic Obstructive Pulmonary Disease (COPD)**: While COPD is primarily associated with smoking, obesity can also contribute to its development and progression. Obesity can lead to reduced physical activity, increased sedentary behaviour and worsening respiratory function.[9] Moreover, the inflammatory processes associated with obesity may contribute to airway inflammation, further complicating COPD management.
- **Lung Function**: Obesity negatively impacts lung function by reducing lung volumes, particularly tidal volume and functional residual capacity (FRC). Excess weight can restrict diaphragmatic movement and increase the work of breathing.[10] These mechanical effects can lead to dyspnoea and reduced exercise tolerance in obese individuals.

Psychosocial Impact of Obesity

The psychosocial implications of obesity also extend to respiratory health. Individuals with obesity often experience stigma and discrimination, which can adversely affect their mental health and adherence to treatment.[11] This can lead to decreased motivation to engage in physical activity and follow medical advice, thus compounding respiratory issues.

Role of Primary Care in Managing Obesity and Respiratory Health

The increasing prevalence of obesity-related respiratory disorders presents significant challenges for primary care providers. Effective management requires a comprehensive approach that addresses both obesity and its respiratory consequences. The stigma associated with obesity, however, should be acknowledged and a sensitive and non-judgemental approach must be taken when dealing with obesity.

The National Institute for Health and Care Excellence 2023[12] outlines the role of primary care in supporting the identification and assessment of overweight, obesity and central adiposity in adults and highlights that permission should be sought from the patient before talking about the results and possible interventions.

Encouraging lifestyle changes is essential in managing obesity and its associated respiratory issues. NICE recommends

promoting a healthy diet and increased physical activity as first-line interventions for weight management. A multidisciplinary approach, involving dietitians and physiotherapists, can enhance the effectiveness of these interventions.

Educating patients about the relationship between obesity and respiratory health is vital. Providing resources for weight management, smoking cessation, and physical activity can empower patients to take control of their health. Support groups and counselling services can also help address the psychosocial aspects of obesity.

Social prescribing can also play an important role in encouraging physical activity and social support.

Comorbidities should be managed when they are identified and clinicians should not wait until the person has lost weight.[12]

For patients with obesity-related asthma, primary care providers should consider adjusting asthma management plans to account for weight. This should include optimising pharmacotherapy and addressing environmental triggers.

For patients with OSA, weight loss is often an effective intervention. Continuous positive airway pressure (CPAP) therapy can be beneficial, and adherence may improve with weight reduction.[8]

Where appropriate, referral to sleep services and/or tertiary weight management service may be appropriate. Local pathways will determine specific referral criteria.

At present, patients need to be referred to a specialist weight management service for treatment with GLP-1 receptor agonists but this will likely change over time so there is a need for all healthcare professionals working in primary care to ensure they update their knowledge and skills on weight management regularly. Elearning for Healthcare (For healthcare professionals working within the NHS only) provides a bitesize learning session on adult obesity with data and signposting to trusted resources you can access at https://portal.e-lfh.org.uk/Component/Details/571222.

In summary, obesity is a significant public health concern with profound implications for respiratory health. The connection between obesity and respiratory disorders such as asthma, OSA, and COPD necessitates a comprehensive approach in primary care. By implementing evidence-based guidelines, promoting lifestyle changes, and providing patient-centred care, primary care providers can play a pivotal role in addressing the challenges posed by obesity and its impact on respiratory health. As obesity continues to rise, ongoing research and effective policy interventions will be crucial in combatting this epidemic and improving patient outcomes.

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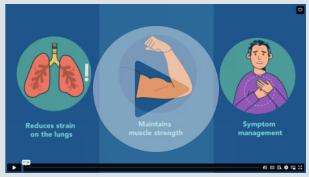
Challenging Perceptions of COPD

This year we have launched a range of new COPD resources, including animations, webinars and a slide rule.

Animations

This three part animation series provides you with guidance to support people with COPD to;



remain active and healthy

understand that 'flare-ups' of their COPD are not normal

and stop smoking

New COPD Slide Rule

The COPD risk slider helps you assess patients' risk of symptom worsening, initiate discussions about their COPD, make informed treatment decisions, and offer tailored advice to reduce exacerbation risks.

On demand webinars

An update on the management of COPD

This session provides a clear and concise update, equipping you with essential information and knowledge to ensure best practice in COPD care.

Launch of the new COPD risk slider

This webinar introduces the new COPD risk slider and provides a practical demonstration on how it can be used effectively within a regular consultation.

These resources are part of our Challenging Perceptions of COPD campaign. Scan the QR code to access.

We are grateful to AstraZeneca UK Limited for the provision of an educational grant to develop these resources. They have been developed by PCRS, and AstraZeneca has had no input into the development, content or production of this material.

Greener Respiratory Healthcare

The PCRS Greener Healthcare Initiative sets out to promote practical action that can help to reduce the environmental impact of respiratory healthcare.

Throughout 2024-25 we are refreshing existing, and producing new resources to support you to play your part in reducing carbon emissions. These resources will give you the inspiration, information and practical guidance you need to deliver greener, kinder and more sustainable respiratory care.

Our greener healthcare calendar promotes practical action that can help to reduce the environmental impact of respiratory healthcare.

Make 2025 the year you make your practice greener - take on the challenge yourself or with your team.

SCAN ME

More resources coming soon!

Leadership resources - videos and blueprints to support you to make change

10 tips for implementing sustainable greener healthcare

Updated White Paper on Greener Respiratory Healthcare

Webinar - Katherine Hickman, PCRS Chair, in conversation with Ian Sinha and Sally Jones

These resources will be available via our greener healthcare campaign webpage in 2025.

Scan the QR code and bookmark the page.

We are grateful to Chiesi for the provision of a grant to support the activities of the PCRS Greener Respiratory Healthcare campaign. The campaign has been solely organised by PCRS and Chiesi has had no input in the content.

Vaping (E-cigarettes) and children and young people (CYP)

Primary Care Respiratory Society (PCRS) position on children and young people and vaping

The Primary Care Respiratory Society (PCRS) advocates that:

- **vaping should be discouraged among children and young people;**
- **accurate information should be available for them, their families, schools and health professionals around the potential risks of vaping, in terms of a gateway product for other addictive behaviours; and**
- **that long-term safety data should be available for this age group in regulated products.**

Awareness needs to be raised around the risks of unregulated products and action is needed on removing advertising and flavours that target young people. Disposable vapes also need to be discouraged because of the effects on the environment and ease of access for young people.

PCRS fully supports the Governments move to ban the sale of single-use disposable vapes in England and Wales from June 2025. However, a strategy needs to be put in place for on-going support.

Vaping and smoking cessation services need to be available for children and young people and provide all support necessary to ensure any nicotine dependency is addressed early. Support should include dealing with any risk that may result in them returning to smoking or obtaining illicit vapes. Vaping is an effective option for quitting smoking but should not be considered safe in non-smokers.

Background

The UK has the largest market for vapes in Western Europe.[1] There has been a rapid increase in use over the last decade and, whilst this has now stabilised in adults, there has been a sharp rise in usage in 18–24-year-olds from 2020, coinciding with the introduction of disposable and flavoured vapes into the UK, which have been popular and attractive to children and young people.[2]

What are they?

Whilst there is a variety of devices, the important thing to remember is that all vapes generally consist of the same things: a heating element or coil (atomiser) which is powered by a battery, and a tank or pod which contains e-liquid. The diverse terminology you hear only really refers to differences in size, shape or peripheral controls.[3]

Vapes can contain a wide range of chemicals, particularly in unregulated vapes, in addition to nicotine (which is known to cause addiction). This generally includes polypropylene glycol and glycerine but may contain formaldehyde (a known carcinogen), acrolein (a carcinogenic weed killer), diacetyl, flavourings (more than 100 different chemicals to make different flavours), plastic, copper and the lithium battery. In the UK there is a regulation that prohibits the use of chemicals of very high concern.[4] However, as only half of children get their vapes from shops, where regulation is easier to monitor, they may be accessing vapes from sources that are not regulated.[5] The regulations around vapes are different around the world. EU regulation does not ban chemicals of very high concern, but they must be labelled if they make up more than 0.1% of contents.[6]

Vapes are devices used to inhale nicotine from a vapour (heated liquid) rather than from smoking. The risks of tobacco smoking are well established and, to reduce smoking and aid smoking cessation, the MHRA is looking to license products that will be prescribable by the end of 2025; for now, they are sold as consumer products. Whilst there is a reduced risk in the short term from moving from smoking to vaping (see PCRS position statement on vaping),[7] the message sent to the wider community is that vaping is in general safe and far safer than smoking. Vaping is however associated with risks and, as a relatively new product to the market, the long-term side effects have not been studied. Whilst it remains illegal in the UK to sell vapes to children and young people less than 18 years of age, the evidence shows that vaping rates in children and young people have increased rapidly over the past decade.[2] Reasons for this include attractive colours and flavours marketed towards children and young people and widespread promotion and perceptions of safety. This leads to the need for different communication by healthcare professionals to discourage both smoking and vaping and explain the risks and

uncertainty around longer-term side effects.

Vapes are available in a range of nicotine strengths, from 0mg/ml to 20mg/ml. Many of the newer disposable vape models, which often attract younger users, utilise nicotine salts. These salts are smoother on the throat and easier to inhale compared to traditional nicotine. These newer vape models could present challenges for helping children and young people reduce their nicotine use or quit entirely (Public Health England, 2019; National Institute on Drug Abuse, 2022).[8]

What is the evidence to support this and why is PCRS making a policy statement?

The PCRS has authored a position statement on vaping in adults to support vaping as part of smoking cessation programmes.[7] For those smoking, access to smoking cessation services with a range of methods for aiding cessation including vaping is widely supported. However, the increase in vaping rates in children and young people, nearly one in four 16–24-year-olds in 2024 compared with one in 20 in 2019, is concerning. Nearly one in five 11–17-year-olds in England have tried vapes; however, 4.3% use vapes more than once a week (230,000 children). The lack of compliance with regulations to prevent under 18-year-olds from purchasing vapes and the widespread promotion and marketing of products directed at this age group is concerning, coupled with misconceptions of the safety of vapes and lack of longer-term evidence.[9]

Key issues

Awareness of vaping in children and young people

- *What percentage of 11–17-year-olds have never smoked but have tried vaping?*
  The proportion of never-smokers who have tried vaping has declined from 11.5% in 2023 to 8.7% in 2024 (380,000 children). However, as most children don't smoke, never-smokers make up four in 10 (39%) children aged 11–17 years who have tried vaping.[5]
  A recent study shows that the increase in persistent vaping has continued to rise in young adults (18–25-year-olds) despite stabilising in adults overall. The previous finding that much vaping is transient was before disposable vapes were introduced into the UK market. The most recent study suggests that 56% of never-smokers who vaped reported daily vaping, with 68% having vaped for more than a year.[2]
- *How are children and young people accessing vapes?*
  The most frequent source of vapes by current vapers is: being given to them (54%), followed by shops (48%), informal purchase (27%) and other options including online sales.[5]

Reducing tobacco dependency

- *Nicotine withdrawal*
  In an ASH survey of 11–17-year-olds, 26% of vapers reported strong, very strong or extremely strong urges to vape in 2020 compared with 44% in 2024.[5] Withdrawal symptoms can lead to long-lasting changes in cognition (thinking), attention and memory. It can also lead to mood disorders like depression and anxiety. This can impact the child's home, social and school life, as well as having an impact on the rest of the family.[9]

- *Diagnosing nicotine and vaping habit dependency*
  There is currently little or no evidence base to assess this; however, it may be useful in practice to ask questions that are adapted from the Heaviness of Smoking Index (HSI)[10] such as:
  1) How many times do you use a nicotine-containing vape a week?
  2) If a daily user, how soon after getting up in the morning do you start vaping?
  3) What's the longest period you can go without using a vape?

  If the person does it daily, vapes early and can't go long without a vape containing nicotine, then referral to a counsellor who specialises in addiction (ideally for children and young people) should be considered if available in your area.

- *Management*
  Vaping cessation is possible, but it is important for the nearly 35% of 11–17-year-olds who have tried smoking before vaping that this is not at the risk of relapsing to tobacco dependence.[5]

- *Managing dual users – vaping and smoking*
  Around half of adult vapers smoke as well,[5,11] but this is a lot smaller in children and young people. In 2024, 2.8% (150,000 children) are dual users (they both vape and smoke). If the child or young person is ready to stop smoking, they can join an NHS stop smoking service to get behavioural support and additional pharmacotherapy if needed.[11]

- *Why do we not have stop vaping services?*
  The National Centre for Smoking Cessation and Training (NCSCT) states that, based on current evidence, it would not be cost-effective for health improvement in the overall population,[12] but may need to be reassessed as longer-term evidence becomes available.
  The Nicotine Mouth Spray is licensed as a vaping cessation aid and could be considered from 12 years and above.[13]

Short- and long-term side effects

- *Short-term unwanted effects*
  The most recent Cochrane Review indicates that the number of unwanted effects (including serious unwanted effects) reported from vaping is low in adults.[14] Unfortunately, data do not exist for children and young people. There are some concerns that developing lungs may be more sensitive to the toxic effects of the chemicals in vapes. Despite these risks, it's crucial to recognise that the adverse health impacts of smoking are significantly more severe than those associated with vaping. The unwanted effects most often reported from vaping are throat or mouth irritation, headache, cough and feeling sick. It is important to report any adverse reactions to the MHRA via the yellow card website https://yellowcard.mhra.gov.uk/.

- *Longer-term potential effects*
  An exploration of the available studies found that levels of tobacco-specific nitrosamines, volatile organic compounds and other toxicants implicated in the main diseases caused by smoking were found at significantly lower levels in vapers. Among vapers, overall levels of nicotine were lower or similar to smokers.[15,16]
  These data are from adults aged 18 years and above and do not include any long-term data for children and young people as the rapid rise in vaping has been since 2020. Vaping exposes users to some toxins and we do not know yet what the risks might be in the longer term.
  The EU has looked at potential risks, including accidental spillage and accidental ingestion, safety caps to prevent children from accessing refills, a gateway product to nicotine addiction and chemicals whilst considered safe for ingestion, not tested for inhalation, with human and animal studies showing evidence of cytotoxic and/or oxidative and respiratory inflammation and cardiopulmonary effects.[1]
  However, for children and young people who have never smoked before but who have tried vaping, it would be ideal not to start vaping in the first place. This is because there remain concerns that the brain of adolescents may be more susceptible to developing addictive behaviours.[16] This is supported by the findings that the UK is now the largest market for vaping in Western Europe and the increase is largest in those who have never smoked, predominantly in young adults aged 18–24 years and those with higher alcohol consumption.2 It is also possible that these same young people may be smoking as well, but not at the level of vape uptake.

Environmental issues

- *What's the environmental impact of vaping?*
  Disposable vapes are incredibly harmful to the environment. Five million disposable vapes are either littered or thrown away in general waste every week. This has quadrupled in the last year. Disposable vapes are difficult to recycle because they're made from a mixture of materials – including plastic, copper and a lithium battery. They're designed as one unit, which means the batteries can't be easily separated from the plastic shell and other materials. This makes disposable vapes difficult and expensive to recycle.[17]

  Due to this, PCRS is very pleased to hear that the Government will be banning single-use disposable vapes in England and Wales from June 2025.

  https://www.pcrs-uk.org/sites/default/files/resource/2024-July-PCRU-tobacco-dependence.pdf

Support, resources and information for healthcare professionals, patients, families and other community providers (schools, etc)

Prevention

Families of children and young people need to be aware that smoking and vaping are more likely to be taken up if they live in families where they are already in use. Thinking about measures for the whole family to quit smoking and vaping is important. Resources available, see overleaf.

Information for children, young people and their families

- Vaping: A young person's perspective https://www.pcrs-uk.org/blog/vaping-young-persons-perspective
- Frank Website https://www.talktofrank.com/drug/vapes
- https://smokefreesheffield.org/get-involved/campaigns/vaping-the-facts/
- https://www.youtube.com/watch?v=pMaTOkSF29A&t=68s

Resources for healthcare providers

British Paediatric Respiratory Society (BPRS)

- Annual report: https://www.bprs.co.uk/publications/

Royal College of Paediatrics and Child Health (RCPCH)

- Policy briefing web page: Vaping in young people | RCPCH
- Policy briefing document: Policy-briefing%3A-Vaping-in-young-people-.pdf (rcpch.ac.uk)

Action on Smoking and Heather (ASH)

- 2024 annual report: Use-of-vapes-among-young-people-in-Great-Britain-2024.pdf (ash.org.uk)
- https://ash.org.uk/resources/view/use-of-e-cigarettes-among-young-people-in-great-britain
- https://ash.org.uk/resources/view/addressing-common-myths-about-vaping-putting-the-evidence-in-context
- https://ash.org.uk/resources/view/awareness-and-use-of-nicotine-pouches

Government Tobacco & Vapes Bill

- https://www.gov.uk/government/publications/tobacco-and-vapes-bill-factsheets/tobacco-and-vapes-bill-smokefree-generation-factsheet
- https://www.gov.uk/government/publications/tobacco-and-vapes-bill-factsheets

Children and young people (CYP) campaign resources

- https://smokefreesheffield.org/get-involved/campaigns/vaping-the-facts/

Public Health Directors

- https://www.adph.org.uk/networks/northwest/wp-content/uploads/sites/14/2024/03/Position-Statement-on-Nicotine-Vaping-Final-1.pdf#:~:text=Children%20and%20young%20people%20under%20the%20age%20of,negative%20impacts%20on%20brain%20development%20in%20young%20people.

World Health Organisation (WHO)

- https://www.who.int/campaigns/world-no-tobacco-day/2024

PCRS position

Overarching PCRS position on vaping which complements the introduction section

PCRS strongly advocates that vaping should be discouraged in children and young people. This includes the significant reduction or withdrawal of promotional/vape advertising campaigns aimed at them; limits in terms of access to vaping and vaping materials; and availability of accurate information to children, young people and their families on the short-term addictive risks and unknown longer-term risks of vaping, as well as risks around unregulated products.

Due to the environmental impact of vaping, PCRS also feels that action is required to discourage vaping from an environmental point of view, particularly where disposable vapes are concerned.

PCRS fully supports the Government's move to ban single-use disposable vapes in England and Wales from June 2025.

Vaping and smoking cessation services play a key role in addressing tobacco dependency and children and young people should have access to these to address nicotine dependency early. However, vaping should not be considered safe in non-smokers and should therefore be actively discouraged. The PCRS would like to see more done to support children and

young people in vaping cessation as well as treating tobacco dependence. With the forthcoming ban of single-use disposable vapes, these services must support children and young people not to revert back to smoking and/or start obtaining illicit vapes.

What do we want our colleagues and others to do (NHS England/population)?

- Carry out health promotion of not smoking or vaping and the health benefits associated with this.
- Raise awareness of vaping in children and young people e.g. that they are addictive (26% of vapers reported strong, very strong or extremely strong urges to vape in 2020, compared with 44% in 2024) and potentially damaging to mental health and well-being.
- Highlight that they are not risk-free and long-term effects haven't been studied in children and young people.
- Campaign for the reduction or removal of vape advertising in a similar way to what has been done for cigarettes. In 2024, 72% of 11–17-year-olds reported they were exposed to some form of vape promotion, the main sources being in shops (55%) and online (29%).[5]
- Provide more support to children and young people in smoking and vaping cessation. This needs to address the underlying nicotine dependency as well as to ensure that they do not revert back to smoking or start obtaining illicit vapes.

What more do we want the government to do?

- Implement effective monitoring of the sale of vapes to ensure age restrictions are observed.
- Discontinue single-use disposable vapes, most commonly used by children and young people, as planned in June 2025.
- Prevent vape advertisements/promotions targeted at children and young people.
- Clear public health messages to not start smoking or vaping.
- Legislate for plain packaging and flavours/colours available and to make vaping less accessible and appealing to children and young people.

A different position to reduce vaping uptake by children and young people

- Addressing vaping along with other health promotion and well-being issues including addiction, drugs and smoking.
- Access to cessation services for children and young people. These services should support children and young people to address their nicotine dependency and provide them with all the necessary support to ensure they do not go back to smoking or start to obtain illicit vapes.

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Approved by PCRS Policy Lead 11th November 2024.

PCRS Respiratory Conference 2024: Highlights, Insights, and New Perspectives

This year's conference was a resounding success, cementing its place as a highlight in the PCRS calendar. With five parallel streams dedicated to clinical practice, service development, professional growth, hands-on workshops, and the latest research, the conference offered something for everyone.

PCRS Executive Chair Katherine Hickman set the tone in her opening address, assuring delegates; "you belong here." The feeling of inclusion was echoed in feedback from attendees, including those who attended on their own as part of 'Team Solo'. The inclusive and welcoming atmosphere was matched by a record-breaking turnout of over 500 attendees, making it our most well-attended conference to date!

The opening keynote, delivered by Professor Lucy Easthope, was nothing short of inspiring. Lucy (aka 'the antidote to despair'), shed light on the powerful impact language can have and reminded attendees of the importance of prioritising self-care.

The conference programme delved into respiratory hot topics providing insights that have the potential to transform practice. From learning to think outside the box when it comes to diagnosis to recognising the transformative potential of lifestyle medicine for those with respiratory conditions, the programme was packed with actionable insights and informative case studies. At every opportunity, the importance of compassionate, person-centred care was underscored.

This year's PCRS Conference saw our most well-attended poster walkaround session as well as a record-breaking number of accepted abstracts. The structured walkaround hosted by Paul Stephenson, Chair of the PCRS Board of Trustees, featured excellent summaries from abstract presenters, leading to insightful discussion and sharing of best practices. Access to the abstracts and posters from this year's event is now open to all.

Paul noted that this year saw "the highest number of abstracts ever submitted" and we encourage you to consider submitting an abstract for PCRS 2025. Submissions will open soon via the PCRS website https://www.pcrs-uk.org/conference/abstracts. This year's submissions are open to all to browse https://www.pcrs-uk.org/conference/2024/abstracts

A big thank you goes out to all the speakers, faculty, and organisers who worked tirelessly to bring this event to life. We're also grateful to our sponsors and exhibitors, whose support helps make the PCRS conference possible each year. Thanks also to our patient reference group who helped us ensure the voice of the patient was at the heart of our programme. The patient reference group also reviewed all posters and awarded the most patient centred poster to DM Edwards for their poster, Lessons in Asthma – improving the management of respiratory conditions in a primary school setting.

Congratulations to Zoe Moon *et al* for the winning conference abstract, The Reliever Reliance Test: evaluating a pragmatic tool to address SABA over-reliance. You can view all the winning abstracts at https://www.pcrs-uk.org/conference/2024/abstracts.

Reflecting on the event, Conference Organising Committee Chair, Darush Attar-Zadeh said: "What sets the PCRS Conference apart is the fantastic networking opportunities throughout the day, continuing into the lively evening dinner and disco. It's the perfect mix of professional growth and social connection, making it a must-attend event for anyone in respiratory health."

Each year, we say it's our best yet—and this year truly delivered! With new insights, fresh perspectives, and a shared commitment to better patient outcomes, we're already looking forward to what next year has in store. **Save the dates in your diary – 18th–20th September – so you don't miss out! https://www.pcrs-uk.org/conference**

Everything about the conference was excellent - it is simply the best, most practical and relevant conference I attend each year.

The format was very professional yet informal and welcoming - a hard balance to strike but it was achieved in spades. Would recommend the conference wholeheartedly.

I really liked the effort to make Team Solo feel comfortable - the dedicated seating area in Ironbridge was great, as well as our own tables for the Friday dinner!

The PCRS Conference is a phenomenal event, uniting passionate professionals and supporting the next generation of respiratory leaders. Fun, engaging, and highly educational - if you have even the slightest interest in improving respiratory patient care, this is the place to be.

Katherine Hickman, PCRS Chair

I always come away inspired with so many new connections - just the best conference

Continues to be the most welcoming and friendly conference, with valuable updates and good translation to practice.

PCRS News round-up

It's been a busy year here at PCRS. We've worked on many different projects to bring you new tools and resources to support your learning and aid practice.

Our MART tools – see pages 10-15 and online at https://www.pcrs-uk.org/resource/current/maintenance-and-reliever-therapy-mart-asthma-action-plan are now available via the Ardens clinical decisions support software at your practice. (*Our thanks to Orion for supporting the development of these valuable asthma action plans which can be personalised and then printed for patients – the sponsor has had no input into the development of these resources*).

Not forgetting COPD, we've also developed some really helpful short videos to help demonstrate to healthcare professionals and patients key advice on the benefits of smoking cessation, movement to support health and the importance of treating and preventing exacerbations. View our videos at https://www.pcrs-uk.org/campaign/challenging-perceptions-copd *(Our thanks to AstraZeneca for the provision of a grant to support the development of these tools – the sponsor has had no input into the development of these resources)*.

We've also been working hard on a number of tools to support our greener healthcare campaign. In September 2024, we launched the greener respiratory healthcare calendar of action promoting simple actions you can take to reduce the environmental impact of respiratory healthcare and improve patient health. In the next few weeks, we'll also be launching an update to our white paper on greener respiratory healthcare, launching a top tips for sustainable respiratory healthcare and undertaking webinar to inspire you to take simple steps in your practice to improve sustainability and reduce your environmental impact. *(Our thanks to Chiesi for the provision of a grant to support the development of these tools – the sponsor has had no input into the development of these resources)*.

During the year we've hosted many webinars with some fantastic and inspiring speakers including Dr Ian Sinha, Dr Llinos Jones, Dr Mike Crooks, Rachel Daly, Dr Mark Levy and many members of our committees and the wider respiratory community. Our webinars and videos are available on demand so you can catch up on your learning at your leisure, just check our website using the search option, selecting videos / webinars in the category option to access them all.

Members are also able to access our wide range of podcasts covering a multitude of respiratory topics from asthma to wheeze, COPD to LVRS, Very Brief Advice and rarer lung conditions. Podcasts are a great way of keeping up to date while you are multitasking.

At the end of this year Carol Stonham will be stepping down as Policy Lead for PCRS.

Carol has been a stalwart and trailblazer for PCRS for many years. She was the first nurse to take on the role of chair of the Executive Committee and is always there to provide sage, pragmatic advice, comment and helpful reviews. She has led the policy forum for 3 years and will no doubt be missed. We're delighted that Steve Holmes will be taking over the reins at the policy forum so we are confident it is in good hands.

As the year draws to a close the Executive will be adding the final touches to our plans for 2025 – it's going to be another busy year with a pressing need to support the implementation of the new BTS/SIGN/NICE guideline for the management of asthma, a focus on getting the diagnosis right and helping patients with long term respiratory conditions to live well.

Our thanks to all the members of our committees, including our patient reference group and other experts in respiratory healthcare who have worked tirelessly and spent many hours developing, supporting and reviewing our resources and tools.

Thanks also to everyone who helped us deliver another fantastic conference.

We hope you all have time to enjoy the festive season and we wish you all a warm, healthy and happy New Year.

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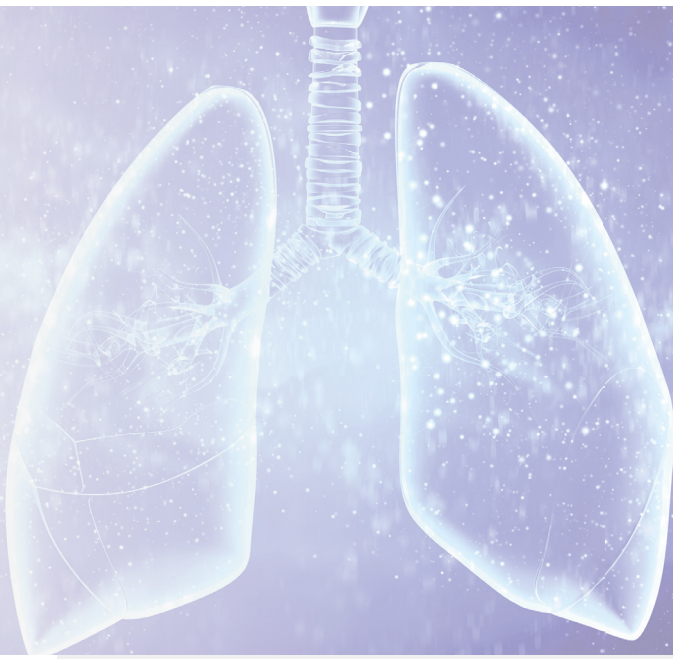
Call for Papers



npj Primary Care Respiratory Medicine is an open access, online-only, multidisciplinary journal dedicated to publishing high-quality research in all areas of the primary care management of respiratory and respiratory-related allergic diseases. Papers published by the journal represent important advances of significance to specialists within the fields of primary care and respiratory medicine. We are particularly interested in receiving papers in relation to the following aspects of respiratory medicine, respiratory-related allergic diseases and tobacco control:

- Epidemiology
- Prevention
- Clinical care
- Service delivery and organisation of healthcare (including implementation science)
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