

Practical Ways to Reduce the Carbon Impact of Inhalers

The table below has some suggestions on how you may be able to improve the sustainability of asthma care. The suggestions below must be considered in the context of the individual patient and must be underpinned with the principles of shared decision making with the patient. High quality asthma care that is centred around the patient will have the most sustainable impact.

Area of Work	Issue Identified	Possible solutions	Supporting Resources
High carbon footprint MDIs	Use of HFA227 pMDIs (Flutiform and Symbicort)	Identify patients and invite in for review and consider switching to DPI versions of same inhaler or other treatment if these are suitable for the patient	Clinical system searches Patient letters/information
High carbon footprint MDIs	Use of salbutamol inhalers with higher volumes of propellant gas (Ventolin)	Identify patients and consider switching to other suitable treatments or lower volume salbutamol inhalers (Salamol or Airomir) Increase use of MART regime Remove salbutamol inhalers from repeat templates Reduce the number of inhalers available on repeat templates Set dose intervals on salbutamol prescriptions to 180 days to allow easier monitoring of overuse	Clinical system searches Personalised Asthma Action Plans
Poor asthma control	Ordering more than 3 salbutamol inhalers per year	Review medication, compliance, inhaler technique Consider MART regime Switch to lower carbon inhalers if clinically appropriate at review	SENTINEL Plus project support Inhaler technique videos Greener Practice patient messages: Resources – Greener Practice
Poor asthma control	Patients prescribed SABA without ICS	Confirm asthma diagnosis Review treatment, adding ICS for patients with asthma as per guidelines	Asthma British Thoracic Society Better lung health for all (brit-thoracic.org.uk) Wessex AHSN FeNO project Community Pharmacy New Medicines Service

			NHS England » NHS New Medicine Service https://psnc.org.uk/wp-content/uploads/2021/08/NMS-patient-leaflet-Aug-2021.pdf
Inhaler device choice	Patients prescribed separate LABA/ICS	Review treatment and consider prescribing as combined inhalers (moving to DPI if appropriate)	Clinical system searches Personalised Asthma Action Plans
Inhaler device choice	Patients prescribed a mixture of pMDIs and DPIs (excluding salbutamol)	Review treatment and inhaler technique and consider prescribing all devices as the same type of device (moving to DPI if appropriate)	Clinical system searches Personalised Asthma Action Plans
Inhaler device choice	Patients prescribed inhaled corticosteroid pMDIs	<ul style="list-style-type: none"> For patients prescribed e.g. 2puffs BD beclomethasone 50mcg pMDI, consider switching to 1 puff BD beclomethasone 100mcg pMDI Review treatment, consider whether MART regime is appropriate 	
Waste	Increasing use of reusable inhaler devices (e.g. refills)	<ul style="list-style-type: none"> Search for all patients with refillable devices and replace repeat medication with refill device Only have refill devices on repeat prescriptions (or limit the number of issues of the device plus refill) in line with recommended replacement intervals Patient education 	Searches for refillable devices Respimat® inhaler Official product site Boehringer Ingelheim
Waste	Recycling of inhalers and returning to pharmacies for environmentally safe disposal	<ul style="list-style-type: none"> Social media information and promotion Patient audits Community pharmacy quality scheme Ensure patients know how to tell when their inhalers are empty 	PSNC-Patient-Briefing-sheet-inhaler-disposal.pdf index (prescqipp.info) Greener Practice patient messages: Resources – Greener Practice

		<ul style="list-style-type: none"> • Add 'return your inhaler to a pharmacy for environmentally safe disposal' to the dose directions for inhalers 	Chiesi scheme in Leicestershire 732_take-air-a4-poster-approved.pdf chiesi.uk.com
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Resources supporting all areas of work

Greener Practice Asthma toolkit [High Quality and Low Carbon Asthma Care – Greener Practice](#)

Sentinel project [SENTINEL Plus | Welcome to SENTINEL Plus](#) (contact your Medicines Optimisation Team for log in details)

UCL Partners Proactive Care Framework [Respiratory resources - UCLPartners](#)

The Breathe Green Project information for patients and professionals - [The Breathe Green Project](#)

Other resources – from future NHS Greener Knowledge Hub

- [NICE patient decision aid](#) - Information and guidance for patients and clinicians when choosing an inhaler, including consideration of the environmental impact of devices alongside clinical benefits
- The [suite of PrescQIPP resources](#) on inhaler carbon footprints, including a detailed data table on current estimates of inhaler emissions (listed as 'Attachment 1' on the webpage)
- [RightBreathe website and app](#) (available through the website) - Information for clinicians on different kinds of inhalers
- [Primary Care Respiratory Society position statement on the environmental impact of inhalers](#) - Detail about the Primary Care Respiratory Society's official position on, and commitment to, addressing environmental issues, published in February 2020
- [British Thoracic Society Position Statement: The environment and lung health, 2020](#) - Statement from the British Thoracic Society on climate change and the role healthcare and respiratory care, in particular, can play in combatting it
- [UKIG inhaler standards and competency document \(including 7 steps to inhaler success\)](#) - Standards set by the UK Inhaler Group designed to provide guidance on optimal inhaler technique

Resources specifically tailored for patients

- [Asthma UK/British Lung Foundation: What does good asthma control look like](#) - Information and advice for patients to manage their asthma
- [Asthma UK/British Lung Foundation advice and videos on inhaler technique](#) - Multimedia providing examples of how to use inhalers effectively
- [Asthma UK/British Lung Foundation: Your personalised asthma action and support plan](#) - A two-page template for developing a personalised asthma management plan
- [Asthma UK/British Lung Foundation: Asthma review](#) - Guidance on how to use your inhaler most effectively, tailored to your device