



PCRS Position Statement

Inhaler Switching: Making safe and clinically appropriate changes for patients with respiratory disease

Update July 2026

Introduction and summary of PCRS position

Concerns about the environmental impact of the propellant gases used in pressurised metered dose inhalers (pMDIs) and the plastics used in all single-use inhaler devices have made them an important focus for efforts to reduce the environmental impact of the NHS. Patients themselves may also be concerned about the environmental impact of their inhalers and express a preference for alternatives. In addition, Integrated Care Boards (ICBs) in England, as well as healthcare commissioners' services in other devolved nations, are under financial pressure to reduce the costs of medicines, which includes inhalers.

The Primary Care Respiratory Society (PCRS) believes that optimising treatment, adherence and inhaler technique to gain the best possible symptom control is key to reducing the environmental impact of treatment and the waste of inhalers. Appointments to review a patient's inhaler treatment or respiratory condition should be used as an opportunity to improve outcomes, including a regular observed review of inhaler technique.

PCRS supports initiatives to reduce the environmental impact of respiratory care provided that patient outcomes are not compromised.

PCRS does **not** support blanket switching of inhalers. Such approaches:

- Are not patient-centred
- Risk worsening disease control
- Do not represent good clinical practice

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All decisions regarding inhaler changes must:

- Be made collaboratively with the patient, taking into account equity of access to engage with shared-decision making and adapting to their inhalers
- Be based on a clinical review by an appropriately trained healthcare professional
- Prioritise optimal individual patient care

Environmental considerations are important but must not override clinical safety and effectiveness.

Background

Since the introduction of the first pMDI in 1956, inhaler devices have revolutionised the care of patients with respiratory disease by allowing the delivery of medications directly to the lungs. These devices have undoubtedly saved countless lives. However, we should be concerned about the environmental impact of the propellant gases used in the majority of pMDIs, which are very potent global warming agents including the plastics used in all inhaler devices. These factors have made them an important focus for efforts to reduce the environmental impact of the NHS, and it is essential we act to reduce this impact at every opportunity.¹ However, it is important to place these concerns in context. The NHS Sustainability Development Unit estimates that about 3% of NHS greenhouse gas emissions are accounted for by inhaler usage and the NHS accounts for about 4–5% of the overall greenhouse gas emissions in the UK.^{2,3}

Propellant-free inhalers such as dry powder inhalers (DPIs) and soft mist inhalers (SMIs), alongside inhalers with a low carbon propellant such as HFA-152a or HFO-1234ze, are available for the delivery of respiratory medications and are suitable for routine treatment for most adult patients. Effective use of a DPI requires patients to generate a quick and deep inhalation over 2–3 seconds, which many patients can achieve as patients' natural untrained inhalation technique tends to be fast and more forceful.^{4,5} However, suitability should be assessed on an individual basis as DPIs vary in internal resistance and the inspiratory flow required for effective use. Tools such as the InCheck Dial® device, manufacturer provided training whistles and placebo devices can help support device selection and help coach correct inhaler technique.

These inhalers also incur environmental costs in relation to their production and disposal, and most are designed as single use devices.⁶ There is no effective national recycling scheme for inhaler devices. However, there have been successful pilot projects/schemes that have been done in South East London ICB, Black Country ICB and many more,

which have showcased recycling schemes can be set up successfully.^{7,8} The current low levels of return of inhalers to pharmacies for safe disposal continues to result in the environmentally harmful release of propellant gases and a considerable amount of plastic and metal going into landfill.

Information on the global warming potential (GWP) of inhaler devices currently used in routine clinical practice can be obtained by using the information compiled by Dr Alex Wilkinson (<https://greeninhaler.org/inhaler-comparison/>) and that provided by RightBreathe (<https://www.rightbreathe.com/>).⁹

PCRS position

- PCRS welcomes initiatives to reduce the environmental impact of respiratory healthcare. It is essential that such strategies do not compromise patient care or create a situation where patients feel conflicted about any potential environmental cost of medications or devices used to manage their respiratory disease.
- Any decision to change an inhaler should be made collaboratively with the patient, following a careful review of their clinical status and with the aim of optimising individual care.¹⁰ This should take place within a shared decision making process as advocated by the NHS and multiple professional bodies. Consideration should be given to health inequalities, ensuring that all patients particularly those with additional communication, literacy, or access needs, are supported to engage in shared decision-making and adapt to any inhaler changes.
- PCRS do not support 'blanket switching' of patients from one inhaler type to another for either environmental or financial reasons, and there is clear evidence to show that this approach is neither patient-centred nor good clinical practice.¹¹⁻¹⁴ Further information can be reviewed on the PCRS blanket inhaler switching article (<https://www.pcrs->

[uk.org/resource/current/blanket-switching-inhaler-types-why-bad-idea](https://www.pcrs-uk.org/resource/current/blanket-switching-inhaler-types-why-bad-idea)).¹²

- Decisions about changing a patient from one inhaler device to another type of inhaler device should be made with the patient after careful review by an appropriately trained health professional of the patient's current condition and within the context of delivering optimal care for the individual patient. **The right inhaler, is the inhaler the patient will use, and use properly.**
 - o Changing from one inhaler device to an alternative with a lower GWP delivering the same or equivalent medication should be considered where the change is clinically appropriate, safe and acceptable to the patient.
 - o For adult patients starting treatment for the first time, a low GWP alternative should be chosen where possible.
 - o Patients should be supported to make a decision that is appropriate to them. This should include an opportunity to try any alternative device or devices with training on the appropriate use of any new inhaler. A recent report from Asthma and Lung UK following a survey of 2600 people with asthma in 2024 highlighted that around 20% of patients had inhalers switched without any appointment to explain or oversee the inhaler switch. A third of patients who had their inhalers switched had worsening control of their asthma and under 40% had not been shown how to use their new inhalers. This highlights the importance of ensuring that inhaler switches are conducted as part of an informed shared decision with the patient, with appropriate follow-ups in place to ensure issues and concerns are addressed to avoid worsening disease control.¹³
 - o Patients should be reviewed by a health professional after any change in treatment of inhaler type.
 - o Every opportunity should be taken to optimise inhaler-based therapy, including regular observed review of inhaler technique, with coaching to correct errors, and ensuring patients have access to appropriate videos to demonstrate the appropriate technique for their inhaler.

For further information on finding the right inhaler devices for individual patients, please see the following PCRS resources:

- PCRS Tailoring Inhaler Devices: <https://www.pcrs-uk.org/resource/current/tailoring-inhaler-devices>¹⁴
- PCRS In Conversation: Breaking the Inhaler Inertia webinar at: PCRS in Conversation - Breaking the Inhaler Inertia: Time to Move Beyond Outdated Respiratory Care | Primary Care Respiratory Society¹⁵
- PCRS Greener Respiratory Healthcare campaign <https://www.pcrs-uk.org/campaign/greener-healthcare>
- **Other considerations**
 - o Using a single inhaler device (e.g. AIR/MART), dual (ICS/LABA,^a LABA/LAMA) or triple therapy (ICS/LABA/LAMA) rather than multiple inhaler treatments.
 - o Optimising the dose (e.g. using a higher strength inhaler but using fewer doses).
 - o Whenever pMDIs are used, they must be accompanied by a spacer. The rationale for this should be clearly explained to the individual (and their understanding of it addressed), with their preferences regarding practical aspects of carrying both the inhaler and the chamber (especially for PRN (as needed) doses) always taken into consideration during joint decision-making processes.

PCRS can support implementation of these recommendations through training and education across the primary care sector. For access to these please go to: <https://www.pcrs-uk.org/>

Industry

PCRS continues to encourage manufacturers of inhaler devices:

- To seek materials and manufacturing processes that minimise the environmental impact and enable appropriate recycling of the devices they produce.
- To produce more reusable inhalers and the development of low GWP propellants for pMDIs should be a focus for future device development.

^a AIR, anti-inflammatory reliever; MART, maintenance and reliever therapy; ICS, inhaled corticosteroids; LABA, long-acting beta-agonist; LAMA, long-acting muscarinic antagonist.

- To ensure all inhalers have the inclusion of dose counters to ensure all available doses are used prior to disposal.
 - o The importance and significance of the lack of a dose counter on pMDI inhalers was clearly highlighted in the paper by Murphy *et al* (2024),¹⁶ which highlighted that many inhalers returned to pharmacies without dose counters were overused or underused. A report in 2024 highlighted that one in eight children attending hospital due to asthma had empty inhalers,¹⁷ and 12% of childhood asthma deaths can be attributed to not being able to tell that they were using an empty inhaler.¹⁸
 - o PCRS encourages the Medicines and Healthcare products Regulatory Agency (MHRA) to mandate the inclusion of dose counters in every inhaler presented for approval to reduce the use of empty inhalers which have been linked to increased patient harm and implicated in child deaths.

National/Healthcare systems

- PCRS advocates a national inhaler recycling scheme and, where this is currently not in place, greater public awareness to encourage the return of inhalers to the pharmacy instead of entering landfills.

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