



Inhaled medicines are essential for millions of people and are not interchangeable

Nearly 550 million people globally live with chronic respiratory diseases including asthma and COPD* and prevalence is increasing.^{1,2}

These diseases can be complex to treat and carry a heavy burden for patients, healthcare systems and society.³⁻⁵

Inhaled medicines, including pressurised metered-dose inhalers (pMDIs), are used by millions of patients to control symptoms, prevent disease progression and reduce mortality.^{3,6}

Many inhaled medicines fall within the scope of **new environmental policies**.⁷

Reducing the environmental impact of respiratory inhalers is critical. However, inhalers are not interchangeable.^{8,9}

Inhaler switching that is not based on clinical need could result in **health risks for individuals** and drive up the carbon footprint of care that accompanies less-controlled disease.⁷⁻¹¹



Changing inhalers without consent can lead to variable clinical consequences and damage the doctor-patient relationship^{9,10}

Non-consented inhaler switching may be associated with:^{8,10}

- Reduced disease control and increased exacerbations
- Non-adherence to treatment
- Incorrect inhaler technique
- Increased healthcare utilisation and associated costs
- Quality of life impact

A panel of eight global experts have developed consensus quality statements for how and when to implement a change in inhaler treatment^{12,**}

The consensus outlines that an inhaler regimen switch requires approximately **35 minutes** per patient.

Baseline competencies required by clinicians for conducting an inhaler switch when appropriate include:¹²



A qualified clinician with medical expertise of respiratory disease management



Knowledge of inhalers including mode of action, handling technique and cost



Able to deliver appropriate patient training and correct inhaler use critical errors



Able to communicate the need for regimen switch/treatment goal, while sensitive to patients' wishes and beliefs



Familiar with relevant policy, access programmes and guidelines

**The consensus was organised and funded by AstraZeneca and consisted of 8 experts from around the globe



Implications for clinical practice and health system policies

Clinical and patient-led factors are the most important reasons for an appropriate inhaler regimen switch. Switches should be initiated and implemented by qualified clinicians only.¹²

The practical considerations of switching millions of patients who rely daily on their inhaled medicine to control their respiratory disease should not be underestimated.



*Chronic obstructive pulmonary disease

1. Soriano JB et al. Prevalence and attributable health burden of chronic respiratory diseases, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet Respir. Med.* 2020;8(6):585-96. 2. WHO. Noncommunicable diseases. Available at: <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>. Accessed: September 2023. 3. Global Initiative for Chronic Obstructive Lung Disease (GOLD) Report 2023. Available at: <https://goldcopd.org/2023-gold-report-2/>. Accessed: September 2023. 4. The Global Asthma Report 2022. Available at: <http://globalasthmareport.org/>. Accessed: September 2023. 5. National Asthma Education and Prevention Program, Third Expert Panel on the Diagnosis and Management of Asthma. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. Bethesda (MD): National Heart, Lung, and Blood Institute (US); 2007 Aug. Section 2, Definition, Pathophysiology and Pathogenesis of Asthma, and Natural History of Asthma. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK7223/>. Accessed: September 2023. 6. AstraZeneca UK Ltd Data on File. ID: REF-154642: Using Respiratory Disease Prevalence and Global Sales of Inhalers to Estimate pMDI User Populations in Europe. 7. Levy ML et al. Global access and patient safety in the transition to environmentally friendly respiratory inhalers: the Global Initiative for Asthma perspective [published online ahead of print, 2023 Jul 19]. *Lancet.* 2023;S0140-6736(23)01358-2. 8. Usmani OS, Levy ML. Effective respiratory management of asthma and COPD and the environmental impacts of inhalers. *NPJ Prim Care Respir Med.* 2023;33(1):24. 9. Bjerner L. The importance of continuity in inhaler device choice for asthma and chronic obstructive pulmonary disease. *Respiration.* 2014;88(4):346-352. 10. Doyle S, et al. What happens to patients who have their asthma device switched without their consent? *Prim Care Respir J.* 2010; 19 (2): 131–139. 11. Karliner, J et al. Health care's climate footprint: the health sector contribution and opportunities for action. *European Journal of Public Health.* 2020; 30(5):2020-01. 12. Usmani OS, et al. Consensus quality standard for implementing inhaler regimen switch in patients with respiratory disease. European Respiratory Society Congress 2023. Poster # PA4607.