

Optimum inhalers for patients

 *I never thought about the effect on the environment; I'd prefer an environmentally friendly option.*

approximately 1/3 of patients wanted environmental factors to be considered when making an inhaler choice.



Respiratory team

Dr Thomas Burden - Respiratory Consultant
Katy Converso - Respiratory Nurse Specialist
Belen Carballidoromero - Respiratory Pharmacist

AIMS

- To reduce the carbon footprint of inhaled therapies
- To increase correct inhaler disposal

APPROACH

- **Project choice:** Metered dose (MDI or 'puffer') inhalers have a large carbon footprint as they use greenhouse gases as a propellant.
- **Engagement methods:**
 - Asking patients if they would like environmental impact to be considered when making shared decisions about which inhaler to use.
 - Using combined inhalers, rather than single-drug inhalers.
 - Switching from MDIs to dry-powdered inhalers (DPIs), that do not contain greenhouse gases.
 - Advising patients to return their used inhalers to pharmacies for incineration or directed toward their nearest recycling scheme rather than putting them in the bin at home. This stops residual greenhouse gases escaping into the atmosphere.
- **Measurement:** Data was collected on the number of device switches made, the devices used before and after the switch, the number of patients informed to return used inhalers to pharmacy. Patient comments were also recorded during consultations where the environmental impact of inhalers was introduced.
- **Embedding:** 2 DPIs added to the formulary so that prescribers have more environmentally - friendly prescribing options. Assessment of optimum inhaler device for patients and recommendations changed on the COPD bundle checklist to reflect broader options.

EVIDENCE OF IMPACT

- Approximately **1/3 patients** wanted environmental factors to be considered when making an inhaler choice.
- Approximately **20 inhaler switches** were made over 10 weeks, an average of 2 switches a week, to lower carbon options, without increasing cost.
- Appropriate disposal: approximately **30 patients** were advised to return their used inhalers to pharmacies for safe disposal.

ANNUAL SAVINGS FORECAST

 **2,153 kgCO₂e**
 **£466**