Developing a toolkit for the multidisciplinary team on Inhalers and Carbon Footprint

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Introduction

Pressurised metred dose inhalers (MDIs) contain a propellant (hydrofluroalkanes) which has a disproportionate global warming potential to dry powdered inhalers (DPIs) and soft mist inhalers (SMIs).

Healthcare's climate footprint is 4.4% of global emissions. The HSE Sustainability and Climate Strategy 2022 – 2050 is due to be launched shortly which includes priority areas of Greener Modules of Healthcare. Inhaler use contributes disproportionately to healthcare emissions – approximately 3% and is an important target for addressing emissions.

In a recent anonymous, online survey of 61 members of the respiratory multidisciplinary team practising in Ireland;

94% felt it was important to consider carbon footprint when choosing an inhaler for a patient.

However, over half did not feel confident identifying patients who do require an MDI and those who could suitably be managed with a DPI.

Responding to the results of this survey, we created the inhaler and carbon footprint toolkit. This tool serves to highlight the fundamental role of clinicians in communicating the health impacts of climate change and ensuring that the measures taken to address climate change yield the maximum health benefits possible.

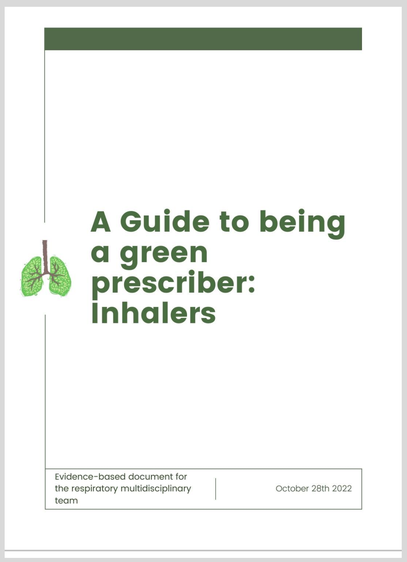
Methods

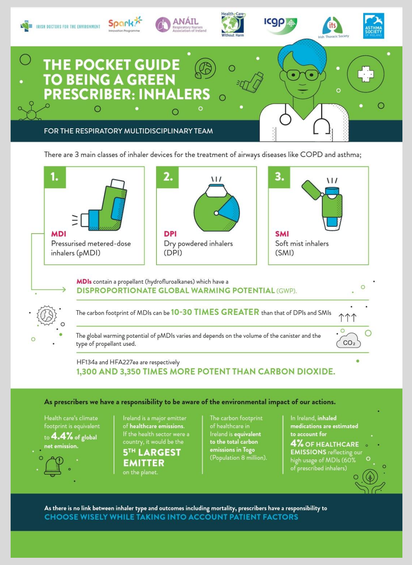
- A multidisciplinary group was formed to review the literature and generate a toolkit that would provide information for clinicians on inhalers and carbon footprint in a succinct and accessible format.
- This toolkit includes information on the available inhalers carbon footprint and distance travelled equivalent as well as dosage, cost and correct inhaler technique.
- This toolkit was designed to be easily utilised in the clinical setting, to guide clinicians in choosing the right inhaler for the right patient with the lowest possible carbon footprint, disposed of correctly.
- In the evidence document, the lifecycle of inhalers and the carbon saving measures of holistic respiratory care are addressed, demonstrating how each of these actions are best for patient and best for planet with information on how to implement these measures in practice.
- This toolkit was developed in consultation with several key stakeholders, including the Respiratory Nurses Association of Ireland (ANAIL), Irish Doctors for the Environment, COPD Ireland, Healthcare Without Harm, Asthma Ireland, the Spark Programme, the Irish College of General Practice and the Irish Thoracic Society.
- The images used in this toolkit are included with permission from the Paediatric, Clinical Photography and Pharmaceutical Departments in Tallaght University Hospital.
- This project was funded by the Spark Programme and the Circular Economy Grant by the Community Foundation of Ireland

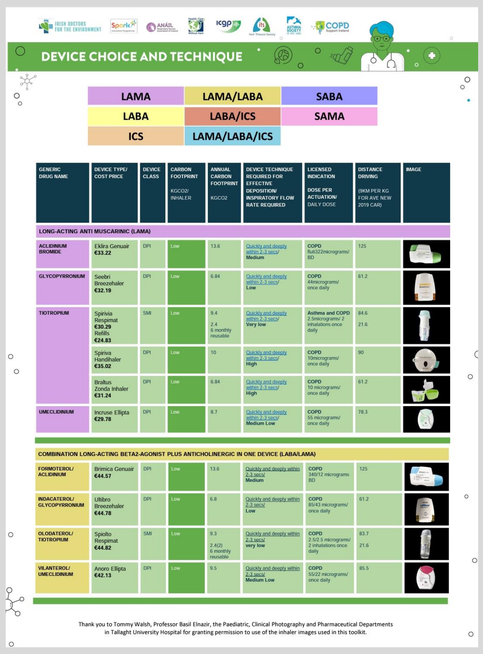
Reference
1. Healthcare without Harm Global Road map for Healthcare Decarbonisation 2021 https://healthcareclimateaction.org/sites/default/files/2021-04/HCWH%20Road%20Map%20for%20Health%20Care%20Decarbonization%20-%20Chapter%204.pdf

Results

Three documents were created, a brief guide, a device choice, technique and carbon footprint table and an evidence based document. This toolkit is in the process of finalising stakeholder approval and will be published on the stakeholder's websites where it will be freely accessible.







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Conclusion

The 'inhalers and carbon footprint' toolkit addresses a previously unmet need for easily accessible information on inhalers and carbon footprint.

This toolkit is designed to provide clinicians with the necessary information to reduce the carbon footprint of inhalers while improving patient care.