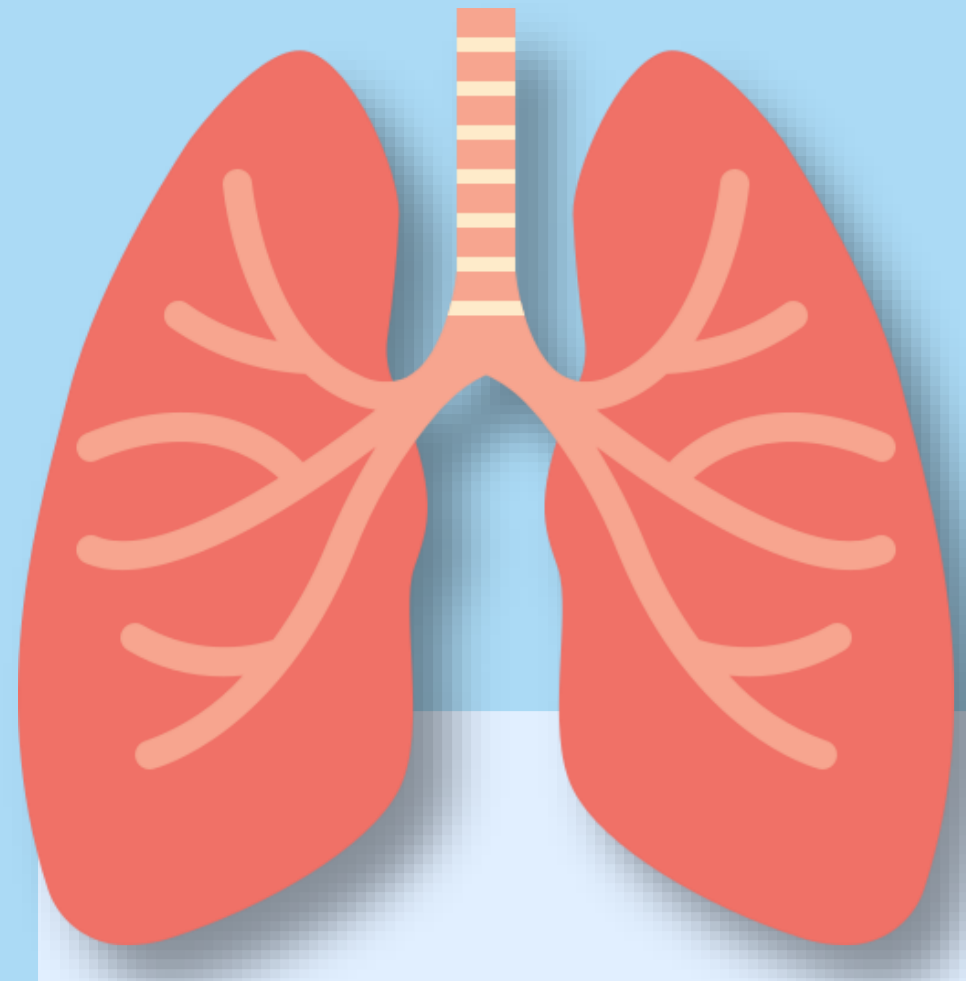


# DON'T JUST CHANGE THE INHALER!

## Supporting Quality Respiratory Prescribing to Reduce Carbon Emissions



As part of the climate emergency and sustainability strategy<sup>1</sup>, NHS Scotland aims to reduce emissions from inhaler propellant by **70% by 2030**.

**The Quality Prescribing Strategy for Respiratory:** A Guide for Improvement (2024-2027) supports clinicians and people with respiratory illness in the appropriate use of medicines, whilst applying the principles of value-based healthcare and realistic medicine. It supports person-centred medication review to optimise respiratory treatment, with environmental considerations, including the use of lower global warming potential inhalers.

- **70% of carbon emissions** are associated with over-reliance on short-acting beta-agonist (SABA) inhalers in asthma.<sup>2</sup>
- **Optimised disease control** has a significant impact on carbon emissions and improves outcomes for people with asthma.<sup>3</sup>

### The Aim

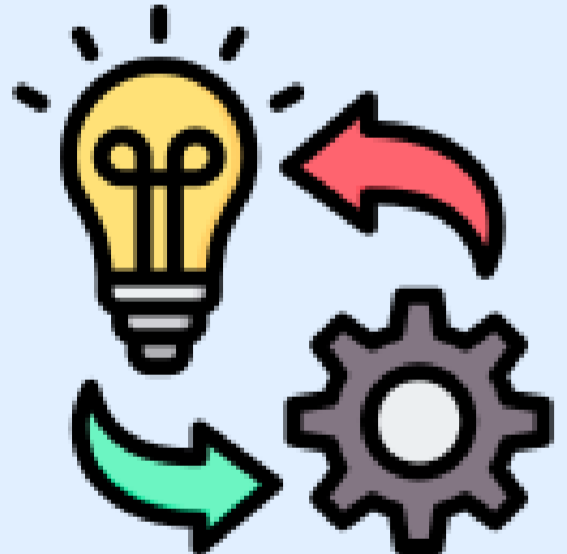
To update **Quality Prescribing Strategy for Respiratory**, building on the 2018-2021 guide, to include environmental considerations in managing respiratory illness and to promote person centred care, 7-steps process for medicine reviews and shared decision making.

### The Methods

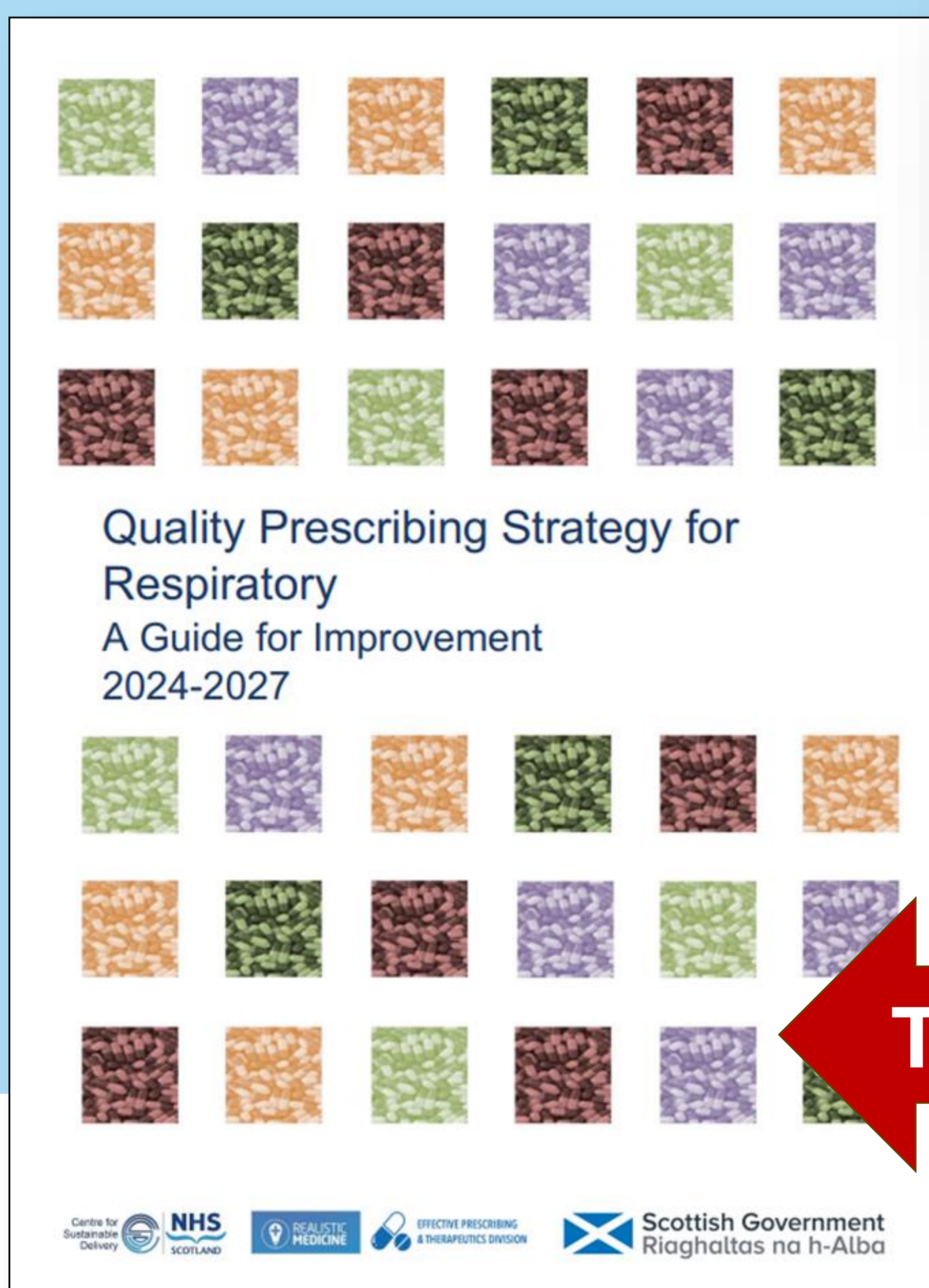
Updating and development of the guide was supported by people with lived experience, patient organisations and the multidisciplinary team across primary and secondary care. Public consultation invited comments on the draft and subsequent publication of the completed guide.

A suite of indicators was developed to support the work; national therapeutic indicators (NTIs). Case finding is supported by the Scottish Therapeutic Utility (STU), a programme using data from GP IT systems.

Content was updated on the Manage Meds website/app, including an implementation **toolkit**, using Quality Improvement (QI) methodology to support clinicians with changes in optimising respiratory care.



The toolkit is active on the Manage Meds app and website and activity will be monitored.



### The Guide



Emily Kennedy, Karen Vint, Iain Wilson, Alpana Mair, Stuart Law

**Acknowledgements:** Thanks to all involved in the SLWG to update the Quality Prescribing Strategy for Respiratory; colleagues at HIS (in particular Ann Wales and Pauline Neison) for the Manage Meds app work; STU team; PHS for the NTI work; Joanna Gilchrist from the QI Leading Improvement Team, and all the team at the EPT division, Scottish Government. Picture sources: IPCRG/PharmTech/Dr Fox

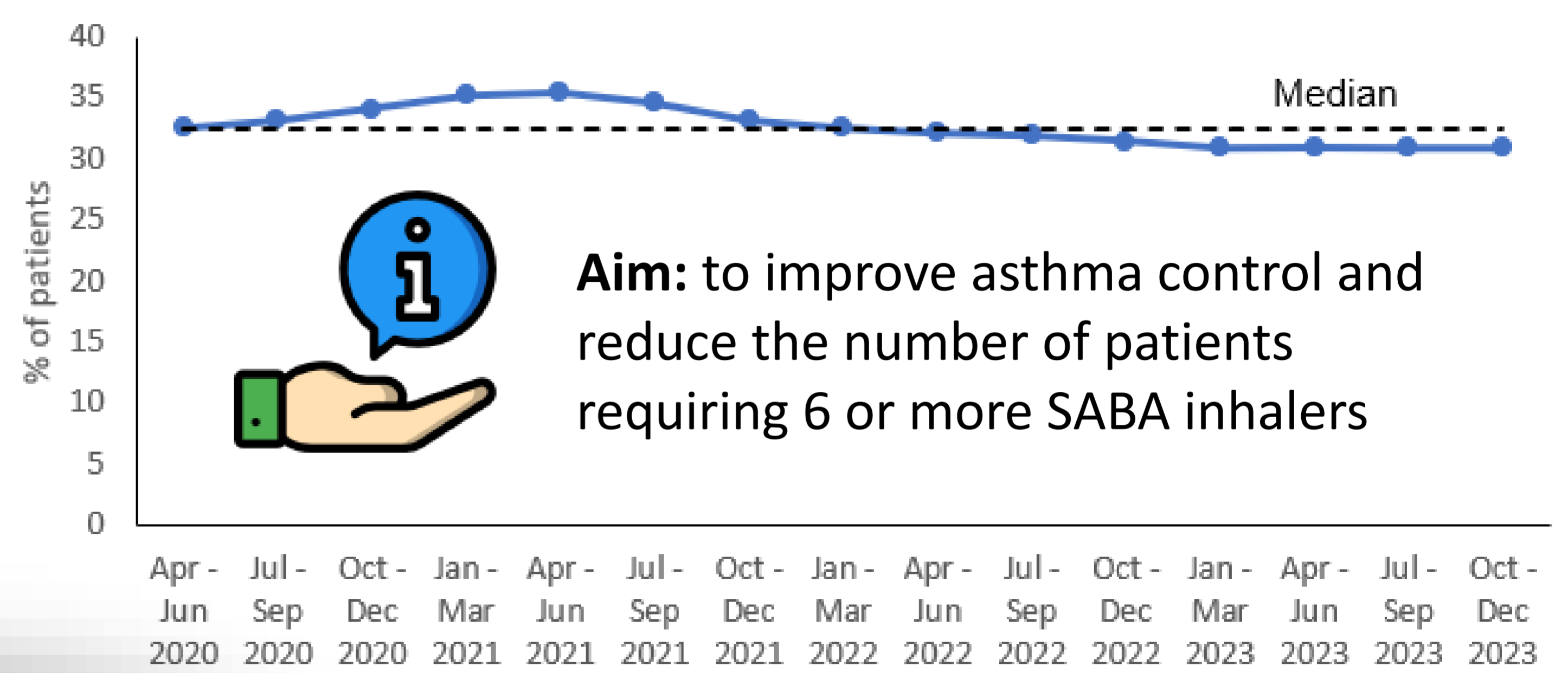
**'Better respiratory care is greener care'**

### The Results

The updated **guide** has been published, assisting clinicians to optimise respiratory care, and supports sustainable care to enable effective use of existing resources. It provides practical, evidence-based recommendations for person-centred review and treatment to improve safe, effective, and sustainable respiratory care. **Supporting tools include:**

- aiding patient identification and prioritisation in primary care using STU
- future changes in prescribing practice and outcomes will be monitored using NTIs {Chart 1, other NTIs available such as carbon emissions from inhalers}
- QI approaches and guidance supported by the Manage Meds website/app
- Improved disease control lessens environmental impact of respiratory illness, contributing to achievement of net-zero targets in sustainable care by 2030.

**Chart 1: People prescribed six or more short-acting beta-agonist (SABA) inhalers as a percentage of all people prescribed SABAs**



**Glasgow to Inverness = 175 miles**

**Over the Queensferry crossing and back = approx. 4 miles**

**Equivalent vehicle exhaust CO<sub>2</sub> emissions from a Ventolin Evohaler (containing 100 x 2 puff doses) and a Ventolin Accuhaler (60 x 1 puff doses) or Salbutamol Easyhaler (200 x 1 puff doses). Assumes car achieves 180g CO<sub>2</sub>/km**



### Key Messages

- Improve outcomes by conducting person-centred medication reviews
- **Person-centred care: Optimise disease control**
- Minimise over-reliance on short acting reliever inhalers
- **Ensure inhaler technique taught and checked**
- Support the use of propellant free inhaler options where appropriate
- **Support safe disposal of inhalers**

**References:** 1. Scottish Government. NHS Scotland climate emergency and sustainable strategy: 2022 – 2026. August 2022. 2. Janson, C, Maslova E, Wilkinson A, et al The carbon footprint of respiratory treatments in Europe and Canada: an observational study from the CARBON programme. European Respiratory Journal 2022. 60:2102760 3. Wilkinson AJK, Maslova E, Janson C, et al Greenhouse gas emissions associated with suboptimal asthma care in the UK: the SABINA healthCARE-Based environmental cost of treatment (CARBON) study Thorax Published Online First: 27 February 2024. doi: 10.1136/thorax-2023-220259