were switched to HFA134 MDIs, this represents an approximate saving of 2.4 ktCO$_2$e.

**Conclusions** Carbon emissions from the highest carbon inhalers appears to have reduced. Further efforts are needed to increase use of low-carbon controller therapy, which could reduce the footprint of controller therapies, whilst also importantly improving disease control and reducing the need for SABA inhalers and related emissions.

**REFERENCE**


Please refer to page A289 for declarations of interest related to this abstract.

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**Abstract P49**

**Figure 1** Absolute number of Ventolin MDI, Salamol and Airomir MDI (including breath-actuated MDI) generic SABA MDI (including breath-actuated MDI) and SABA DPI inhalers prescribed each month from April 2018 to March 2023.

**Abstract P50**

**Figure 1** Absolute number of Ventolin MDI, Salamol and Airomir MDI (including breath-actuated MDI) generic SABA MDI (including breath-actuated MDI) and SABA DPI inhalers prescribed each month from April 2018 to March 2023

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**Introduction** There is an increasing pressure to prefer propel-lant free inhaler devices over pressurized metered dose inhalers (pMDI) due to environmental considerations. In this work we present results from three life cycle assessments (LCAs) on dry powder inhaler Easyhaler product portfolio and assess the changes in Easyhalers’ environmental impact and carbon footprint (CF) over time.

**Methods** Three cradle-to-grave life cycle assessments were conducted in 2019, 2021 and 2023. The 2019 assessment covered four products while 2021 and 2023 assessments included all six products in the portfolio. LCA for the protective cover sometimes used with Easyhaler was conducted in 2023. In addition to CF, nine other environmental impact categories were assessed to ensure that no burden shifting occurs.

**Results** Figure 1 shows the average emissions from the four devices included in all LCAs. For individual products, the decrease in CF was 5.0–6.8% between each assessment. In the latest assessment the CF of average Easyhaler was 547 gCO$_2$e with a range of 452–617 gCO$_2$e. The LCA of the protective cover was assessed for the first time in 2023 and had a CF of 66 gCO$_2$e.
Conclusions The carbon footprint of Easyhaler show steady decrease between LCAs and is in line with the lower limit of previously reported CF for dry powder inhalers. Climate impact from the protective cover was one-tenth compared to climate impact from the inhaler itself.

P51 SWITCHING INHALER TREATMENT FROM PMDI TO DPI IN REAL-WORLD; REDUCTION OF CARBON FOOTPRINT

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Background EU regulation on F-gases encourages physicians to treat patients with DPIs rather than pMDIs for environmental reasons. However, many fear this may worsen treatment outcomes.

Methods and Aim We performed a post-hoc analysis on clinical outcomes data from a 12-week real-world, non-interventional single arm study of adult patients with asthma, COPD or asthma COPD overlap (ACO) who switched treatment from pMDI to DPI, budesonide-formoterol Easyhaler (B-F EH DPI), according to the treating physician and local guidelines. Clinical end points included ACT, CAT and lung function tests. Range of kg CO2e for one dose as reported in Montreal Protocol was used and as a conservative estimate, for lower range for B-F EH DPI, the average estimate reported (0.004 kg CO2e).

Results Among all 253 patients, clinical improvements were observed after switch. Range of estimated kg CO2e emissions per year was (90–97%) lower for B-F EH DPI (2.9 – 14.6 kg CO2e emissions/year) than for pMDI (91–137 kg CO2e emissions/year) assuming twice daily dosing for pMDI and B-F EH DPI.

Conclusion The study shows that switching from a pMDI to B-F EH DPI may enhance disease control among patients with asthma, COPD and ACO and at the same time have a positive environmental impact by reducing the carbon footprint of inhaler treatment.

REFERENCES
2. MCTOC 2018 Assessment Report p 32.

P52 EFFECTIVENESS OF A NATIONAL RESPIRATORY TOOLKIT TO DRIVE THE GREEN AGENDA IN INHALER PRESCRIBING IN WALES

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Introduction and Objectives Hydrofluorocarbon (HFC) propellants from metered dose inhalers (pMDI) contribute an estimated 3.5% of the total carbon footprint of the NHS. The UK lags far behind the rest of Europe in terms of the proportion of inhalers that are low global warming potential (GWP), with current rates of 30% for this group, compared to 50% as the European average and 76% in Sweden. England has set a target to reduce the carbon footprint from inhalers by 50% by 2030, but in Wales a more stringent target of 69% reduction (A reduction of pMDI inhalers from 70% to less than 20% by 2025). In carbon footprint terms this would equate to a reduction from 65,000 tonnes of CO2 equivalent to less than 20,000 tonnes. Wales has created a national respiratory toolkit, comprising national guidelines for asthma and COPD, national educational modules and patient apps, all promoting low GWP inhalers.

Methods The national respiratory toolkit was created by senior clinicians working in partnership with the Institute for Clinical Science and Technology (ICST). Guidelines for asthma and COPD highlighted the impact of inhalers using green and red footprints for high and low GWP inhalers. Patient apps featured embedded videos on the green agenda, and data...