

# Sustainable Pharmaceuticals Short Life Working Group

28<sup>th</sup> November 2019

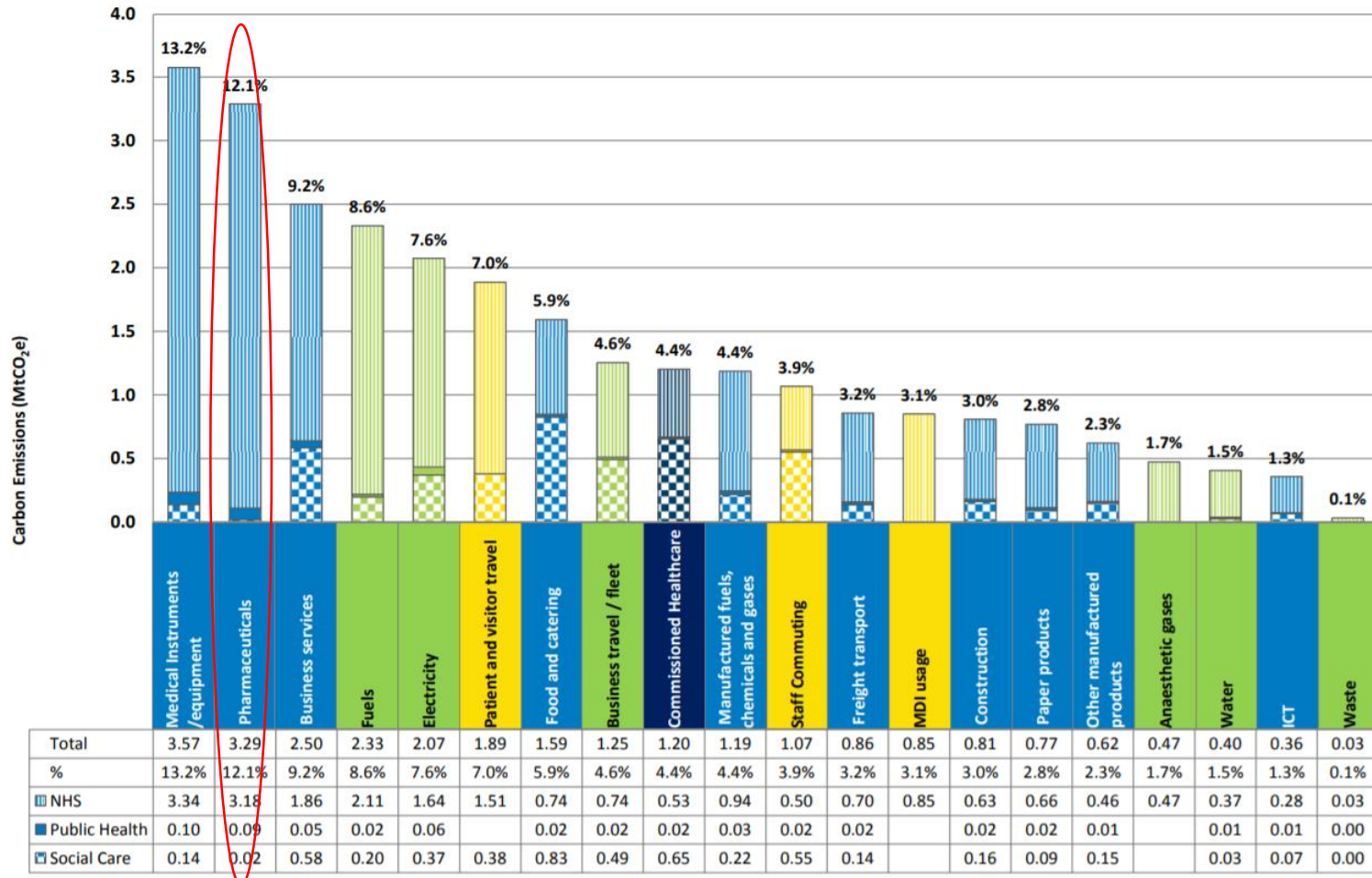
NHS England and NHS Improvement



- 17<sup>th</sup> October 2019 Roundtable Discussion
- 23<sup>rd</sup> October 2019 Short Life Working Group established
- NHS Long Term Plan commitments
  - Inhaled Anaesthetics
  - Inhalers
- Next Steps to be decided

# HSC Carbon Footprint 2017<sup>1</sup>

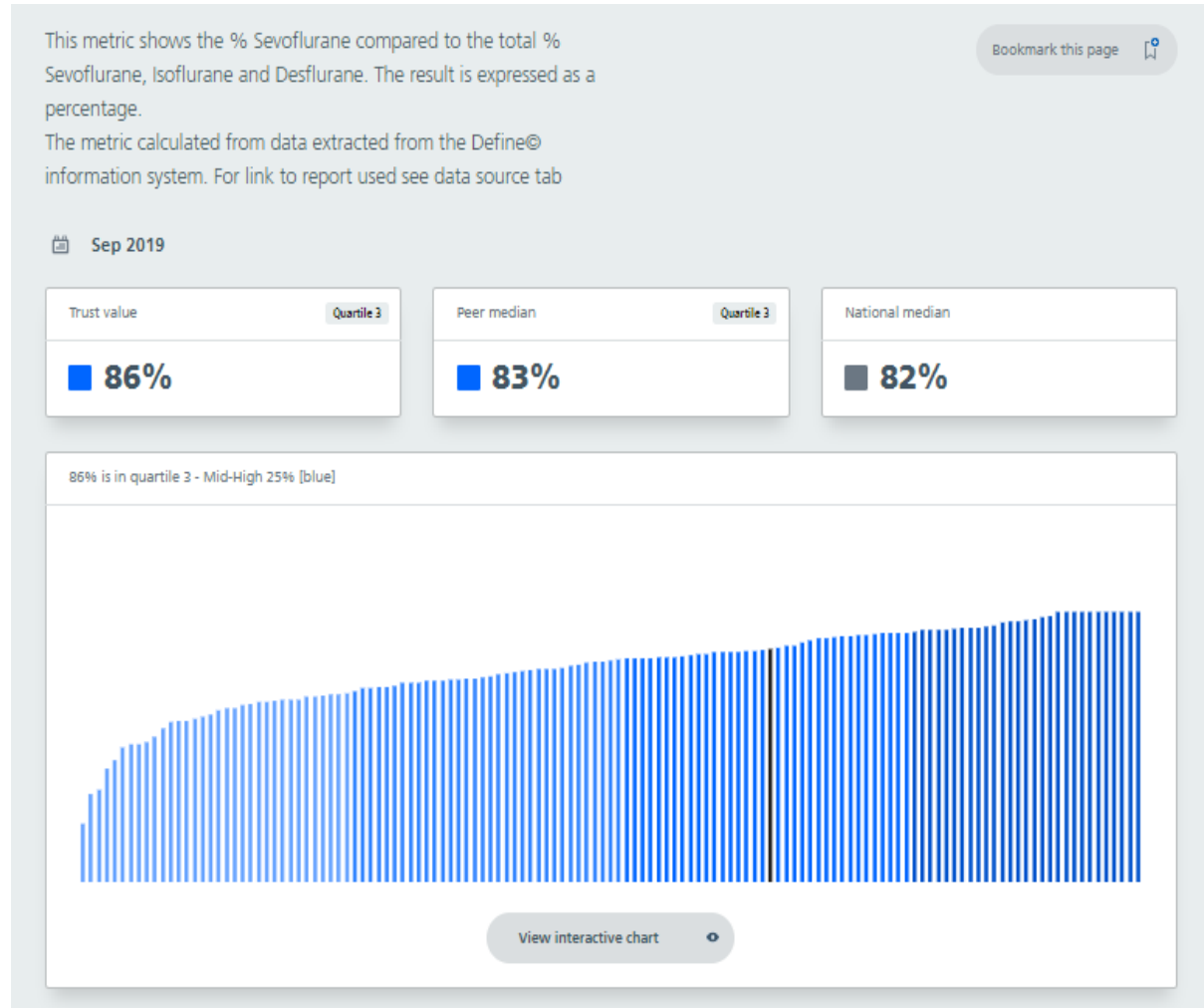
Figure 4. Health and Social care detailed breakdown 2017

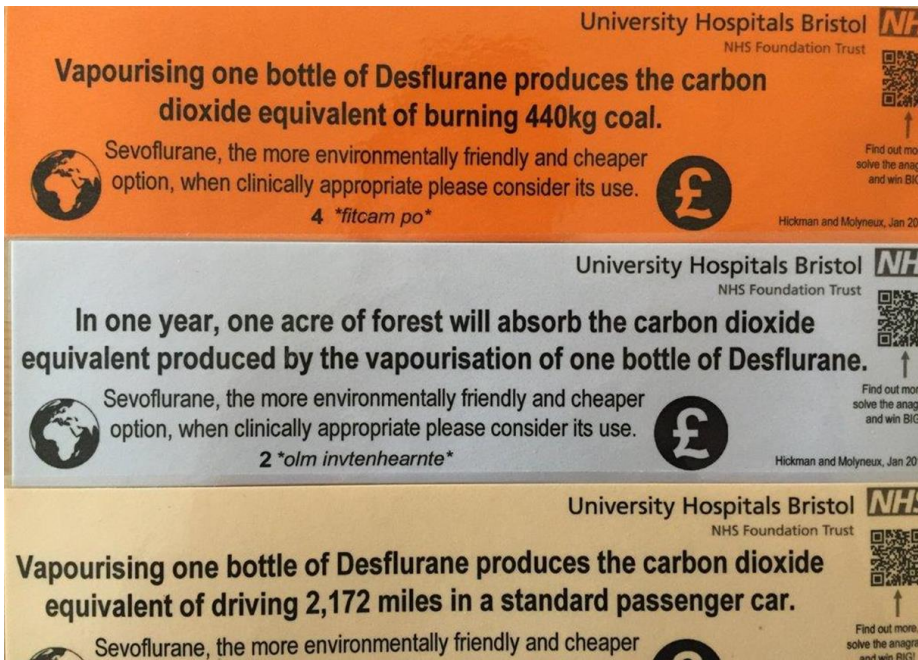


<sup>1</sup> SDU, PHE & NHSE Reducing the use of natural resources in health and social care 2018 report

# Inhaled Anesthetics Metric

- Model Hospital Metric for Trusts to benchmark Sevoflurane use
- Secondary care data (Define RxInfo®) fed into the metric from Hospital Pharmacy and Medicines Optimisation Team





S.E.A.S.N  
@SEASN12

Follow

We are delighted to formally launch Severn Environmental Anaesthesia and Sustainability Network, we are in a climate emergency and through collaborative working in healthcare we will have a positive impact. Please join us or get in touch! #sustainable #anaesthesia #healthcare



3:47 am - 21 Nov 2019



Clare Topping PhD @environmentalist · Nov 19

Really pleased that nearly all @NGHnhstrust anaesthetists that answered our survey were aware of the Enviro impact of inhaled agents and most support a target to reduce ghg emissions from anaesthetic gases



Life Didn't Begin At 40 @did\_40 · Nov 21  
Replying to @doodiebeth

The **environment** peeps already started on asthmatics, apparently they should all be on powder inhaler. You should see the amount of plastic in the powder inhaler. I'd say more than double of the spray inhaler.

We can't help needing meds to live.

sky NEWS @SkyNews · Oct 30

The most common type of **inhaler** is as bad for the **environment** as eating meat, a new study suggests

**Asthma inhalers as bad for the environment as eating meat**

Switching 10% of inhalers to ones that do not use liquefied compressed gas could reduce CO2 emissions by 58,000 tonnes a year.

news.sky.com

# Inhalers: transitioning from shared priorities to a shared approach

Brendon Jiang @NZPharmer

Steve Moore @somersectcg illustrating the environmental impact of metered dose inhalers. We switched from CFCs which were harmful for the ozone layer but the replacement propellant (HFAs) are far more potent greenhouse gases than CO2.

8:16 am · 21 Nov 2019

NICE National Institute for Health and Care Excellence

**Patient decision aid**

**Inhalers for asthma**

Information to help people with asthma and their healthcare professionals discuss their options for inhaler devices. It is suitable for use by people aged 17 years and over.

**About this patient decision aid**

Asthma affects the airways and can make it difficult to breathe. It may cause symptoms such as chest tightness, wheeziness or coughing. Inhalers are devices that deliver a medicine into the lungs to help with the symptoms of asthma. There are different types of medicines available. Your healthcare professional will discuss with you which medicine is recommended for you. Once you know which medicine you are using, this patient decision aid will help you and your healthcare professional decide which inhaler you might like to try.

Different types of inhalers are available. Most asthma medicines are available in more than 1 type of inhaler. The National Institute for Health and Care Excellence (NICE) says everyone should be able to choose the inhaler they find easiest to use. NICE also says that everyone should have the way they use their inhaler checked regularly. If needed, people should be given advice on how to improve their technique. If you have asthma, you may find it useful to read details about all options. This can help you and your healthcare professional decide which inhaler will suit you best.

BMJ Open. 2019 Oct 29;9(10):e028763. doi: 10.1136/bmjopen-2019-028763

**Costs of switching to low global warming potential inhalers. An economic and carbon footprint analysis of NHS prescription data in England.**

Wilkinson A.K<sup>1</sup>, Braggins S<sup>2</sup>, Steinbach J<sup>3</sup>, Smith J<sup>2</sup>

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NHS Insight  
Business Services Authority

Respiratory Dashboard

## Respiratory Dashboard Carbon Impact

Please select dashboard page:-

- Overview
- Respiratory Comparators
- Supplementary Information
- Practice Breakdown

# ePACT 2 Dashboard

**Metric Definition**

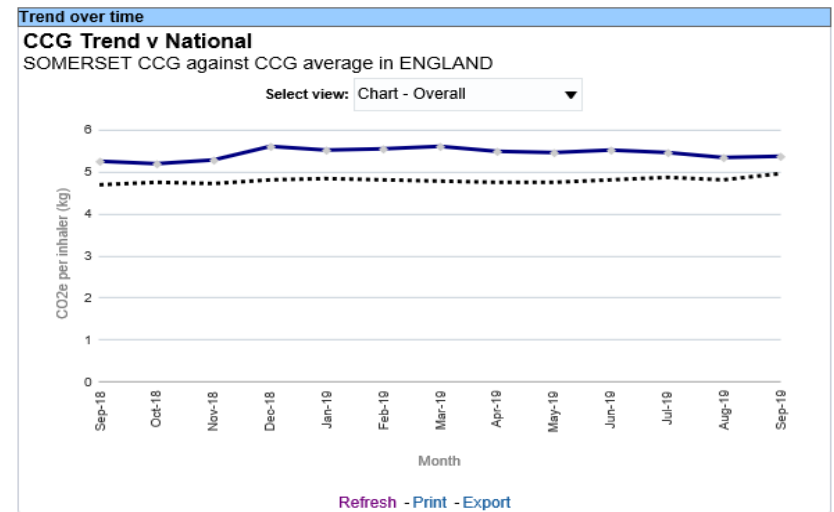
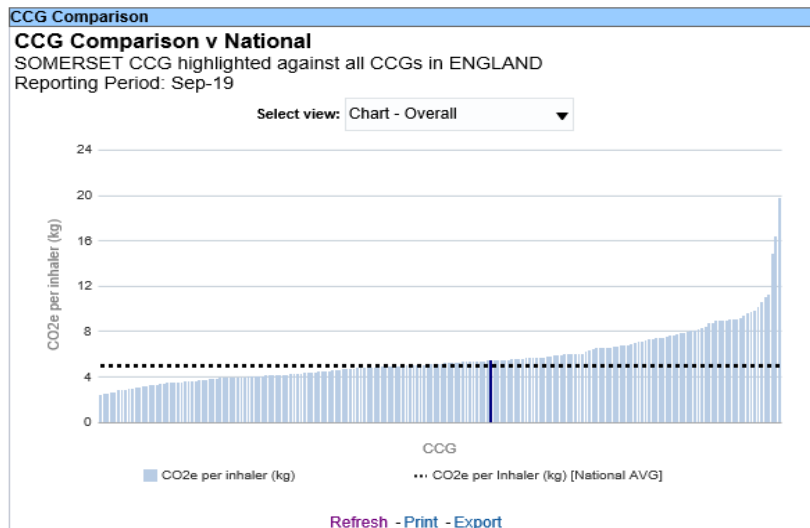
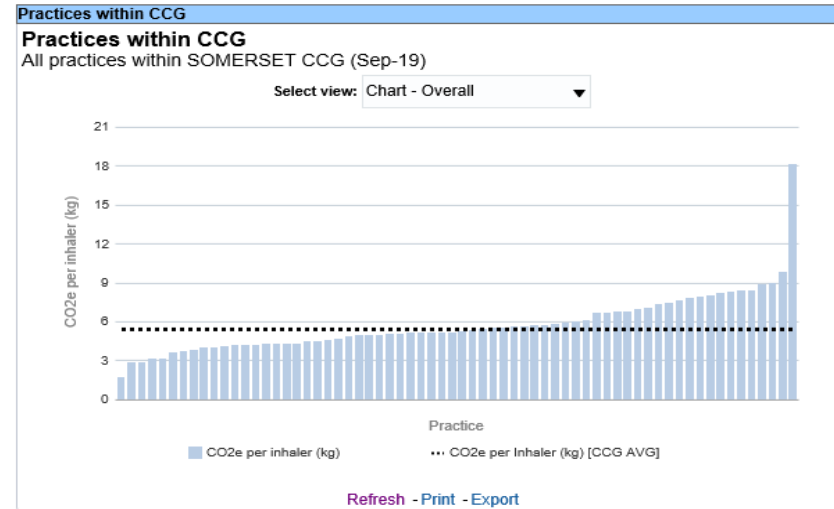
Metric Overview

**Overview**  
Identifying the average carbon intensity per inhaler from prescribing in primary care by CCG area.

**Numerator**  
The carbon footprint of the propellant in inhalers (Meter Dose Inhalers (MDI)) prescribed within primary care over the year. Uses an assumed average grams of propellant per specific type of MDI (based on published academic research), which is multiplied by the Global Warming Potential of the specific propellant used. The data only includes primary care prescriptions summed to CCG level.

**Denominator**  
Total number of inhaler devices (MDI, Dry Powder Inhalers (DPI) and Soft Mist inhalers (SMI)) prescribed by GPs within the CCG boundary over the same period. The data only includes primary care prescriptions summed to CCG level.

**Value**  
Inhalers carbon emissions per device (KgCO<sub>2</sub>e)  
Refresh - Print - Export



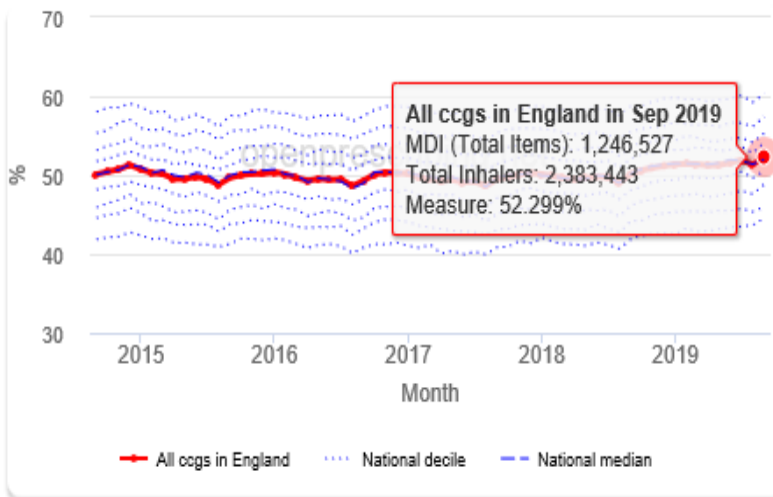
# Open Prescribing

## Environmental Impact of Inhalers

Environmental Impact of Inhalers

[Link to chart](#)

MDIs prescribed as a proportion of all inhalers in BNF Chapter 3, excluding salbutamol



[Download data](#) ↓

**Why it matters:** The NHS has committed to reducing its carbon footprint by 51% by 2025 to meet the target in the Climate Change Act, including a shift to dry powdered inhalers (DPI) to deliver a reduction of 4%. DPIs are less harmful to the environment than traditional metered dose inhalers (MDIs) and the NHS long term plan supports the use of DPI where it is clinically appropriate. NICE has produced an inhaler decision aid to facilitate discussion about inhaler options.

You can read more about this measure [on our blog](#), including the rationale for excluding salbutamol.

Explore:

- [Compare all CCGs in England on this measure](#)

Tagged as: [Respiratory](#)



## Clinical Pharmacy and Environmentally Sustainable Medicines Use

3.86. **We will do more to support those with respiratory disease to receive and use the right medication.** 90% of NHS spend on asthma goes on medicines<sup>136</sup>, but incorrect use of medication can also contribute to poorer health outcomes and increased risk of exacerbations, or even admission. Pharmacists in primary care networks will undertake a range of medicine reviews, including educating patients on the correct use of inhalers and contributing to multidisciplinary working. As part of this work, they can also support patients to reduce the use of short acting bronchodilator inhalers and switch to dry powder inhalers where clinically appropriate, which use significantly less fluorinated gases than traditional metered dose inhalers<sup>137</sup>. Pharmacists can also support uptake of new smart inhalers, as clinically indicated.

# Next Steps to be decided

- Short Life Working Group (SLWG) on sustainable medicines use will continue to collaborate with existing workstreams
- SLWG will continue to report to the NHSE/I Sustainability Board
- Scoping opportunities across the pharmaceutical supply chain, prescribing and dispensing
  - Opportunities
  - Challenges
- Engaging with key stakeholders in clinical practice, professional bodies, pharmaceutical industry and medicines regulation