

Interim Position Statement Carbon Footprint of Inhalers

Position Statement

The NHS aims to be the worlds' first net carbon zero health service and has set two targets:

- For the emissions the NHS controls directly (the NHS Carbon Footprint), we will reach net zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032;
- For the emissions the NHS can influence (our NHS Carbon Footprint Plus), we will reach net zero by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.

Metered dose inhalers are a major contributing factor to the carbon footprint of the NHS. Inhalers are used in a variety of respiratory conditions, ranging from asthma to chronic obstructive pulmonary disease (COPD). The majority of the emissions come from the propellant in metered-dose inhalers (MDIs) used to deliver the medicine, rather than the medicine itself. **10.5 million kg CO₂ per year is generated in Kent and Medway from Salbutamol inhaler prescribing alone.** Ventolin, many community pharmacies preferred brand, produces 28kg CO₂ per inhaler, whereas other MDIs, such as Salamol and Airomir only produce 10 kg CO₂. **Dry powder inhalers (DPI) have a much lower carbon footprint and Global Warming Potential (GWP) and Salbutamol Easyhaler only produces 0.62 kg Co₂ per inhaler.**

While Kent and Medway CCG work with the wider system to develop a full sustainability plan we would like to recommend the following interim advice:

- **A blanket switch from MDI to DPI is not advisable.** Many COPD patients will not have the respiratory effort to trigger a DPI and it is imperative that any patient switched has comprehensive inhaler technique training to maintain concordance and efficacy.
- Consider a review of all patients who are **prescribed > 2 x salbutamol inhalers per year**, which can indicate poor disease control, or concordance with other preventative therapies.
- Consider **switching any Ventolin** branded salbutamol prescribing to a brand with a **lower GWP** (Salamol or Airomir) or to a Salbutamol DPI (Salbutamol Easyhaler is the most cost effective), with full patient counselling and inhaler technique assessment.
- Consider **switching any patient with COPD**, currently using multiple inhalers (LABA+LAMA+ICS) **to a triple therapy inhaler.** Preferably this should be a DPI if respiratory effort allows, with full patient counselling and inhaler technique assessment.