

# The Sentinel Project – Collaborating to Improve Asthma Care

ACCELERATED  
ACCESS  
COLLABORATIVE

## SUMMARY

Asthma clinicians and patient across Hull have worked collaboratively with Pharmaceutical Industry partners to develop and implement the Sentinel Project. The Sentinel project aims to improve asthma outcomes for patients alongside reducing the environmental impact associated with metered dose inhalers.

The project is in the early stages of implementation. Initial data shows promising results with one Primary Care Network (PCN) reducing their previously high short acting beta-2 agonist (SABA) use to below the national average. This has also resulted in contributing to an offset of over 195,000 kg eCO<sub>2</sub> emissions.

## AIMS AND OBJECTIVES

- > To improve asthma outcomes for adult asthma patients in primary care by:
  - Reducing the number of SABA inhalers issued for asthmatics
  - Reducing the proportion of SABA inhalers prescribed
  - Increase adoption of maintenance and reliever therapy (MART) guidelines recommending, where appropriate, dry powder inhalers for patients
  - Reduce asthma related emergency attendances and hospitalisation
- > To reduce the environmental impact of adult asthma reducing the carbon footprint associated with metered dose inhalers by adoption of MART guidelines

## Reasons for implementing your initiative

In the UK there are over 4 million adults with asthma and health outcomes have stagnated for decades, they are among the worst in Europe. Nationally, over 15 million SABA inhalers are prescribed a year, of which 38% are prescribed to patients who are over-reliant (three or more a year). SABA over-reliance is a contributor to poorer health outcomes and is known to cause twice as many asthma attacks compared to those who are not over-reliant, regardless of their asthma severity. Salbutamol inhalers account for 70% of the total carbon footprint of all inhalers in the UK. Hull and East Riding is a region with approximately 40,000 asthma patients and ranked in the bottom 10% for asthma outcomes in the UK.

## HOW YOU IMPLEMENTED THE INITIATIVE

Patients and NHS based Asthma Clinicians across Hull collaborated with AstraZeneca and using experience-based co-design methodology, promoted guideline implementation. This was combined with rigorous evaluation and real-world evidence generation. The five-point-plan developed focused on:

- > HCP and Patient Education
- > Pharmacy Alignment
- > Patient review
- > Evidence
- > System Implementation

## KEY FINDINGS

The SENTINEL team are in the early phases of rolling out the programme and the initial data is positive. In less than four months the first PCN has seen a reduction SABA inhaler use from the highest user nationally (97th percentile) to below the national average (41st percentile). Data from two PCNs has shown a reduction in SABA prescribing by nearly 7,000 units, equating to an offset of over 195,000 kg eCO<sub>2</sub> emissions. Wider roll out has the potential spread improvement in respiratory care across the UK and support delivery of aims within the NHS Long Term Plan and Greener NHS Strategy.

## KEY LEARNING POINTS

By engaging primary care clinicians and supporting education in the review and optimisation of asthma patients, and by reducing SABA inhaler use, it is possible to improve management of a patient's condition and drastically reduce the CO<sub>2</sub> emissions generated.

Supporting information: <https://hullasthma.co.uk/>



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