

Green Inhaler – Phase 2

QI Project

Background

Pharmaceuticals are the second highest contributing factor towards the NHS carbon footprint, and the largest contributor in general practice. There are a range of options that pharmaceutical companies should develop to help reduce the impact of pharmaceuticals on the environment.¹

Inhalers account for 3-4% of the whole NHS carbon footprint. Metered dose inhalers (MDIs) use hydrofluoroalkanes (HFA) propellants which are potent greenhouse gases, 1000 – 3000 times more potent than carbon dioxide. In the UK approximately 70% of inhalers used are MDIs which is much higher than many other European countries.²

In 2021-22, the Green Inhaler mini project was introduced as part of the QI basket in QAIF to encourage practices to reduce the carbon footprint of inhaler prescribing.

The [NHS Wales Decarbonisation Strategic Delivery Plan](#) has set a target shift to 80% of inhalers being low Global Warming Potential (GWP) alternatives by 2025.

Public Health Wales launched their Greener Primary Framework and Award Scheme in June 2022. The framework supports the four independent primary care contractor services in Wales (pharmacy, dental, GP and optometry) to improve the environmental sustainability of their day-to-day practice to achieve a carbon-neutral public sector by 2030. Climate change is one of the biggest challenges to health in medium and long-term and the consequences are likely to be wide and diverse.

The Greener Primary Care Framework and Award Programme embodies the principle that a large number of people making small changes will have a bigger impact overall than a small number of people making big changes.

The most recent report published by AWTTC on the overall prescribing data ([June 2022](#)) shows a 1.88% reduction in prescribing of inhalers with a high GWP April-June 2022 compared to Jan-March 2022.

Chronic condition management is a key part of essential services. As part of recently agreed contract changes the clinical indicators for chronic disease of last

¹ <https://www.bma.org.uk/media/2570/bma-sustainable-and-environmentally-friendly-general-practice-report-june-2020.pdf>

² <https://greeninhaler.org/more-environmentally-friendly-inhalers/>

years QAIF are now part core activity within essential services and the associated funding has been transferred into Global Sum.

Aims of the project

To help achieve the targets of the [NHS Wales Decarbonisation Strategic Delivery Plan](#) by:

- 1) A reduction in the use of inhalers with high Global Warming Potential (GWP) and instead greater use of inhalers with a lower GWP. Some inhalers have a greater carbon footprint than others. In general, MDIs have a higher carbon footprint than DPIs.
- 2) A reduction in the overreliance of Short Acting Beta Agonist (SABA) reliever inhalers where possible by improving prevention and reducing ineffective use/prescribing of SABAs.^{3 4 5}

Requirements of the QI project

Practice Level

Practices should plan to achieve the aims of the project through small cycles of tested change in line with the principles of QI. It is recommended that these plans and associated improvement activities should involve the wider practice team working to achieve the best patient outcomes, taking account of national prescribing guidance. Practices should use the [AWTTC Decarbonisation dashboard](#) (or PCIP tile) to measure progress and achievement against expected outcomes.

Measurement of the implementation of the project

Practices should aim to set Specific, Measurable, Achievable, Relevant, and Time-bound goals (SMART) goals. Outcomes will be measured using data from the [AWTTC Decarbonisation Dashboard](#) (or PCIP tile).

The outcomes expected from practices are:

- 1) Reduce use of inhalers with high Global Warming Potential (GWP) and instead use inhalers with a lower GWP. (NB Changing respiratory devices will need patient education and possible clinical review to check technique and efficacy of administration).

³ British Thoracic Society and Scottish Intercollegiate Guidelines Network. British guideline on the management of asthma. 2019. [Asthma | British Thoracic Society | Better lung health for all \(brit-thoracic.org.uk\)](#)

⁴ The National Review into Asthma Deaths. Royal College Physicians. May 2014. <https://www.rcplondon.ac.uk/projects/outputs/why-asthma-still-kills>

⁵ The All Wales Adult Asthma Diagnosis and Management Guidelines. 2021. <https://awttc.nhs.wales/files/guidelines-and-pils/all-wales-adult-asthma-management-and-prescribing-guideline-pdf/>

- 2) Reduce the overreliance on SABA inhalers by undertaking a respiratory review of patients as clinically appropriate. The Global Initiative for Asthma pocket guide 2021 [GINA Pocket Guide 2021 \(ginasthma.org\)](https://ginasthma.org) describes the dispensing of 3 or more SABA inhalers per year as an example of overuse.
- 3) Practices to timetable internal discussion on QI project with a view to informing collaborative discussion and complete a QI report for submission to LHB.

Collaborative level

Collaboratives will timetable a discussion on green inhaler prescribing progress against the aims at one of their four collaborative meetings.

Health Board Level

Verification –The LHB will collate and review practice QI template submissions. [AWTTC Decarbonisation Dashboard](#) (or PCIP tile) will be used to gather prescribing data and evidence a change in practice to reduce the carbon footprint associated with inhaler prescribing across the LHB footprint and report progress to WG.

Data to support practices

The [AWTTC Decarbonisation Dashboard](#) presents data that can be used to support the QI project. The presentation of data will be enhanced through the life of this project to make it simpler to access and tailored to the specific need of practices engaged in this QI project, either through development of a PCIP tile or a specific QI project page on the AWTTC Decarbonisation Dashboard.