Ecclesbourne Practice & Roding Valley Medical Centre

Green Impact Inhaler Project

Reducing the Carbon Footprint at Ecclesbourne Practice & Roding Valley Medical Centre through Appropriate Dry Powder Inhaler Prescribing in Asthma

At Ecclesbourne Practice & Roding Valley Medical Centre, we are dedicated to supporting the NHS in achieving its goal of becoming completely carbon neutral by 2040. As part of our commitment to environmental sustainability, we are currently reassessing our practices to identify opportunities for reducing our carbon footprint.

One significant change we have identified is transitioning patients from Metered Dose Inhalers (MDIs) to Dry Powder Inhalers (DPIs) where appropriate. This shift aligns with our mission to promote an environmentally friendly and sustainable future. Our healthcare team is passionate about making a tangible impact, and we believe that by working together with our patients, we can enact meaningful change.

Join us in this journey towards a greener future by considering the switch to DPIs. Your participation plays a crucial role in our collective efforts to reduce carbon emissions and protect the environment for generations to come.

What are metered dose inhalers and dry powder inhalers?

Metered Dose Inhalers (MDIs) utilise pressurised propellants within the aerosol chamber to deliver medication. Unfortunately, these propellants are potent greenhouse gases that contribute to ozone layer depletion.In contrast; Dry Powder Inhalers (DPIs) represent a modern alternative. They operate by releasing medication when the patient inhales, eliminating the need for pressurised propellants entirely.

By transitioning from MDIs to DPIs where suitable, we can significantly reduce our carbon footprint and contribute to a healthier environment. Join us in making this switch for a greener future.

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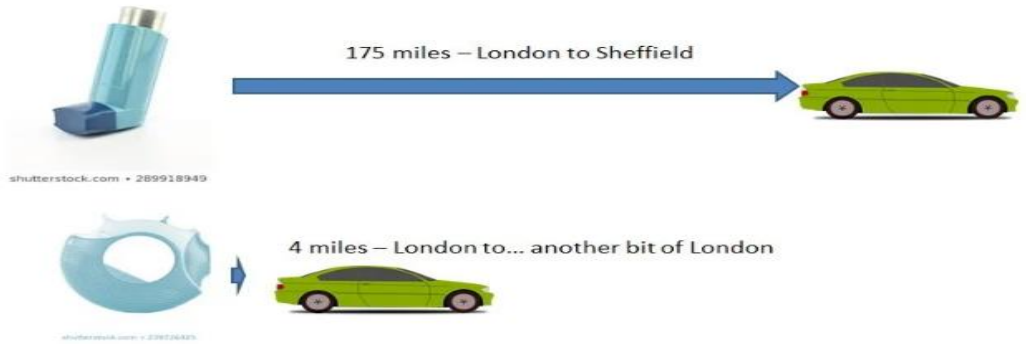
Why are these inhaler changes important?

Inhalers represent approximately 3.5% of the NHS' total carbon footprint. Metered Dose Inhalers (MDIs) utilise greenhouse gases as propellants, with 100 doses emitting carbon equivalent to a 180-mile car drive. Conversely, Dry Powder Inhalers (DPIs) emit 18 times less carbon than MDIs. See below



Equivalent tailpipe greenhouse gas emissions from a Ventolin Evohaler (containing 100 2-puff doses) and a Ventolin Accuhaler (60 1-puff doses). Assumes car achieves 100gCO2/km.

Addressing climate change is crucial for both environmental and public health reasons. By reducing our carbon emissions, we not only mitigate environmental damage but also promote overall well-being. Join us in adopting DPIs to minimise our impact on the planet and foster healthier communities

How will we be implementing these inhaler conversions?

We have identified two groups of patients in which we could make a significant impact.

These are:

1. Asthma patients over the age of 18 currently on the Fostair (MDI) inhaler can be converted to the Fostair NEXThaler (DPI).
2. Asthma patients over the age of 18 currently on any Beclomethasone inhaler (MDI), for example clenil, can be changed to the Beclomethasone Easyhaler (DPI).

We will be sending out text messages to these patients in the near future to gauge their interest in converting to the environmentally friendly DPI inhalers.

We welcome patients interested in changing from an MDI inhaler to a DPI inhaler, to email nelondonicb.ecclesbourneprescriptions@nhs.net with subject 'FAO Clinical Pharmacist-Inhaler review' to register their interest. Alternatively, you can use your NHS app - https://www.nhsapp.service.nhs.uk/login or our unique practice ID that comes direct into your patient record- https://florey.accurx.com/p/F86018

Should this intervention prove successful, we will then look to other patient groups on other inhalers to make similar conversions in the future.

How will changing to a DPI affect me?

The medication and dose that you receive will remain same, so it should not have any impact on your health. The only aspect that will change is device that delivers the medication.

Some people find the DPIs are easier to use, as they do not require the hand-breath coordination that is required by MDIs[6]. Although some people may find that, they prefer their original MDI.

Of course, should you decide that you prefer your original MDI after trying the DPI, you can always be switched straight back.

Inhaler technique

When changing over inhalers it is important that patients know the correct technique for their new inhaler.

Please visit the links below, which show the correct technique for both inhalers:

Fostair NEXThaler: www.asthma.org.uk/advice/inhaler-videos/nexthaler

Beclomethasone Easyhaler: www.asthma.org.uk/advice/inhaler-videos/easyhaler

1. NHS England. Delivering a 'Net Zero' National Health Service. www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf (EXTERNAL PDF LINK).
2. NHS Sustainable Development Unit. Sustainable Development in the Health and Care System: Health Check;2016. www.sduhealth.org.uk/documents/publications/2016/20160310%20SDUupdate%20FINAL%20CR%20update.pdf (EXTERNAL PDF LINK).
3. NICE National Institute for Healthcare and Excellence: asthma patient decision aid. www.nice.org.uk/guidance/ng80/resources/inhalers-for-asthma-patient-decision-aid-pdf-6727144573 (EXTERNAL PDF LINK)
4. British Thoracic Society (BTS) (2019) Position Statement: Environment and Lung Health. www.brit-thoracic.org.uk/document-library/governance-and-policy-documents/position-statements/environment-and-lung-health-position-statement-2019
5. Watts N, Amann M, Arnell A, et al. (2018). The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come. Lancet, 392(10163):2479–2514
6. Desai, H. & Dala, B. (2012) Management Options in Chronic Obstructive Pulmonary Disease. Clinical Medicine Insights: Therapeutics. 4(4):273-285.