Inhalers and a Greener NHS

Laura Self, Practice Clinical Pharmacist

In 2020, the National Health Service (NHS) committed to becoming **net carbon neutral** by 2050 for emissions under its direct control. This is now embedded into legislation through the Health and Care Act 2022. One of the immediate areas we have been asked to focus on is reducing the carbon footprint of asthma inhaler devices.

Reducing the carbon impact of Metered Dose Inhalers (MDI) in line with long term plan commitments, including by:

- **DEVICE IMPACT** reducing the overall carbon impact of all inhalers dispensed. A small number of MDI make up over 30% of all emissions. Alternate lower carbon dioxide emission (CO2e) MDI devices are available for equivalent cost (See below)
- DEVICE TYPE decreasing the percentage of inhaler prescriptions that are for MDIs where clinically appropriate. Dry powder inhalers may be an option for older children and young

people, but this would have to be reviewed on an individual patient basis.

 SAFE DISPOSAL - encouraging patients to return spent devices for green disposal in pharmacy medicines waste. <u>Returning-inhalers-poster-greener-practice-toolkit-v1.1.pdf</u> (pcdn.co)

Did you know?

- Salamol (@10kg CO2e per device and £1.46)

delivers the same drug as

- Ventolin (@28kg CO2e per device and £1.50)



 ASTHMA REVIEW – patient education about appropriate inhaler usage ad technique together with regular, robust asthma review would maximise asthma control, leading to less salbutamol usage and directly lessen the carbon impact of inhaler usage.







Implementing the National Bundle of Care Children and Young People with Asthma, the QE Gateshead Experience

Dr Neelmanee Ramphul, Consultant Paediatrician

The National Bundle of Care for Children and Young People (CYP) with asthma was published in September 2021 and urges all professionals to adopt a whole system approach and to make every contact count when looking after CYP suffering from asthma. At the Queen Elizabeth Hospital in Gateshead, we have worked solidly as a team to:

- Improve diagnostic accuracy through our newly acquired spirometry and exhaled nitric oxide (FeNO) kit. Our lead consultant approached management highlighting the standards that the bundle advocates and the long -term benefits that an accurate asthma diagnosis can achieve. Coding with the correct "asthma" diagnosis makes it easier for primary care to identify patients, follow them up, continue preventative treatment such as inhaled steroids and offer annual reviews. Better asthma care in the community should eventually translate into less unscheduled attendances and reduce the pressure that an already fragile and overwhelmed emergency service faces every winter in secondary care because of the sheer number of acute asthma attacks that require emergency treatment. Management invited bids for a pot of funding that existed within the Trust and our application was successful as we stressed that the availability of child friendly diagnostic services would help achieve better care through accurate diagnosis and also align our service with other units in the region.
- Encourage leadership and improve service delivery by establishing a joint clinic between a consultant and a nurse practitioner who is already in post but was keen to broaden her scope of work, both passionate about improving the care of CYP living with asthma.
- Deliver regular teaching updates and signpost to online resources such as Beat Asthma and encourage staff to enrol on eLFH training modules (https://portal.elfh.org.uk/Component/Details/777204 for Tier 3)
- Tackle smoking cessation as a matter of priority by developing links and initiating referrals of young people and their family members to our on-site smoking cessation service that had already been established by our adult services and pharmacy colleagues but was under- utilised in our paediatric department. Our lead consultant contacted the adult Trust smoking cessation team who was very keen to establish links with paediatrics and to capture any young person and their family members as the earlier we start the battle against smoking, the more chance we stand in being successful...
- Audit key targets in asthma management such as the early administration of oral steroids when treating acute asthma attacks, follow up arrangements and discharge information provided to CYP and their families, with an aim to improve performance in all these areas.





