NHS South West London

Environmental Impact of Inhalers – Next Steps for NHS South West London

This document aims to support GP practices in SWL to help reduce their inhaler carbon footprint whilst also improving asthma outcomes. It will support practices to achieve the 2022/23 IIF respiratory indicators and PCN DES respiratory targets.

Many of these project ideas have been taken from www.greenerpractice.co.uk the UK Primary Care Sustainability Network. Practices are encouraged to visit the Asthma Toolkit pages for a wide range of education material and resources on this topic and for further ideas to implement.

The decision to change an inhaler device should be made in conjunction with the patient and ideally as part of their regular asthma and COPD reviews as this is most likely to be successful. Always select a device based on the patient's preference and ability to use it; ensure patients are trained and have shown satisfactory technique. The NICE Patient Decision Aid: Inhalers for Asthma can be used to support these discussions.

<table>
<tr><th colspan="2">TACKLE SHORT-ACTING BETA AGONIST OVER-USE IN ASTHMATICS
Over-reliance on short-acting beta agonist (SABA) inhalers is linked to poorer clinical outcomes and higher carbon emissions. See SWL Management of Asthma in Adults and Children Guideline for more details.</th></tr>
<tr><td>Suggested Actions:</td><td>1. Identify asthmatic patients issued more than 6 SABA inhalers in the last 12 months (exclude patients also coded for COPD).* Invite them for review using an AccuRx, SMS or letter template - examples available here. Follow up patients who do not respond to their invite.
2. Ensure staff know how to identify SABA over-reliance in asthma patients, routinely check frequency of SABA prescriptions and ICS adherence at the time of actioning prescription requests. Send patients an SMS/AccuRx message about over use – examples available here and invite for a review.
3. Identify all asthma patients prescribed 2 or more SABA inhalers on each prescription and reduce prescription quantities to a maximum of 1 inhaler per prescription.</td></tr>
<tr><td colspan="2">PCN DES Target RESP-01: Percentage of patients on the QOF Asthma Register who received three or more inhaled corticosteroid prescriptions over the previous 12 months. PCN DES Target RESP-02: Percentage of patients on the QOF Asthma Register who received six or more SABA inhaler prescriptions over the previous 12 months.</td></tr>
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<tr><th colspan="2">REDUCE VENTOLIN® AND INCREASE SALAMOL® PRESCRIBING
Ventolin Evohaler® has a carbon footprint 2.4 times higher than Salamol® metered dose inhaler (MDI). Patients prescribed generic salbutamol may be dispensed any brand from their pharmacy, therefore salbutamol MDIs should be prescribed as Salamol®.</th></tr>
<tr><td>Suggested Actions:</td><td>1. Identify patients prescribed Ventolin MDI or generic salbutamol MDI and change to Salamol®.*
2. Inform patients about the change to their inhaler prescription using an AccuRx, SMS or letter template - examples available here.
3. Send a follow up message to all patients 4-6 weeks after the change using an SMS/AccuRx message – examples available here.</td></tr>
<tr><td colspan="2">IIF Target ES-02: Mean carbon emissions per salbutamol inhaler prescribed on or after 1 October 2022</td></tr>
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<table>
<tr><th colspan="3">CONSIDER USING MAINTENANCE AND RELIEVER THERAPY (MART) IN ASTHMA
A MART regime is a form of combined inhaled corticosteroid (ICS) and long-acting beta agonist (LABA) treatment within a single inhaler, used for both daily maintenance therapy and the relief of symptoms as required. Using a single dry powder inhaler (DPI) in a MART regime can contribute to lowering the inhaler carbon footprint. It can also improve asthma control and reduce SABA use.</th></tr>
<tr><td>Suggested Actions:</td><td colspan="2">1. Consider MART in patients that remain uncontrolled on low dose ICS/LABA.
2. Patients over ordering/overusing SABA and not using ICS can benefit from using MART therapy.
3. Give patients on MART an action plan which tells them how many puffs to take each day, how many puffs to take if presenting with symptoms and when to seek medical advice.</td></tr>
<tr><td colspan="3">DPI inhalers licensed for MART regimes:</td></tr>
<tr><td>Fostair® NEXThaler
100/6</td><td>Symbicort® Turbohaler
100/6 & 200/6</td><td>DuoResp® Spiromax
160/4.5</td></tr>
<tr><td colspan="3">For patients suitable for MART who are unable to use a DPI – Fostair® MDI 100/6 is available</td></tr>
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INCREASE THE USE OF DRY POWDER INHALERS (DPIs)

In adults, there are no differences in clinical effectiveness between MDI plus spacer, DPIs or soft mist inhalers. DPIs should be considered first line for new patients and for unstable patients who require a change in treatment, provided they have shown that they are able to use the device effectively.

Suggested Actions:

1. Identify patients aged 18 years and over who are prescribed MDI inhalers which have an equivalent DPI formulation available.* Examples include Fostair MDI, Symbicort MDI and Clenil 200mcg MDI (see table below).
2. Prioritise patients that may be poorly controlled and invite patients for a review where environmentally friendly options can be discussed.
3. Send out SMS/AccuRx messages to patients (examples available here) explaining that lower carbon footprint options are available and invite them to make an appointment to discuss this.
4. Set an alert on patient records to remind everyone to discuss lower carbon options at their next consultation. Follow up all patients who have had their devices changed after 4-6 weeks.

MDI		DPI
Clenil® 200mcg MDI	→	Easyhaler® Beclometasone 200mcg
Fostair® 100/6 MDI	→	Fostair NEXThaler® 100/6
Fostair® 200/6 MDI	→	Fostair NEXThaler® 200/6
Symbicort® 100/3 MDI†	→	Symbicort 200/6 Turbohaler®†
Symbicort® 200/6 MDI†	→	Symbicort 400/12 Turbohaler®†

*†CAUTION: Care must be taken to select the correct strength of **Symbicort Turbohaler** to ensure the equivalent dose of budesonide and formoterol is maintained.*

IIF Target ES01: MDI prescriptions as a percentage of all non-salbutamol inhaler prescriptions issued to patients aged 12 or over

PROMOTE INHALER RECYCLING AND RETURNING

Inhalers cannot be recycled or disposed of with household waste. Encourage patients to return them to pharmacies. It is important for inhalers to be incinerated with medical waste as landfill disposal results in the harmful residual gases from canisters being released into the atmosphere.

Suggested Actions: Search for **all** patients prescribed an inhaler and send information to patients using SMS or AccuRx messages* - examples available here.

GENERAL POINTS TO CONSIDER

- The 'greenest' inhaler is the one the patient can and does use. See SWL Guidelines for asthma and COPD for suggested inhaler choices and treatment summaries.
- All inhalers (including SABAs) should be prescribed by brand to ensure patients receive the inhalers they have been trained to use.
- Treatments initiated in secondary/tertiary care should not be changed without discussion with the respiratory specialist.
- Where patients are currently prescribed a DPI preventer consider also prescribing a salbutamol DPI e.g. Salbutamol Easyhaler®.
- When selecting an inhaler device, where possible choose one with a dose counter to support patients to use all of the available doses and to reduce unintentional medicines waste. Where these are not available, educate patients on the number of doses in an inhaler and when repeats would be required.
- Avoid prescribing large volume hydrofluoroalkane (HFA) inhalers such as Flutiform® MDI, Symbicort® MDI and Ventolin® Evohaler as these have significantly larger carbon footprints. These inhalers should not be initiated in new patients unless there is no appropriate alternative available.

PAEDIATRIC PATIENTS

- DPIs require children to have appropriate inspiratory flow rate and are only recommended for use in children >12 years. An MDI with a spacer remains the first line choice for patients under the age of 12.
- If an older child (≥12 years) is not using their spacer, consider a DPI for both their reliever and preventer if they have appropriate inspiratory flow and are assessed and trained to use. Symbicort MART can also be considered.
- If a child requires additional SABAs for school or alternative homes they should be prescribed as one-off acute issues.

The recommendations made in this document do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.

**EMIS searches to support identifying patients for the above suggested actions are available through your CCG Pharmacist if required.*

Environmental Impact of Inhalers – Next Steps for South West London – v1 FINAL
Lead author: SWL Respiratory Network
Approved by SWL IMOC: July 2022
Date final document written: July 2022
Review date: July 2024 (or sooner if national guidance changes)