



NHS

Do your patients have an asthma action plan?

Are you aware of the four asks for your patients?

healthy london.org/ask-about-asthma

#AskAboutAsthma
October 3 - 9 2022

#AskAboutAsthma 2022: How pharmacy can improve equitable access to asthma care

Babies, Children and Young People's Transformation – London

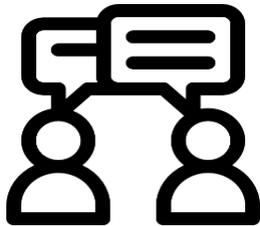
Chair: Sukeshi Makhecha, Lead and specialist paediatric respiratory pharmacist, Royal Brompton and Evelina Hospitals



Joining instructions and Teams etiquette



You'll automatically be muted with camera off during the webinar



Use the group chat feature to ask questions and please like any questions that you would like answered.



This session is being recorded. A link will be available on the HLP website with any slides

#AskAboutAsthma 2022 – pharmacy webinar

5th September 2022, 19:30 – 20:30

How pharmacy can improve equitable access to asthma care

Topic	Speaker
Chair: Sukeshi Makhecha Lead and Specialist paediatric respiratory pharmacist, Royal Brompton and Evelina Hospitals	
To Spacer and Beyond	Stephen Tomlin <ul style="list-style-type: none">• Director of the Children's Medicines Centre – GOSH• Professional Lead - NPPG
SEL Pharmacy Scheme	Raj Matharu <ul style="list-style-type: none">• Chief Officer of Lewisham, Southwark & Lambeth and Bexley, Bromley & Greenwich Local Pharmaceutical Committee and Pharmacist
South West London Respiratory Network – Medicines Optimisation Workstream Update	Vicky MacGregor <ul style="list-style-type: none">• Senior Primary Care Pharmacist (Croydon), NHS South West London



To Spacer and Beyond

Stephen Tomlin FRPharmS FFRPS

Director of the Children's Medicines Centre – GOSH

Professional Lead - NPPG



Intro and History

- pMDI – MID 1950's
 - Requires slow 30L/min inhalation immediately after activation
 - Breath hold for >4sec, optimally 10sec
 - Even optimal technique = 20% to lower airways and 80% to oropharynx
- Large Commercial Spacer – 1976
 - Decreases oropharyngeal deposition of larger particles
 - BUT clinical significance has been poorly established.
- Large Valved Holding Chambers (VHC) – 1983
 - No great clinical advantage
 - Adaptions until 1998 – first real proof (*Nikander*)
- Still not prescribed as much as they should be and used even less!
- >50% of children who use an MDI without a spacer gain little or no benefit (*Pedersen*)

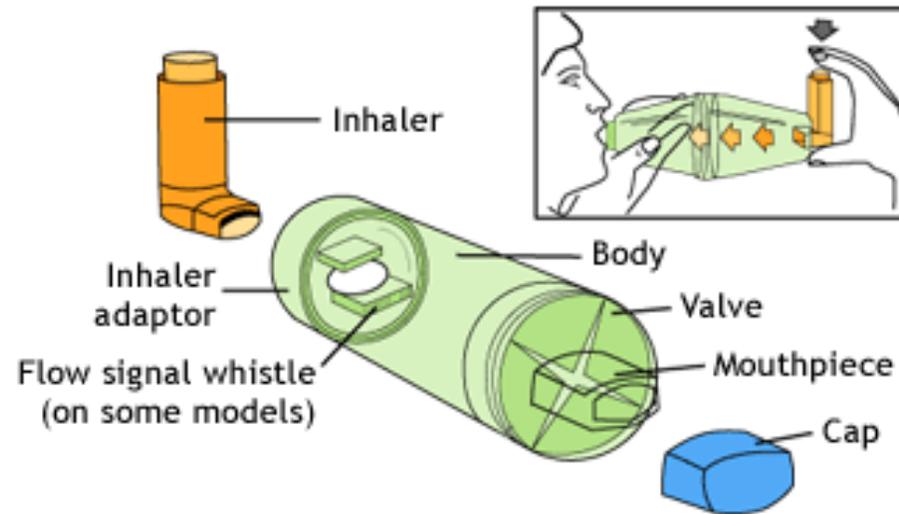


Does Size Matter?

- **Smaller but friendly!**
 - Up to 100ml are usually not valved
 - Least cumbersome, but at least distance to mouthpiece is lengthened
- **The Bigger the better!**
 - Unidirectional mouthpiece – inhalation from but no exhalation back into spacer. (VHC)
 - Allow inhalation after activation or tidal breathing.
 - Ideally 100-700ml with a distance of 10cm between MDI and mouth (*Fink*)
 - Small children have a tidal breaths of 10ml/kg – so there is a thing of too big.



Valves



- Valveless are just a spacing device
- VHC – retain the aerosol until patient inhales
- Valved or not a spacer will deliver particles smaller than those of an MDI alone (*Wilkes*)
- Most children <24months unable to open the valve (*Reginato*)

Material



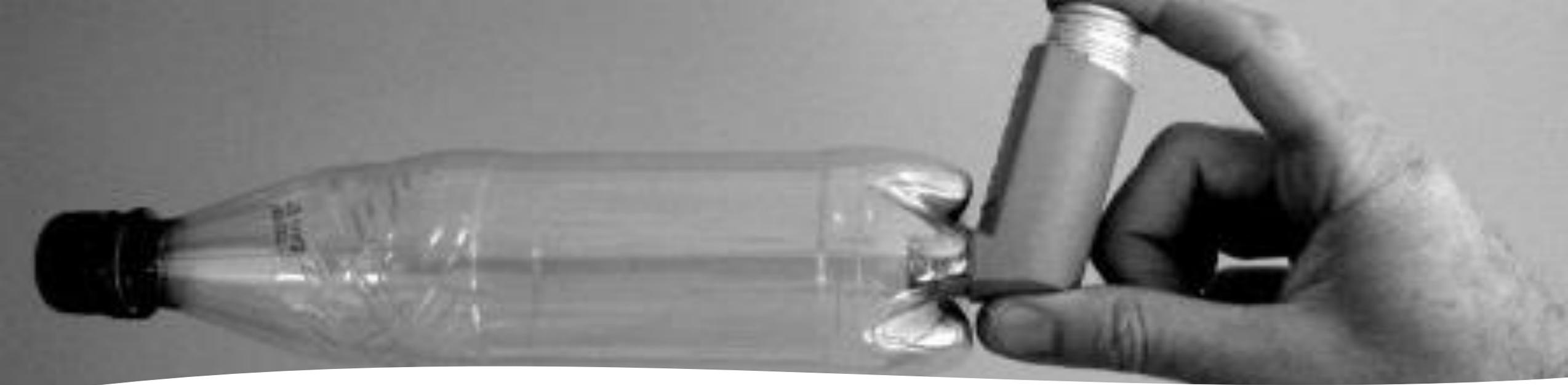
- Electrostatic
 - Plastics create an electrostatic charge attracting aerosol particles –
 - Reduced by, priming / continued use / washing-up liquid
- Antistatic
 - Metallic (aluminium / steel)
 - Some plastic spacers with an antistatic inner liner
 - Should allow dose reduction – never proven!





Masks

- Preferable for children <3 years
- Mask **MUST** fit tightly
- What about other ages?
- When to transition to mouth piece?
- Masks tend to promote tidal use of VHCs vs mouthpiece promoting breath holding (*Everard*)



Universal Spacers vs Specific

- MHRA likes a spacer to be tested with a device (FDA don't)
- Universal rubber inlets work but do allow spray to be directed at walls
- ALL spacers (even toilet rolls and plastic bottles decrease oropharyngeal deposit (*Sanders*))
- Even Spacers that look similar have been shown to have large variance in performance for an individual (*Dissanayake*)

Facts

- Whilst VHC reduces need for coordination still best to breath in soon after activation (>10sec significantly reduces delivery) (*Chambers*)
- A slow deep inhalation and breath hold is optimal even with VHC (*Newman*)
- Turbulence and reduction in respiratory fraction is caused by multiple activations into a spacer before inhalation (*Barry*)
- Whilst dirty spacers may have less static they also build up bacteria and thus should be washed regularly (*Cohen*)

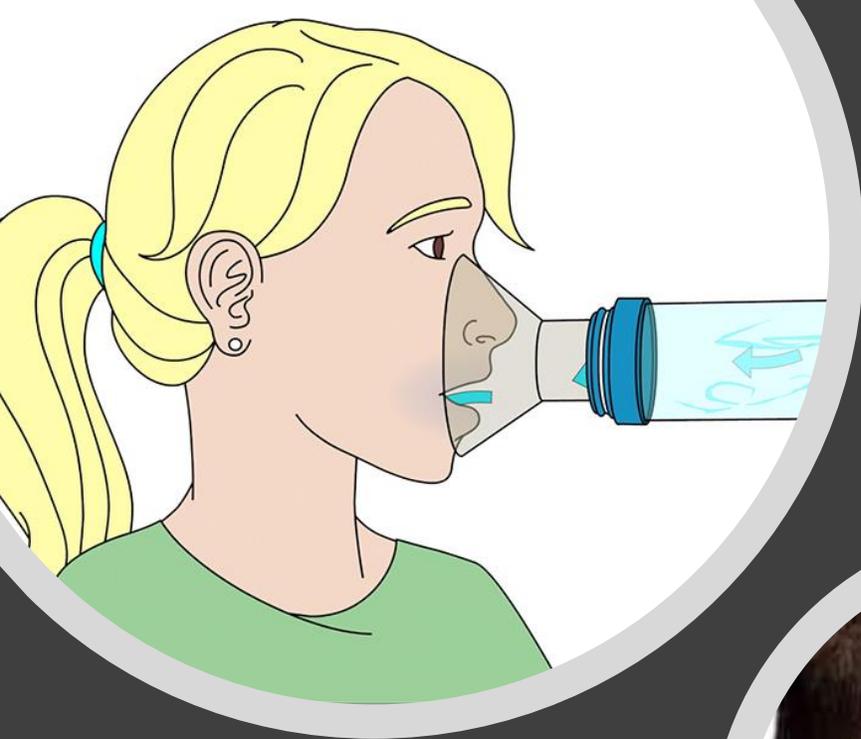
Want to go green?

Is it time for a rethink on spacers?

Example

- The Aer8 spacer is for use with MDIs.
- high quality cardboard from a sustainable wood pulp.
- large volume (500mL) but is easily portable as collapse between uses.
- non-static, biodegradable, no plastic parts.
- lasts for 30 days and does not have to be washed.
- But Does It Work???





Summary

- Nobody has perfect MDI technique and spacers do help
- All help reduce oropharyngeal deposit
- Some spacers (if used correctly) may have some advantage over others
- Correct use and care is critical to make the most of the spacer

References

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- Chambers FE et al. J Aerosol Med Pulm Drug Deliv 2010; 355-361
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- Everard ML et al. J Aerosol Med 2004; 17:186-195
- Dissanayake S et al. Pulm Pharmacol Ther 2018; 48:179-184
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Bexley, Bromley & Greenwich
Local Pharmaceutical Committee



Lambeth, Southwark and Lewisham
Local Pharmaceutical Committee



Community Pharmacy Children & Young Persons Asthma Scheme 2022

Raj Matharu
Pharmacy London- Chair
BBG LPC- Chief Officer
LSL LPC- Chief Officer

Background:

- The pandemic caused major disruption in healthcare service delivery
- Community Pharmacy remained open, providing convenient access to a healthcare professional
- Theme of community pharmacy as "NHS on the High Street" has emerged since the pandemic and is being used by SEL ICB as part of the patient comms
- Closer working relationship between pharmacists across sectors leading to formation of SEL Pharmacy Leadership Group
- Commissioners and providers co-designing services and collaborating as envisaged in the NHS Long Term Plan



Background:

- Asthma is the most common long-term condition in childhood affecting approximately 1 in 11 children and young people in the U.K.
- Managing the symptoms of childhood asthma can be improved by providing education on inhaler technique and increasing awareness to environmental triggers.
- Impact of COVID has changed the way patients interact with general practice
- Patterns regarding over or under use of rescue medications, known as SABAs (Short Acting Beta Agonists) indicating poor asthma control
- In South East London there are nearly 30,000 children and young people being prescribed inhalers (8% of 2–15 year olds)

	CYP population (2-15)	CYP (2-15) with coded asthma diagnosis and/or medication	Population prevalence estimate (Based on EMIS searches)
Lewisham	56,170	4358	7.8%
Lambeth	55,468	4492	8.1%
Southwark	49,298	3993	8.1%
Bexley	43,990	3271*	*7.8%
Bromley	60,567	4737	7.8%
Greenwich	56,060	4485	8.0%

*estimated

- Poor management of asthma, including non-adherence and over-reliance on rescue medication increases risk of adverse outcomes and loss of control.
- Short acting Beta 2 agonist (SABA) metered dose inhalers (MDI) have a particularly high environmental impact.

Plan:

- Evidence that regular planned care for patients with asthma reduces the risks of exacerbations and improves quality of life.
- Enhance the role of community pharmacies to proactively support children and young people (CYP) with asthma to reduce the risk of asthma exacerbations and improve patient outcomes.
- The scheme proposed would be delivered as a quality intervention with an evaluation including patient experience metrics.

Community Pharmacy Intervention:

- Inhaler technique check at every contact and prescription issue
- A spacer to CYP with asthma without a prescribed spacer
- smoking cessation advice to CYP with asthma as well as household
- For those CYP with asthma who have been issued with:
 1. more than 3 short acting beta agonist inhalers, or,
 - 2 prescriptions for short-course steroids, in a rolling 12-month period, and:
 - i. To provide advice around adherence to inhaled corticosteroids (ICS) (where prescribed) including tips to reduce unwanted effects and spacer use.
 - ii. Alert their GP practice to their inhaler use enabling the practice to prioritise their asthma review and care.
- Identify CYP who have been prescribed an ICS inhaler in the last year, but have collected less than 6 inhalers in a rolling 12-month period, and:
 - i. offer support to them to understand the importance of medicine use and how this can positively impact on their wellbeing e.g. better attendance at school, more able to participate in physical activity, fewer exacerbations and hospital admissions
 - ii. Discuss approaches to encouraging adherence / reducing effects or timings to suit lifestyle, e.g. spacer use, frequency and timing of dosing
 - iii. Check they have a personal asthma action plan – if not encourage them to contact their GP practice and get one as part of an asthma review

Community Pharmacy Intervention:

- Community pharmacists would enter all the details on PharmOutcomes
- Allows commissioners and LPCs access to real time data
- LPC Support Officers have provided operational support and guidance

Barriers to the service:

- Data sharing agreement and completing **Data Protection Impact Assessment (DPIA)**, which is a process to help you identify and minimise the data protection risks of a project. Required for each service.
- Workforce pressures within community pharmacy
- Managing medicine shortages
- Service went live 1st September 2022, limited data!



Discussion and any Questions?

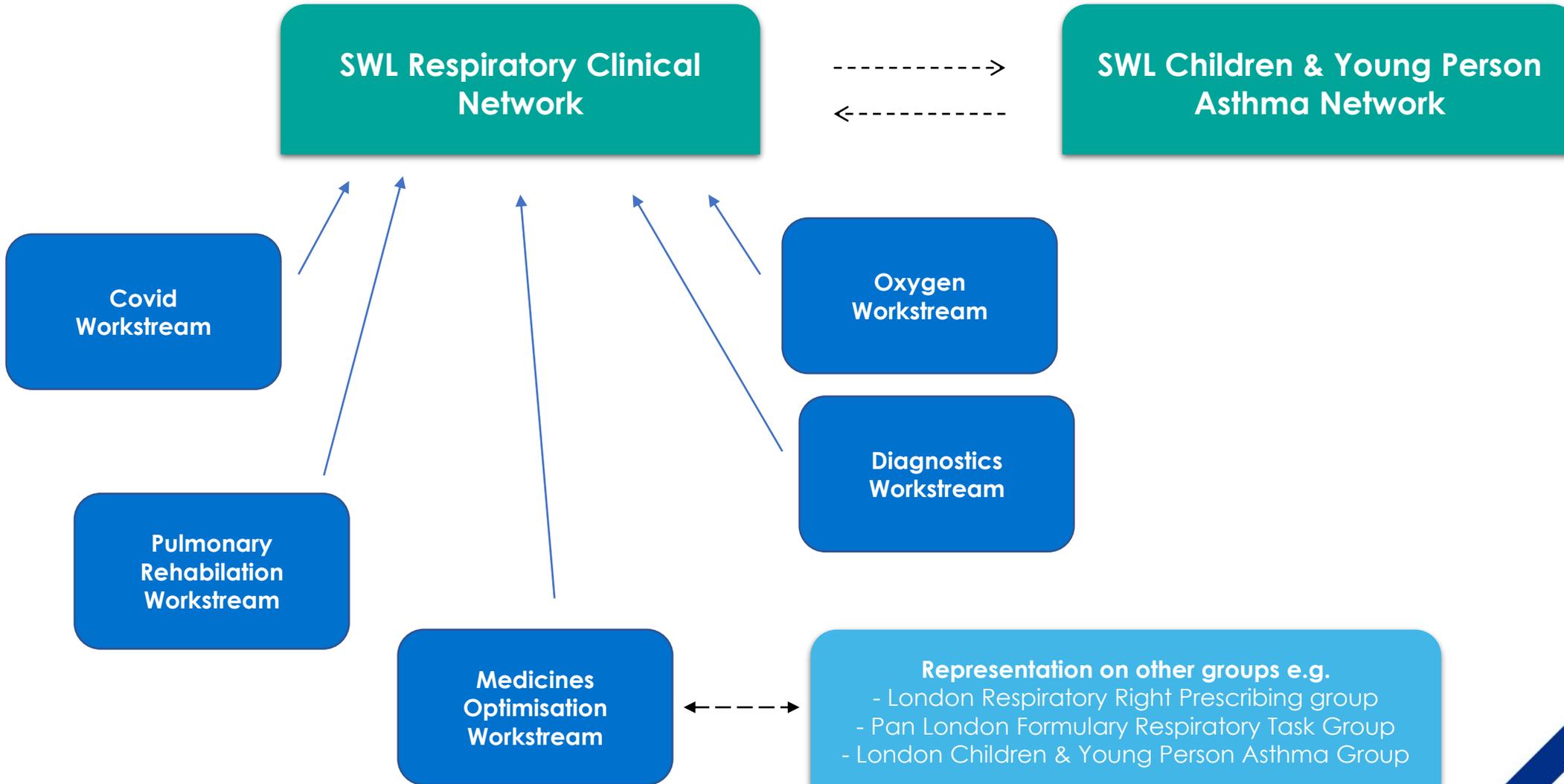


A decorative graphic on the left side of the slide, featuring several overlapping shapes in shades of blue, green, and teal, including circles, ovals, and elongated rectangles, some with outlines and some solid.

South West London Respiratory Network – Medicines Optimisation Workstream Update

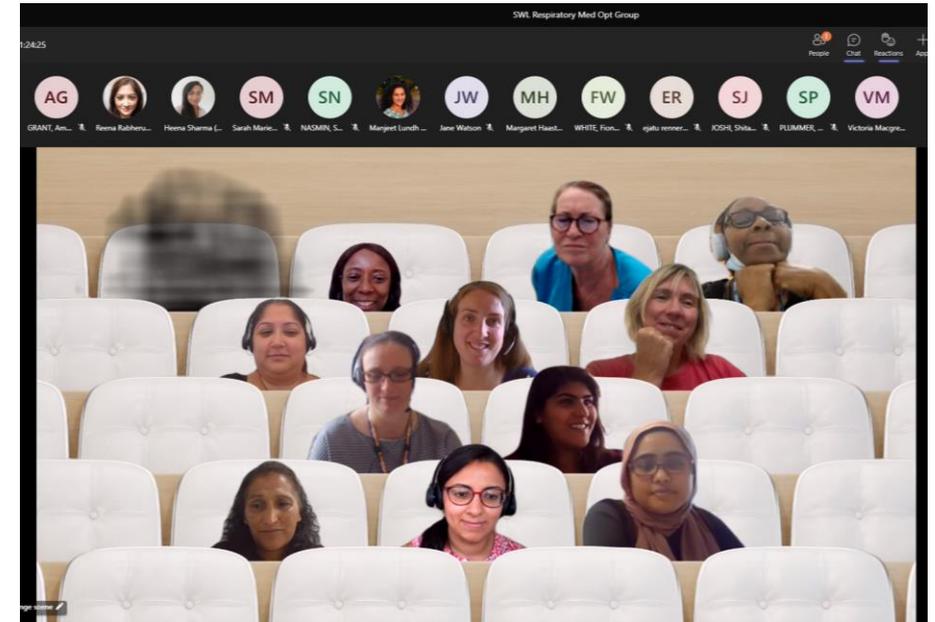
Oct 2022

Presenter: Vicky MacGregor
On behalf of SWL Respiratory Network



SWL Respiratory Network Medicines Optimisation Workstream

- Wide MDT collaboration (adult and paediatric representation)
 - **Secondary care:** consultants, nurses, pharmacists, physiotherapists
 - **Primary care:** GPs, PCN pharmacists, practice nurses, medicines optimisation teams, neighbouring boroughs/ICBs.
- Liaise with:
 - **Community pharmacy:** LPC, send updates via newsletters
 - **Pharma companies:** Liaison with pharma companies to check stock availability



Our work in NHS South West London

- Guidelines
 - Asthma – October 2021
 - COPD – February 2020 (review & update in progress)
 - Environmental Impact of Inhalers x 2
 - Spacer Devices in Children
- Raise awareness/share learning from the recent MHRA alert: Nebulised asthma rescue therapy in children
- Regular newsletter articles to disseminate key respiratory related updates
- Promotion of the London schools' guide for the care of children and young people with asthma - [link](#)

The screenshot shows the NHS South West London Clinical Commissioning Group website. The navigation menu includes Home, About us, Your area, Policies, Clinical Guidance, IFR, and Contact us. The Clinical Guidance section is expanded to show various medical specialties, with Respiratory highlighted. Under the Respiratory section, there are several download links for guidelines:

- Asthma – Guideline for Management in Adults and Children
- COPD – Medicines Optimisation Guidelines
- Inhalers – Environmental Impact of Inhalers
- Inhalers – Environmental Impact of Inhalers – Next steps for NHS SWL
- Inhalers – Spacer devices in children – ensuring the right device for the right age

Correct Storage of Inhalers

It is important to store inhalers at the correct temperature advised by the product manufacturer as extreme temperatures and/or high altitudes can affect the medicine in the inhaler. Inhalers should also be kept dry, with the dust cap on and out of the reach of children and pets.

Some inhalers (e.g., Trimbrow pMDI and Fostair pMDI) must be stored in a refrigerator (2°C-8°C) prior to dispensing, however once given to the patient should be kept at room temperature (below 25°C). It is important that patients are given accurate information on how best to store their inhalers and that they are not asked to keep them in the fridge.

If inhalers are stored in a patient's fridge it can lead to problems such as,

- Patients may experience reduced therapeutic effect when the canister is cold.
- Patients may experience discomfort if the delivered dose is too cold.
- Doses may be missed as the inhaler is kept out of sight.

Action for clinicians and community pharmacies:

- Check the storage requirements of prescribed/dispensed inhalers and ensure patients are given clear instructions on how best to store their inhalers.
- Remind patients that unwanted and expired inhalers should be returned to the pharmacy for safe disposal.

NHS South West London Medicines Optimisation Newsletter

August 2022

Croydon Kingston Merton Richmond Sutton Wandsworth

Learning from a Near Miss with a Home Nebuliser for Asthma

Clinicians are reminded that very few people with asthma will need to use a nebuliser outside of hospital. The London Asthma Leadership and Implementation Group (LALIG) has shared a case study relating to the inappropriate use of a nebuliser. In this case during a routine follow up, an Asthma Clinical Nurse Specialist (CNS) service noted that a parent of a young child had purchased a "home nebuliser" with no clinical input or support. Clinical investigation identified that the use of the nebuliser and rescue inhalers was masking very poor asthma control which could have resulted in potentially fatal consequences.

Using salbutamol through a spacer has been shown to be just as effective as salbutamol via a nebuliser for mild to moderate asthma attacks. The need for higher doses is an indicator of the severity of the attack and the need for urgent medical review.

Worried parents or carers may be requesting rescue packs, as noted by Asthma UK, in response to inaccurate social media posts promoting this practice. A rescue pack i.e. antibiotics and/or oral steroids, provided without specialist input has the potential to greatly increase the risk of a parent or carer delaying seeking urgent medical

New Guideline for the Management of Asthma in Adults and Children

The new approved [SWL Guideline for the Management of Asthma in Adults and Children](#) has been developed by the Medicines Optimisation subgroup of the SWL Respiratory Network. The guideline presents NICE, BTS and best practice recommendations. It aims to provide easily accessible information on how best to manage asthma patients in primary care and improve the outcomes of these patients.

The guideline includes preferred inhaler choices in adults and children for each of the treatment steps which should ideally be considered 1st line when an inhaler is being initiated or where there is a need to change therapy. All decisions regarding inhaler choice are expected to be made based on the patient's preference and ability to use a device.

Two new cost-effective inhaler choices are now included as 1st line options. Patients stabilised on alternative brands should not have their inhalers changed.

- ⇒ Sobrobec® (beclomethasone dipropionate) - pMDI
- ⇒ Combisal® (fluticasone with salmeterol) - pMDI

The triple therapy inhalers Trimbrow® (pMDI) and Enerzair Breezhaler® (DPI) are approved for use in asthma and should only be prescribed following secondary care specialist initiation or recommendation.

Produced for use in SWL CCG. The information contained in this newsletter is issued on the understanding that it is the best available from the resources at our disposal at the time of issue. Any comments / suggestions please email your local CCG borough team.

Our work in NHS South West London – cont.

Via <https://swlimo.swlondonccg.nhs.uk/clinical-guidance/respiratory/>

Asthma

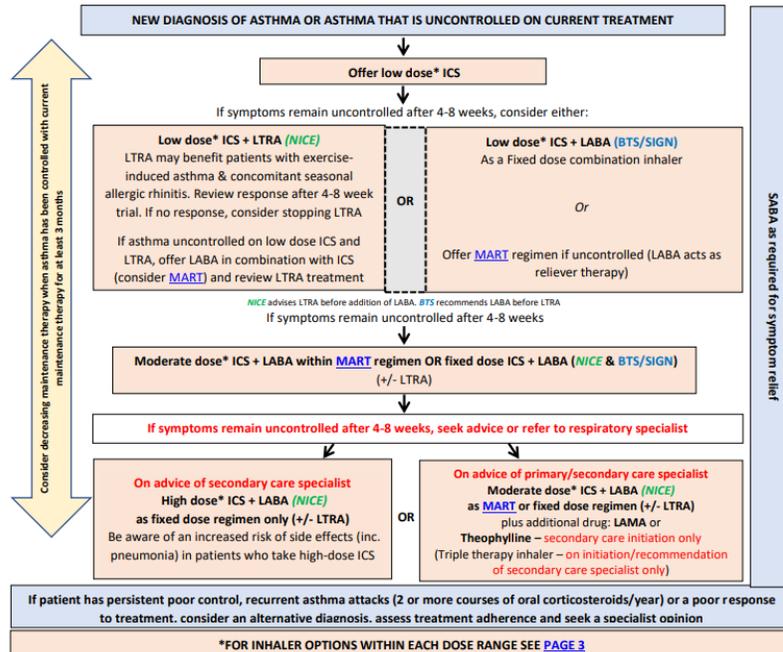


SWL Guideline for the Management of Asthma in Adults and Children

Adapted from NICE NG80 November 2017 (updated March 21) and BTS/SIGN July 2019

Note: NICE and BTS/SIGN Guidelines differ on some aspects of the management of asthma.

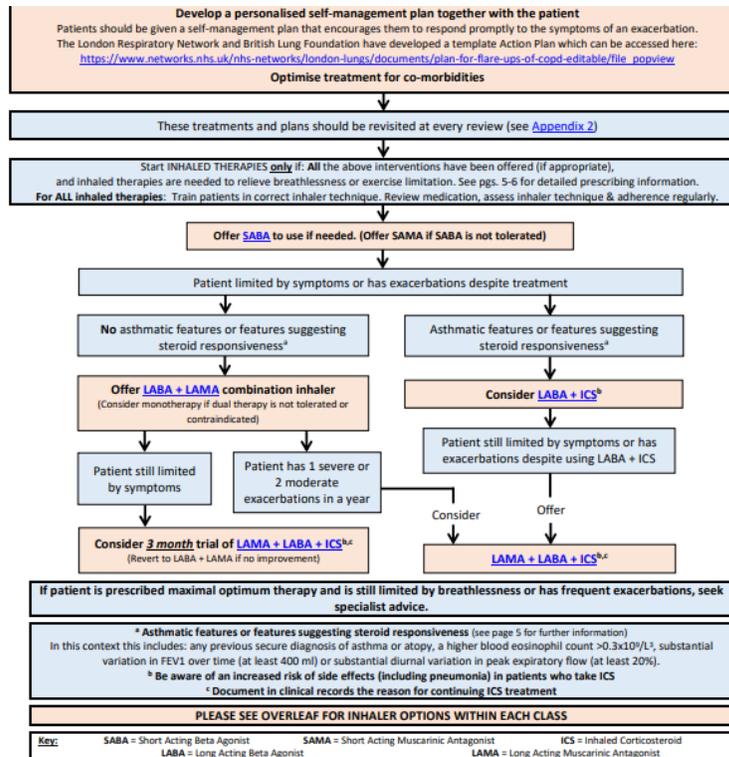
Disclaimer: The recommendations in these guidelines do not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian.



SWL Guideline for the Management of Asthma in Adults and Children
Lead author: South West London CCG Date approved: October 2021 Approved by: SWL IMOC Review date: October 2023 (or earlier) Page 2 of 13

COPD

Medicines Optimisation Guideline for the Management of Chronic Obstructive Pulmonary Disease (COPD)



Spacers in children



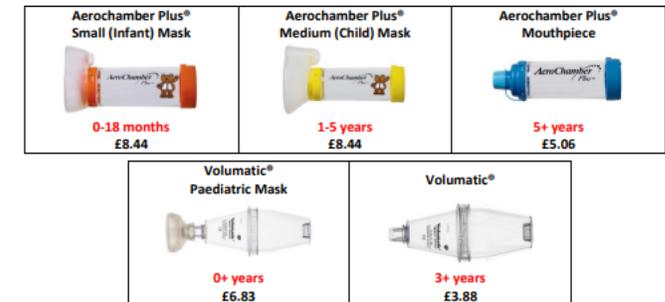
SPACER DEVICES IN CHILDREN: ENSURING THE RIGHT DEVICE FOR THE RIGHT AGE

Spacer devices are recommended for use with pressurised metered dose inhalers (pMDIs) in all age groups.

A face mask is required until a child can breathe reproducibly using the spacer mouthpiece, however from approximately 3 years of age children should be able to competently use a spacer without a mask.

As children grow the spacer device +/- face mask they require will change. Using the wrong device for their size and stage of development may mean they are not getting the full dose of their asthma medication.

Aerochamber Plus® and Volumatic® spacers are two of the most commonly prescribed in SWL and have the following age recommendations:



Some older children and adults may need a spacer with a mask, for example learning disability patients or those with complex physical needs. It is important to ensure the correct sized mask is supplied (see above). A blue Aerochamber Plus® Large (Adult) with mask is available for patients aged 5 years and over who are unable to use a mouthpiece. For all other spacer brands, licensing information and inhaler compatibility please refer to individual manufacturer product information and rightbreathe.com for further information.

Actions for clinicians:

- When prescribing spacers for use in children over the age of 3, consider prescribing a spacer with a mouthpiece unless there are specific concerns about their ability to use a mouthpiece.
- If a spacer with a mask is required in older children, ensure the correct size mask is supplied.
- Ensure patients and their carers are given clear instructions on how to use their inhaler and spacer. Asthma UK have a wide range of videos which can be used for patient education:
 - [How to use a spacer with tidal breathing \(5-breaths technique\)](#)
 - [How to use a spacer with a mask for a baby or child](#)
 - [How to use a spacer without a mask for a child](#)

Our work in NHS South West London – cont.

Via <https://swlimo.swlondonccg.nhs.uk/clinical-guidance/respiratory/>



The Environmental Impact of Inhalers

The NHS has [committed to reducing its carbon footprint by 51% by 2025](#) to meet the target in the Climate Change Act, including a shift to dry powdered inhalers (DPI) to deliver a reduction of 4%. DPIs and other newer types of inhalers like soft mist inhalers are less harmful to the environment than traditional pressurised metered dose inhalers (pMDIs) and the NHS long term plan supports the use of these inhalers where it is clinically appropriate. [NICE has produced an inhaler decision aid](#) to facilitate discussion about inhaler options.

pMDIs use a propellant, which is a greenhouse gas that contributes to global warming. DPIs, which use no propellant, are less harmful to the environment. However, DPIs require people to have an adequate inspiratory flow rate for effective delivery of the medicine. **Treatment with inhalers should only be initiated or changed when it is clinically warranted and with appropriate training.**

Where a new device is prescribed, adherence and inhaler technique should **always** be checked, as well as at every review, to ensure patient control is not affected. **The most effective device is the one the patient can and does use.**

The [Investment and Impact Fund](#) (IIF), which forms part of the [PCN DES specification](#) includes two prescribing targets that form the "Help create a more sustainable NHS" and makes a requirement of PCNs to "actively work with their CCG to optimise the quality of prescribing of metered dose inhalers".

The table below provides some suggested actions and considerations that GP practices could use to support this initiative (see the PCN DES for additional information):

<p>1. Ensure appropriate use and disposal of inhalers</p>	<ul style="list-style-type: none"> Review patients repeat prescription issues and adherence to therapy. Encourage patients to reduce waste by not over-ordering their inhalers, looking after them and using the correct inhaler technique. Ensure patients know how many doses are contained within their inhaler, how to tell when their inhaler is empty and encourage patients to keep track of how many doses they have used if an inhaler doesn't have a dose counter.
<p>Unwanted or used inhalers should be returned to a community pharmacy for recycling or inclusion in the general medicines waste, which undergoes environmentally safe disposal.</p>	
<p>2. Consider low carbon inhalers during Structured Medication Reviews and Planned Asthma/COPD</p>	<p>Prioritise patients at high risk or with poor control for a respiratory review.</p> <ul style="list-style-type: none"> Offer a DPI if a patient is not using a spacer with their pMDI, and they have adequate inspiratory flow. DPIs are not an appropriate choice of inhaler for patients who are not able to generate sufficient



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.

<p>TACKLE SHORT-ACTING BETA AGONIST OVER-USE IN ASTHMATICS</p>	
<p>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.</p>	
<p>Suggested Actions:</p>	<ol style="list-style-type: none"> 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. 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. 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.
<p><i>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.</i></p>	

<p>REDUCE VENTOLIN® AND INCREASE SALAMOL® PRESCRIBING</p>	
<p>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®.</p>	
<p>Suggested</p>	<ol style="list-style-type: none"> Identify patients prescribed Ventolin MDI or generic salbutamol MDI and change to Salamol®.* Inform patients about the change to their inhaler prescription using an AccuRx, SMS or letter

Work in progress in NHS South West London

- Lead local implementation of National & London Respiratory Medicines Optimisation best practice and sustainability related recommendations e.g. PAN London respiratory formulary recommendations
- Adopt a digital health passport for asthma patients to use
- Update of the SWL COPD guidance
- Support practices with the safe & appropriate implementation of the IIF targets
- SABA in schools guidance



Network Contract Directed Enhanced Service

Investment and Impact Fund 2022/23: Updated Guidance

March 2022

What we plan to do next in South West London

- Develop a generic MART action plan for use across NHS SWL
- Support implementation of guidelines via ScriptSwitch® / Optimise Rx® messages
- Education and training – support implementation of guidelines/formulary/low carbon inhaler initiatives
- Liaising with community pharmacies to ascertain any issues with increase return of inhalers from patients



Health inequalities

- Health inequalities in SWL
 - Input into the SWL Respiratory Network work to review available dashboards e.g. Respiratory Population Health Dashboard (Imperial College Health Partners) and/or develop local dashboards
 - Explore asthma action plans / training videos in other languages



Challenges

- Staffing
- COVID – paused workstreams
- Engagement: both primary and secondary care
- Timelines: working in bigger groups, more individuals involved, takes longer but better for collaboration.

