**Medicines Management Enhanced Service Scheme 2023-24**

**Prescribing Quality Improvement in Asthma: HNY Implementation Pack**

**Overall rationale for the Medicines Management Enhanced Scheme:**

The UK has one of the highest mortality rates from asthma in Europe1 and a large proportion of our patients have poorly controlled asthma.2 A large part of the problem is that people with asthma are not getting the right medicine (underuse of the preventer inhaler and over-reliance on the reliever inhaler) to the right place (poor inhaler technique). It is estimated that 70% of asthma admissions are preventable.3 Furthermore, asthma control is worse in socioeconomically deprived areas, where the majority of patients do not have well controlled asthma.2

From a prescribing point of view, to improve asthma care, we need to do two things.

1. Ensure people are getting the **right medicine** (inhaled corticosteroid)
2. Ensure the **medicine is getting to the right place** (airways)

The first two indicators in this Medicines Management Enhanced Scheme support these two aims. The third indicator enables cost savings to be made to fund payments to practices overall. To ensure efforts are made to support the quality improvement elements, **all three indicators will need to be achieved to some extent**, to qualify for payment.

**Important safety information:**

Any change of inhaler device must be done as an individualised shared decision-making process **with patients** and **inhaler technique must be observed**. A [visual guide](https://s40639.pcdn.co/wp-content/uploads/Web-linked-Asthma-Conversations_V15-1-1.pdf) has been developed to support this. Medication changes and inhaler device changes **must not be undertaken as a bulk switch**.

1. [WHO European Health Information Gateway](https://gateway.euro.who.int/en/indicators/hfamdb_135-sdr-asthma-per-100-000/)
2. <https://www.asthmaandlung.org.uk/sites/default/files/2023-03/aas-2020_2a-1.pdf>
3. Department of Health, Respiratory Team. *An outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England.* London: DH; 2011. <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216139/dh_128428.pdf>

**Indicator B1:** **each practice is required to ensure the percentage of QOF asthma register patients who receive six or more SABA (e.g., salbutamol) inhaler prescriptions over the previous 12-month period is …** **(see target range for your Place – lower is better)**

**Rationale: Improving asthma outcomes by identifying poor control**

This indicator aims to help practices put systems in place to prevent *over prescribing of SABA* and *identify patients with SABA over-reliance* to help improve their control.

**Inhaled corticosteroid (ICS) is the main treatment in asthma.** ICS controls the airway inflammation which leads to narrowing of the airways, that if untreated, leads to a higher risk of symptoms and exacerbations. Patients whose asthma is well-controlled should be symptom-free with no restriction on activity, no night-time waking and will rarely need to use their short acting beta agonist (SABA) inhaler. This is usually the blue salbutamol inhaler, which *should be seen as a rescue inhaler*. If patients are prescribed separate ICS and SABA inhalers and their asthma is well controlled (defined as needing to use SABA twice a week or less), then *1 or 2 SABA inhalers a year should be sufficient* for occasional symptoms.

**SABA over-reliance** **is a marker of poor control.** It is defined as needing 3 or more SABA inhalers a year and is associated with a higher risk of exacerbations, GP visits and hospitalisations.4 Approximately 50% of UK patients are over-reliant on their SABA inhaler and the average for this group was 6.51 SABA prescriptions/year.5

**Combination ICS/Formoterol inhalers can improve asthma control.** Patients use just one inhaler containing both preventer (ICS) and reliever (Formoterol) medication. Formoterol has a fast onset of action like salbutamol, and unlike other long-acting beta agonists (LABAs), can be used as a reliever. Randomized clinical trials (RCTs) have demonstrated that in **adolescents and adults** with asthma, ICS/formoterol therapy reduces the risk of severe exacerbations compared with separate ICS and SABA therapy, across the spectrum of asthma severity.6 Combination ICS/formoterol reliever therapy overcomes the problems of low ICS adherence when separate inhalers are prescribed where real world adherence to ICS inhalers is estimated between 15-54%.7  Also, as patients become symptomatic and take extra doses of their ICS/formoterol inhaler, they automatically receive the increased dose of ICS they need, thus preventing exacerbations. ICS/Formoterol inhalers can be used ‘as needed’ as Anti-inflammatory Reliever Therapy (AIRT) for step 1 and Maintenance and Reliever Therapy (MART) for step 2 and above. Salbutamol inhalers are not needed if combination inhalers are prescribed. This is the preferred approach for managing asthma for adults and children 12 years and over, in the new HNY asthma guidance.

4. Bloom CI, Cabrera C, Arnetorp S, Coulton K, Nan C, van der Valk RJP, et al. Asthma-Related Health Outcomes Associated with Short-Acting ß2-Agonist Inhaler Use: An Observational UK Study as Part of the SABINA Global Program. Adv Ther. 2020;37(10).Wilkinson A,

5. Menzies-Gow A, Sawyer M, et al. S26 An assessment of short-acting β2-agonist (SABA) use and subsequent greenhouse gas (GHG) emissions in five European countries and the consequence of their potential overuse for asthma in the UK. Thorax 2021;76:A19. <https://thorax.bmj.com/content/76/Suppl_1/A19.1>

6. Beasley R, Bruce P, Houghton C, Hatter L. THE ICS/FORMOTEROL RELIEVER THERAPY REGIMEN IN ASTHMA: A REVIEW. The Journal of Allergy and Clinical Immunology: In Practice. 2023 Jan 10.

7. Marjolein Engelkes et al. Medication adherence and the risk of severe asthma exacerbations: a systematic review. European Respiratory Journal 2015 45: 396-407; DOI: 10.1183/09031936.00075614

**Quality Improvement Activities:**

1. **Search** for patients with asthma 6 or more SABA and set up a process to review these patients. (Greener Practice Disease Control Project 1)
2. **System changes:** Take SABA off repeat **OR** change prescribing intervals to *at least* 90 days and max issues of 5. (Greener Practice Disease control project 3). If you are considering taking SABA off repeat altogether, please watch a video by Dr Tim Ryder explaining how they did this safely in their practice.
3. **System changes:** Add AccuRx messages to practice templates on SABA overuse and/or asthma control to send as bulk to all asthma patients and/or with asthma review invite (appendix 1)
4. **Clinical Practice:** Use the visual guide (print out or on desktop) during asthma reviews to:

Check if patient is adherent to their preventer (ICS) inhaler,

Educate about airway inflammation and the importance of ICS inhaler,

Consider ICS/Formoterol combination inhaler

Consider if a dry powder inhaler (DPI) may suit patient better.

**Resources** (many also found here: [www.greenerpractice.co.uk/asthma-toolkit](https://nhs-my.sharepoint.com/personal/aarti_bansal1_nhs_net/Documents/Net%20zero%20lead/www.greenerpractice.co.uk/asthma-toolkit)):

Search for patients on 6 or more SABA prescription items in the last 12 months

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[Education video 3: Disease control (5 min)](https://www.greenerpractice.co.uk/high-quality-and-low-carbon-asthma-care/education/)

[Video by Dr Tim Rider on how to take SABA off repeat safely](https://www.youtube.com/watch?v=ep50HSSBZPI) (8 min)

[Airways diagram](https://www.greenerpractice.co.uk/high-quality-and-low-carbon-asthma-care/resources/)

[Asthma visual guide](https://s40639.pcdn.co/wp-content/uploads/Web-linked-Asthma-Conversations_V15-1-1.pdf)

[MART Personalised Asthma Management Plan](https://shop.asthmaandlung.org.uk/collections/mart-asthma-action-plan/products/mart-asthma-action-plan-editable)

AccuRx messages (see appendix 1)

HNY Asthma Guidance - [Clinical Guidance and Pathways - Humber and North Yorkshire Health and Care Partnership](https://humberandnorthyorkshire.org.uk/imoc/clinical-guidance-and-pathways/)

**Indicator B2: each practice is required to ensure the number of** **pMDI inhaler prescriptions as a percentage of all non-salbutamol prescriptions issued to patients aged 12 years or older over the previous 12 months is … (see target range for your Place - lower is better)**

**Rationale: Getting treatment to the right place in the small airways**

**Poor inhaler technique is common** and associated with increased asthma exacerbations and hospital admissions. Inhaler technique deteriorates with time so needs to be reinforced.

**“Show me how you use your inhalers.”** Observing inhaler technique is the best place to start when deciding which inhaler is best for each individual patient. There are two main types of inhaler device for asthma: Dry powder inhalers (DPIs) and pressurised metered dose inhalers (pMDIs). DPIs require a *quick and deep* breath in whereas pMDIs require a *slow and steady*breath in and are best used with a spacer device. If patients incorrectly use a quick and deep inhalation technique with their pMDI, they may be better suited to a DPI. DPIs don’t require spacers and have dose counters to help people keep track of their medication. A small proportion of patients with asthma cannot take a quick and deep breath in and should stay on pMDIs. This may include children < 12, the elderly and those with severe asthma.

**Using placebo devices, In-Check Dials and a Trainhaler**, can help in assessing which inhaler device is best for each patient. These assessments should be done face to face. [A visual guide](https://s40639.pcdn.co/wp-content/uploads/Web-linked-Asthma-Conversations_V15-1-1.pdf) has been produced to help aid healthcare professionals choose the most appropriate device with their patients 12 years and over and is part of the resource pack.

**pMDIs have a very high carbon footprint** because the canisters contain hydrofluorocarbon gases which are approximately 1000-3000 times more powerful as greenhouse gases than carbon dioxide.8 pMDIs are responsible for 13% of the NHS’s direct carbon footprint (related to delivery of care), and the NHS has a target to reduce this by at least 50% by 2028.9 In the UK approximately 70% of all inhalers prescribed are pMDIs. Most of our European neighbours prescribe fewer than 50% pMDIs and in Sweden the figure in 13%.10 The carbon footprint from inhaler prescribing can be reduced by improving asthma control as well as prescribing DPIs where clinically appropriate.

**Well controlled asthma has 1/3rd the carbon footprint of asthma that is not controlled** due to fewer SABA pMDI inhalers being prescribed.11

For patients who need or prefer pMDIs, the prescribing carbon footprint can be reduced by swapping to an equivalent pMDI brand with a lower-carbon footprint and/or changing dosing regimes (e.g., 1 dose 200mcg beclomethasone bd instead of 2 doses 100mcg bd).

8. Wilkinson AJK, Braggins R, Steinbach I, Smith J. Costs of switching to low global warming potential inhalers. An economic and carbon footprint analysis of NHS prescription data in England. BMJ Open [Internet]. 2019;9(10):e028763.

[https://bmjopen.bmj.com/content/bmjopen/9/10/e028763.full.pdf](https://bmjopen.bmj.com/content/bmjopen/9/10/e028763.full.pdf 9)

[9](https://bmjopen.bmj.com/content/bmjopen/9/10/e028763.full.pdf 9). <https://www.england.nhs.uk/greenernhs/a-net-zero-nhs/> (accessed 19.9.2023)

10. Lavorini F, Corrigan CJ, Barnes PJ, et al. Retail sales of inhalation devices in European countries: So much for a global policy. *Respir Med*. 2011;**105**(7):1099-1103. doi:[10.1016/j.rmed.2011.03.012](https://doi.org/10.1016/j.rmed.2011.03.012)

11. Alexander Wilkinson et al., European Respiratory Journal 2021 58: OA76; **DOI:** 10.1183/13993003.congress-2021.OA7

**Quality Improvement Activities:**

**System changes:**

1. Have the new HNY asthma guidance on desktop or printed in each room.
2. [Get placebo packs](https://medicines.necsu.nhs.uk/supply-of-placebo-devices/) of different DPIs (Easyhalers, Nexthaler, Turbohalers and Ellipta) from pharmacy reps.
3. Consider obtaining Inhaler training devices such as the [In-check Dial](https://medicines.necsu.nhs.uk/supply-of-placebo-devices/) and [Trainhaler](https://www.haag-streit.com/clement-clarke/products/inhaler-technique/trainhaler-cr/) to help with assessments
4. Change asthma invite messages to include information on different inhaler devices. There is a choice of videos you can find on the resources tab of the [Greener Practice asthma toolkit](https://nhs-my.sharepoint.com/personal/aarti_bansal1_nhs_net/Documents/Net%20zero%20lead/greenerpractice.co.uk/asthma-toolkit)
5. Create AccuRx templates with videos of different DPIs attached to send to patients when inhaler device changed. (Appendix 2 for pre-written versions)

**Clinical changes:**

1. Run a session in your practice on how to assess appropriate inhaler device and advice clinicians of resources below.
2. Ensure you have a system so that patient’s inhaler technique is observed during asthma reviews.
3. Add **‘for NMS: inhaler technique’** on script note if prescribing DPI for first time. This promotes inhaler technique check by community pharmacy.
4. Have a process for reviewing patients around 6 weeks after an inhaler device is changed. (F2F appointment? Phone call? Video call? Through pharmacy NMS?).

**Resources:**

Search for pMDI inhaler prescriptions with all salbutamol prescriptions issued excluded (as Luforbec is included in Indicator B3, it is also excluded).

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[Device choice: Education video 4 (13 min)](https://www.greenerpractice.co.uk/high-quality-and-low-carbon-asthma-care/education/)

[Approach to consultations: Education video 6 (9 min)](https://www.greenerpractice.co.uk/high-quality-and-low-carbon-asthma-care/education/)

[Asthma visual guide for optimising asthma reviews](https://s40639.pcdn.co/wp-content/uploads/Web-linked-Asthma-Conversations_V15-1-1.pdf)

[NICE decision aid](https://www.nice.org.uk/guidance/ng80/resources/inhalers-for-asthma-patient-decision-aid-pdf-6727144573)

HNY Asthma Guidance - [Clinical Guidance and Pathways - Humber and North Yorkshire Health and Care Partnership](https://humberandnorthyorkshire.org.uk/imoc/clinical-guidance-and-pathways/)

AccuRx templates for asthma review invite (appendix 1) and AccuRx templates for DPI inhaler devices videos (appendix 2)

**Indicator B3: To improve cost efficiency, the percentage of all ICS-LABA combination inhaler units prescribed as either of these two low-cost formulary products (Fobumix Easyhaler (low carbon DPI) or Luforbec (high carbon pMDI)) … (see target range for your Place - higher is better)**

**Rationale: Cost savings**

**Important considerations:**

* **This Indicator is for Adults only.** Fobumix is only licensed for use in people aged 18+
* Patients on *pMDI ICS/LABA inhaler* should be assessed to check if:
  + They may be better suited to a DPI (see Indicator B2)
  + They would like to move to more environmentally friendly inhaler
* It is important that patients are prescribed the device that works for them, and they are given a choice of devices.
* If a DPI inhaler is suitable, currently the cost-effective ICS/LABA DPI is **Fobumix Easyhaler**.
* If a DPI inhaler is not suitable, currently the cost-effective ICS/LABA pMDI is **Luforbec**. Spacer use should be encouraged with pMDIs.
* **Remember we are encouraging DPI use, so patients well controlled on Fostair Nexthaler and happy with their inhaler device, need not be changed.**

Qualifying products

**ICS/LABA Low Cost Product Choice**

Fobumix Easyhaler 160microg / 4.5microg/dose dry pdr inh

Fobumix Easyhaler 320microg/dose / 9microg/dose dry pdr inh

Fobumix Easyhaler 80microg/dose / 4.5microg/dose dry pdr inh

Luforbec 100micrograms/dose / 6micrograms/dose inhaler

Luforbec 200micrograms/dose / 6micrograms/dose inhaler

Searches for patients on non-qualifying products

SystmOne EMIS Web

 

**Appendix 1: Patient information: SMS/AccuRx and letter templates that educate and empower patients on asthma control.**

**Reducing Repeat SABA**: send to all patients with asthma on SABA when you change prescribing intervals/max issues as a practice. This is an example of changing to 90-day interval. Adjust message if you choose 180-day interval or take SABA off repeat.

*If you need to use 3 or more rescue (blue) inhalers a year, this more than doubles your risk of an asthma attack. To ensure we identify patients whose asthma control needs improvement, our systems will no longer allow patients to receive more than 5 a year without a check from a healthcare professional. For more information have a look at this video* [***bit.ly/3Vaqfoh***](https://bit.ly/3Vaqfoh)*or read this leaflet*[***bit.ly/3EmhyRT***](https://bit.ly/3EmhyRT)

**Asthma Control:** can be sent as bulk message to all asthma patients.

*Good asthma control means you will rarely or never have symptoms. Many people don’t realise their asthma could be better controlled and that it is important to take a preventer inhaler regularly, even when you feel well. If you need 3 or more rescue (blue) inhalers a year, your asthma control may need improvement. To learn more watch this video****[bit.ly/3Vaqfoh](https://bit.ly/3Vaqfoh" \t "_blank)****or read this leaflet****[bit.ly/3EmhyRT](https://bit.ly/3EmhyRT" \t "_blank)***

**Asthma Review Invite:** adjust according to your practice processes

*Our records show that you are due for an asthma review. Please call to book your appointment. Asthma reviews are essential to ensure you’re on the right treatment. Did you know that good asthma control means you will rarely or never have symptoms? Or that if you need more than two reliever (blue) inhalers a year, your asthma control may need improvement?  For more information about asthma and good control, please watch this video* [***bit.ly/3Vaqfoh***](https://bit.ly/3Vaqfoh)*. To learn more about inhaler devices choices please watch this video* [***bit.ly/3T90yTn***](https://bit.ly/3T90yTn)*.  Remember to bring the following things to your appointment: your inhalers, your spacer if you use one, your Personalised Asthma Action Plan and your Peak Flow Meter if you have them.*

**Appendix 2. SMS/AccuRx messages with DPI inhaler technique videos.**

To send to patients once DPI prescribed to reinforce DPI inhaler technique shown in consultation. Also add ‘for NMS: inhaler technique’ on script note so inhaler technique shown when collect from pharmacy.

**Turbohaler**

You have been prescribed a type of inhaler called a Turbohaler. Please click on the link to watch a short video which explains how to use this inhaler. https://www.asthmaandlung.org.uk/living-with/inhaler-videos/turbohaler

**NEXThaler**

You have been prescribed a type of inhaler called a NEXThaler. Please click on the link to watch a short video which explains how to use this inhaler. https://www.asthmaandlung.org.uk/living-with/inhaler-videos/nexthaler

**Easyhaler**

You have been prescribed a type of inhaler called an Easyhaler. Please click on the link to watch a short video which explains how to use this inhaler. https://www.asthmaandlung.org.uk/living-with/inhaler-videos/easyhaler

**Ellipta (for Relvar)**

You have been prescribed a type of inhaler called an Ellipta inhaler. Please click on the link to watch a short video which explains how to use this inhaler. https://www.asthmaandlung.org.uk/living-with/inhaler-videos/ellipta