Focus on asthma: The GINA Approach to Managing Asthma





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Asthma is a long-term condition characterised for the vast majority by eosinophilic airway inflammation. In the UK, anti-inflammatory therapy options are easily accessed, affordable and are highly effective with minimal side effects. However, many people with asthma do not use enough or timely amounts of this therapy in order to control their symptoms and prevent attacks. This is seen when people attend in crisis at emergency departments, make urgent appointments with their GPs, miss work or school; and sadly, poor management still causes death.

In 2022, using the available Quality and Outcomes Framework (QOF) data from UK general practice registers, 6.5% or 3,745,077 people over the age of six were diagnosed with asthma.[1] The vast majority of asthma care occurs in general practice. Planned and routine asthma care can allow the vast majority to live well with asthma and avoid emergency care.

This spring, the Primary Care Respiratory Society brings you a new focus on asthma and outlines a new approach to ensure timely use of anti-inflammatory medicine for people that have not benefited as well from historic treatment pathways.

The Medicines and Healthcare Products Regulatory Agency (MHRA) has for the first time approved the use of a dual (ICS/Formoterol) combination treatment to be used as a reliever therapy for people aged 12 and over with the therapy choice situated early in the asthma treatment pathway as an alternative to its current use as a preventer or MART therapy sitting later in traditional treatment pathways.[2]

The MHRA approval is for Budesonide 200mcg/Formoterol 6mcg combination that is delivered as dry powder via a turbohaler. In recent trials, the use of this dual therapy, utilising the fast-acting property of formoterol for quick relief resulted in reductions in asthma attacks compared to the use of short acting beta agonists alone.[3]

In the UK, this new therapy option does not yet sit within an approved national guideline as NICE last updated its treatment pathway in 2020.[4] We await a new national asthma guideline but do not anticipate this new joint approach between NICE, BTS and SIGN to publish until 2024.

In the meantime, PCRS has looked to the latest Global Initiative for Asthma (GINA) approach to asthma treatment to see how this new approach fits and we have developed a simple algorithm for healthcare practitioners to see where this new treatment option sits.[5]

At PCRS, we know how busy primary care is and realise that introducing a new treatment choice means change and that changes takes time, can use up scarce resources, and can feel burdensome. In this Spring's issue of *Primary Care Respiratory Update* we will also show you how to take small steps to try out this new treatment pathway on a limited patient group, using a real-world test of change in a GP practice and show the key steps to help make implementation a success.

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- Dr Mike Crooks, Hull University Teaching Hospitals NHS Trust
- Dr Andrew Whittamore, Asthma and Lung UK
- Dr Alex Wilkinson, East and North Herts NHS Trust

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2. Medicines regulator approves UK's first dual combination inhaler for mild asthma. The Pharmaceutical Journal https://pharmaceutical-journal.com/article/news/ medicines-regulator-approves-uks-first-dual-combination-inhaler-for-mild-asthma (2023).
3. O'Byrne, PM et al. Inhaled Combined Budesonide–Formoterol as Needed in Mild Asthma N Engl J Med 378, 1865–1876 (2018).
4. NICE. NICE guideline [NG80] Asthma: diagnosis, monitoring and chronic asthma management. Published date: 29 November 2017 Last updated: 12 February 2020 https://www.nice.org.uk/guidance/ng80.
5. GINA. GINA-2022-Pocket-Guide-WMS. Global Initiative for Asthma 1–50 https://ginasthma.org/wp-content/uploads/2022/07/GINA-2022-Pocket-Guide-WMS.pdf (2022).

For more information see

Richard Beasley, Irene Braithwaite, Alex Semprini, Ciléin Kearns, Mark Weatherall, Tim W. Harrison, Alberto Papi, Ian D. Pavord. ICS-formoterol reliever therapy stepwise treatment algorithm for adult asthma European Respiratory Journal 2020 55: 1901407; DOI: 10.1183/13993003.01407-2019 Also see https://www.asthmafoundation.org.nz/assets/images/NZ-Asthma-Guidelines-Quick-Reference-Guide-2020-Online-09-21.pdf

We'll also be bringing you a series of resources in this Spring's Primary Care Respiratory Update which includes more information on how to assess asthma control as well as a series of other resources including:

- The presenting features of asthma and the importance of correct diagnosis using objective airflow measurement and Fractional Exhaled NO (FENO) to support any clinical suspicion.
- The non-pharmacological elements of asthma care that ensure the use of anti-inflammatory therapy is clinically effective and safe.
- How to deliver an effective asthma review in ten minutes
- The importance of choice of therapy and device, and that the greenest asthma care is a well-managed asthma patient using an inhaler device they can and will use
- How to recognise when asthma is difficult to manage and severe and know when to ask for help.

You can view all our asthma resources including online learning modules, asthma myths videos and other tools directly from the PCRS website

PCRS guide to the management of asthma aged 12 and over in primary care

Before treating asthma, check that the criteria for diagnosis are present and correct*.
Ensure that you, as the prescriber, can describe to the person with asthma:

- The criteria by which they have been given the diagnosis
- What they can do to help manage it
- What can happen if it's left unmanaged

Any asthma treatment will be more effective if it is created and agreed by both the patient and the clinician, reflects the patient's wishes, encourages self-management and clearly states when to seek further clinician support. **These wishes and choices should:**

Be written down or recorded in another way e.g. voice or video note that is understood

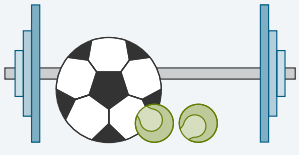
Include inhaler choice with respect to design, usability, cost and environmental impact

Describe communication options when help is needed or the plan isn't working anymore

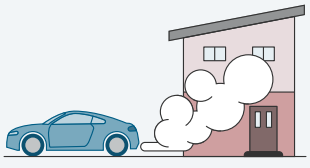
Confirm that the person with asthma understands that the foundation of asthma medical therapy is ensuring that any airway inflammation arising due to triggers such as allergens, pollutants and infections is controlled by an inhaled corticosteroid.

Short- acting beta-agonists are used to dilate airways and do not treat underlying asthma inflammation. Over-reliance on SABA in asthma is associated with an increased risk of asthma attacks and asthma deaths.

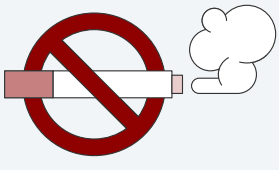
Patients may be successfully managed on a lower dose of inhaled corticosteroids and require fewer doses if they can be supported to:



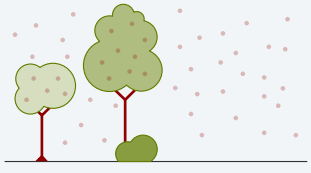
Maintain a healthy weight and be active



Understand the impact of indoor and outdoor air pollution and, where possible, how to avoid it



Avoid smoking/smoky environments and/or seek support to quit smoking



Understand asthma triggers (pollen, animal fur, perfumes etc.) and how to avoid or modify their effect

*Where asthma is suspected but there is a delay in diagnostic testing, treatment should be initiated based on clinical judgement while awaiting objective diagnostic testing results

Path 1: Dual anti-inflammatory reliever pathway

Low-dose (ICS-Formoterol)
200mcg budesonide and 6mcg formoterol, 2 actuations per day

Moderate-dose (ICS-Formoterol)
200mcg budesonide and 6mcg formoterol, 4 actuations per day

1		ICS – Formoterol PRN		Low-dose (ICS – Formoterol) dual reliever PRN as needed (one actuation) for relief of asthma symptoms (without regular maintenance treatment)*.
2	ICS – Formoterol 1 puff BD	ICS – Formoterol PRN		Low-dose (ICS – Formoterol) 2 actuations (1 actuation BD, or 2 actuations OD) with PRN use as required.
3	ICS – Formoterol 2 puffs BD	ICS – Formoterol PRN		Moderate-dose (ICS – Formoterol) 4 actuations (2 actuations BD) with PRN use as required.
4	ICS – Formoterol 2 puffs BD	ICS – Formoterol PRN	LTRA	Consider add-on therapy with LTRA, reviewing after 4-6 weeks and withdrawing if not effective or tolerated.
5				If medicinal therapy at step 4 is not controlling asthma symptoms then refer for help from an asthma specialist.

Step up if control is not achieved and step down level when control is achieved

* Budesonide 200mcg and Formoterol 6mcg is licensed for use as a reliever, as needed in response to asthma symptoms in Step 1 without regular maintenance treatment

Path 2: Alternative path – Traditional approach

1	ICS	SABA		Low-dose inhaled corticosteroid (ICS) each time a short-acting beta-agonist (SABA) is required for relief of asthma symptoms.
2	ICS	SABA		Low-dose daily maintenance ICS as prescribed and use SABA as reliever PRN.
3	ICS-LABA	SABA		Low-dose daily maintenance (ICS-LABA) as prescribed with SABA as reliever PRN.
4	ICS-LABA	SABA		Moderate-dose (ICS up to 800mcg BDP equivalent) daily maintenance (ICS-LABA)as prescribed with SABA as reliever PRN.
5	ICS-LABA	SABA	LTRA	If add-on therapy is required offer a leukotriene receptor antagonist (LTRA) and review at 4-6 weeks for efficacy and tolerability. Withdraw if not effective or tolerated.
6				If medicinal therapy at step 4 is not controlling asthma symptoms then refer for help from an asthma specialist.

Step up if control is not achieved and step down level when control is achieved

Notes

1. Inhalers shown in this document are for illustrative purposes only. Please see prior page regarding inhaler selection
2. Some medicines in this document are only licenced in people aged 18 years and above
3. Please see **link** for advice regarding asthma control [or use QR code]

Scan the QR code for more on asthma control