**Humber and North Yorkshire (HNY) 2023 Asthma Guidelines: Implementation Strategy**

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**Introduction**

There are more than 100,000 people on primary care asthma registries across Humber and North Yorkshire (HNY). Despite advances in our understanding of asthma and its treatment, including innovative new approaches to management and new therapeutics, asthma outcomes in the UK have stagnated and remain worse than comparable developed nations. The formation of the HNY integrated care board (ICB) presents an opportunity to drive improvements in asthma care across the region. An important driver for change is the development of a unified asthma formulary and guidelines, providing clear guidance for clinicians practicing across HNY in order to facilitate standardised delivery of high quality asthma care. The guidelines were developed collaboratively with clinicians from the broad spectrum of disciplines involved in delivering asthma care across primary, secondary and tertiary care services. Additionally, an aligned patient advisory group ensured that the patient voice is reflected in the guideline and this aligned implementation strategy.

Review of prescribing across the region reveals concerning trends, with high levels of short-acting beta agonist (SABA) prescribing relative to inhaled corticosteroids (ICS), a pattern that is known to be associated with risk of adverse outcomes; including, higher rates of asthma exacerbations, asthma related deaths and environmental harm. Additionally, these prescribing patterns suggest that prior evidence based guidelines had not been widely implemented in practice.

The HNY Asthma Guideline Steering Committee agreed that a comprehensive implementation strategy is needed to support adoption of guideline recommended care. Scaled adoption of the new HNY asthma guidelines has the potential to significantly improve asthma outcomes across the region and reduce the environmental impact of asthma and its treatment, thereby supporting attainment of the NHS long term plan.

**The HNY 2023 Asthma Guidelines Implementation Strategy**

* **Taking a Behaviour Change Approach**

The HNY asthma guidelines endorse ICS-formoterol as the preferred reliever for people with asthma that are aged 12 years and above, as supported by the Global Initiative for Asthma (GINA) since 2019 and, more recently, the Primary Care Respiratory Society (PCRS) in the UK. There is robust clinical evidence that this approach can improve asthma outcomes, including reducing the risk of asthma exacerbations. Despite the evidence underpinning this approach, it is not yet widely embedded within clinical practice across much of HNY. It is therefore important to recognise that the new asthma guidelines reflect a paradigm shift in asthma management and, therefore, clinician and patient behaviour change will be required to bring about meaningful and sustained practice change.

This implementation strategy has been developed with reference to the COM-B model of behaviour change. The COM-B model identifies that factors within the following domains must be addressed in order for behaviour change to occur: capability, opportunity and motivation. It is recognised that factors within these domains interact with each other, exerting influence on subsequent behaviour. The HNY 2023 Asthma Guideline Implementation Strategy will be structured around these domains and operationalised through 2 implementation plans (one for North Yorkshire and one for the Humber) in order to optimise opportunities to leverage local systems and structures to support guideline implementation.

**The HNY 2023 Asthma Guideline Implementation Strategy**

* **Capability, Opportunity and Motivation**

The implementation strategy is structured around the core domains of capability, opportunity and motivation. While these domains can be considered separately, it is important to recognise that i) a single implementation intervention may influence more than one, or indeed all, of these domains simultaneously, and ii) there can be a complex interplay between these domains. For example, motivation can be positively or negatively impacted by an individual’s perception of their capability and opportunity. For example, where somebody perceives that they are unable to achieve behaviour change due to limited capability and/or opportunity, they are likely to be less motivated to attempt change, irrespective of their underlying desire for change. The converse is of course also true. It is therefore important that each domain of the COM-B model is addressed in order to achieve behaviour change.

Implementation of guideline recommended care requires shared decision making between clinicians and patients and it is therefore important to consider how these domains apply to healthcare professionals and people with asthma (and, where appropriate, their carers), and what is required to support both of these groups.

* **Capability**

This domain can be considered in terms of physical capability and psychological capability. When combined with opportunity, capability is what makes behaviour change possible. The following are considered important to support capability in terms of guideline implementation:

Health Care Professionals

*Knowledge and Understanding*

 In order for guideline recommended care to be implemented and sustained, it is essential that HCPs and allied healthcare staff have adequate knowledge and understanding of the guidelines, the principles underlying them (preferred and alternative options) and how to implement them. The depth of knowledge and understanding that is required will vary between role, however, all those in contact with people with asthma or involved in any aspect of their care will be required to have a basic level of understanding, with those making treatment decisions requiring a more in-depth understanding. Education must therefore be delivered widely, with content and delivery tailored to audiences with differing levels of pre-existing knowledge and understanding and be accessible to varied audiences.

As part of supported guideline implementation, an education programme will be developed and delivered, supported by bespoke web-based resources that will be made available to clinicians and other members of the healthcare team via an ICB webpage.

*Communication Skills*

Shared decision making is an important principle of healthcare and is important in supporting subsequent concordance with prescribed therapies. In order to address patient behaviour, it will be essential for healthcare professionals implementing treatment changes to be equipped with adequate communication skills to support patient behaviour change, with consideration of patients’ capability, opportunity and motivation for change. Education resources will be developed for clinicians to support

their understanding of behaviour change and equip them with communication skills to support patients to adopt guideline recommended treatment.

*Guidelines and Access to Treatment (pharmacological and non-pharmacological)*

In order to improve outcomes for asthma patients, it is essential to have clear, evidence-based guidance that provides both capability and opportunity to use treatments that will achieve this goal. The new HNY asthma guidelines endorse asthma management approaches that are well evidenced to reduce asthma exacerbations, reduce overall steroid burden and reduce health care resource use in asthma, when compared with current prescribing practice across HNY. It is hoped that the new asthma guidelines will support clinicians’ capability to effect positive change in asthma care. The HNY Asthma Guideline Steering Committee will work with local Area Prescribing Committees and healthcare organisations across the region to facilitate adequate supply and access to medicines endorsed by the new asthma guideline. Additionally, opportunities to embed guideline recommendations within electronic support systems used within primary care will be explored.

*Tools and Resources*

In order to effect change it is important to ensure that those that require a change in treatment can be identified and reviewed, that guideline recommended care can easily be prescribed using digital systems and that clinicians can access resources to support self-management.

* Identification of uncontrolled asthma

Education resources will be developed to support clinicians to identify people registered with their practice that have uncontrolled asthma. Links to external tools, resources and support will be provided on the HNY Asthma Guidelines webpage.

* Supporting guideline recommended prescribing

Opportunities to support guideline implementation using digital tools, such as Ardens (a clinical decision support and workflow solution) and AccuRx (a shared communication platform), will be explored and, where possible, implemented across the ICB with aligned education.

* Supporting asthma self-management aligned to guideline recommended care

The HYN Asthma Guidelines Group will explore national ambitions to develop AIR/MART focussed personalised asthma action plans and where possible, collaborate to support their development and accessibility for HNY clinicians. If delays are anticipated in the delivery of national documents, we will consider developing HNY specific documents to support guideline implementation.

People with Asthma and their Carers

*Knowledge and Understanding*

When making shared decisions about asthma treatment, it is important that patients are provided with sufficient knowledge and understanding to enable informed decision making. Education resources will be developed for health care professionals to support communication during consultations, including delivering patient education. However, recognising the limited time available during asthma consultations, patient facing education materials will be developed and made available on a patient facing ICB webpage, with printable versions that can be made available to patients by practices.

Additionally, a communications strategy will be developed with the ICB communications team to raise public awareness about the key principles of asthma care, the dangers of SABA over-use and how to access more information and advice about their asthma and its management.

*Peer Support*

The HNY Asthma Guideline Patient Advisory Group felt that peer-support could be utilised to facilitate patient behaviour change, through shared learning from those with lived experience of asthma and guideline recommended treatments. This will be explored within implementation plans.

*Health Literacy*

Health literacy refers to an individuals or communities ability to access, understand, appraise and use information and services to make health decisions. Health literacy incorporates both personal characteristics/skills and social resources. Functional health literacy describes the basic health literacy skills necessary for someone to obtain and apply relevant health knowledge to a limited range of activities. Functional health literacy is therefore the minimum required level of health literacy to enable people living with asthma to engage in their care. Healthcare professionals involved in implementing HNY asthma guidelines will be provided with access to Health Education England resources to support people with asthma attain Health Literacy. Additionally, public facing resources and communications will be developed to be accessible to those with limited literacy and numeracy and will be presented using multiple methods (i.e. written and spoken resources) to aid accessibility.

*Tools and Resources*

Patient focussed self-management resources, including AIR/MART focussed personalised asthma action plans and will be developed (see above). Existing publicly available resources will be reviewed and, where considered appropriate, links provided on the ICB website. Examples of resources that will be considered include those that have been developed by Asthma + Lung UK, PCRS, Greener Practice and SENTINEL Plus.

* **Opportunity**

Healthcare Professionals

*Time and Capacity*

In order to effect change, clinicians require the time and capacity within their work schedule to i) address issues relating to capability and ii) review people with asthma in order to optimise care. Consultation duration needs to be of a sufficient length to enable patient education and shared decision making, in addition to a high quality structured clinical assessment.

To support scaled guideline implementation, it is anticipated that clinical time will need to be dedicated to enable:

* Annual asthma reviews
* Review of uncontrolled asthma patients
	+ Reactive – in response to reported symptoms and/or asthma exacerbations
	+ Proactive – by identifying at risk populations (e.g. those using ≥3 SABA in the past year and/or with ≥2 oral corticosteroid courses)
* Review following treatment change

People with asthma should be reviewed following a change in treatment to assess response and re-enforce education. There is added value where this is undertaken by the clinician that made the original treatment change but this may not always be possible. Recognising the limited capacity within primary care for review appointments after initial treatment change, consideration should be given to utilising community pharmacies New Medicines Service. Where community pharmacy services are being utilised to support a change in treatment, care should be taken to ensure that they have access to and have reviewed education resources in order to ensure adequate understanding of the new HNY Asthma Guideline and its underlying principles. Community pharmacy staff will be included in the communications strategy and education plans.

During clinical encounters with people with asthma, it is important that clinicians have adequate time to enable delivery of guideline recommended care. It is therefore important to consider consultation duration and how direct contact time between clinicians and people with asthma can be used most effectively.

* Consultation Duration

Many GP consultations last 10 minutes or less and practice nurse asthma reviews last 20 minutes. This means that there is limited time to undertake the core components of an asthma consultation and support treatment change, which may require a change from a long established behaviour that is underpinned by strongly held views, such as SABA over-use. Patient facing education materials, digital systems and other resources will be developed to support clinicians to be able to make optimal use of consultation time. Tools and resources will be developed to act as an extension to the consultation that people with asthma can access outside the formal consultation time.

People with Asthma and their Carers

*Physical Opportunity*

In order for somebody living with asthma symptoms to access guideline recommended care, the following must occur: i) asthma must be considered as a potential diagnosis when they present with symptoms; ii) objective testing must be accessible to confirm an asthma diagnosis; iii) they must have access to a suitably trained clinician to interpret the investigations, confirm a diagnosis and initiate therapy; iv) they must be able to obtain their treatment locally and conveniently; v) they must be able to use their treatment effectively; and vi) they should be supported and empowered in self-management. It is therefore essential that they have:

* + Local access to basic asthma diagnostics
	+ *Access to advanced asthma diagnostics (where necessary)*
	+ *Access to clinicians with appropriate knowledge and expertise to support delivery of guideline recommended care*
	+ *Access to medicines from local dispensaries/pharmacies on a regular basis*
	+ *Access to inhaler technique assessment and training*
	+ *Access to resources and materials to support self-management (e.g. personalised asthma actions plans).*

*Social Opportunity*

When considering social opportunity, it is essential to consider how inequalities and health literacy can impact individual’s ability to access care and successfully transition to and sustain new treatment approaches. It is important to consider the following:

* Availability of resources to enable access to guideline recommended care
* Affordability of healthcare access and treatment
* Support to enable individuals to attain functional health literacy
* Access to support from family / friends / formal caregivers

The HNY Guideline Committee will work with the HNY Respiratory Network and the ICB to support development and delivery of asthma diagnostic pathways. Additionally, healthcare professional education will include asthma diagnosis, interpretation of investigations and assessment of training of inhaler technique. Work will be undertaken with local Area Prescribing Committees and pharmacies to ensure access to guideline recommended therapies.

* **Motivation**

Motivation is the end result of mental processes that energise and direct behaviour change. Motivation is a complex concept and there are a broad range of theories and models used to describe it. We can consider that our behavioural responses arise in response to external stimuli interacting with internal cognitive and emotional processes, weighing of wants and needs and processing of impulses and inhibitions. An individual’s motivation to alter their behaviour can be influenced by a number of factors, including perceived self-efficacy to effect change (i.e. an individual’s perception of their own capability and opportunity).

Healthcare Professionals

When considering what will motivate healthcare professionals to adopt the HNY Asthma Guidelines, it is useful to consider the question, ‘Why should I implement the HNY guideline?’ There are of course many ways to answer this question, and consideration should be given to the core beliefs, wants and needs, and impulses and inhibitions that may exist within certain groups of clinicians or individuals. Tailoring implementation plans to maximise motivation across all clinicians/healthcare staff will optimise the opportunity for scaled guideline implementation and the resulting clinical, environmental and cost benefits. I order to achieve this, it is important to address:

* *Knowledge and Understanding*

It is essential that healthcare professionals have sufficient understanding of the HNY Adult Asthma Guidelines and their underlying principles in order for them to recognise the potential patient, healthcare and environmental benefits. This will leverage individuals’ desire to ‘do the right thing’ as an intrinsic motivating factor.

* *Personal / Professional Risk versus Reward*

It is important to consider the risk/benefit assessment that healthcare professionals will undertake when considering clinical decisions, including those essential for guideline implementation. This will include consideration of risk/benefit to themselves (e.g. will changing treatment lead to increased or decreased work load in the short/medium/long term? Will changing treatment lead to personal reward such as attainment of targets or recognition of good practice?), risk/benefit to the patient (e.g., will changing treatment improve their asthma control, reduce exacerbation etc?), risk/benefit to the health service

(e.g., will a change in treatment reduce or increase cost to the NHS?), and risk/benefit to the environment (e.g., will a change in treatment have a positive or negative impact on the environment?). The communications and education plan will endeavour to provide evidence supporting the potential positive impact of HNY Asthma Guideline implementation across these factors with the aim of supporting motivation for guideline implementation.

Additionally, the HNY Guidelines Steering Committee will work with Medicines Optimisation Teams and the ICB to align prescribing incentives with guideline recommended care, providing extrinsic motivation through financial reward being associated with positive changes in prescribing practice.

People with Asthma and their Carers

*Personal Risk versus Reward*

As with healthcare professionals, when considering a change in behaviour relating to their treatment, people with asthma will assess the potential risks and benefits associated with the change. It is therefore important that people with asthma, and those that support their health related decision making/behaviour, are provided with high quality and accessible information, informing their motivation to support or resist guideline recommended care. Individuals will be motivated by different things and this should be considered within local guideline implementation plans, with communications and engagement strategies tailored to the local population and leveraging potential motivating factors, such as clinical, environmental and economic benefits.

**The HNY 2023 Asthma Guideline Implementation Strategy**

* **Summary**

The HNY 2023 Asthma Guidelines have potential to improve asthma care, drive improvements in asthma outcomes and reduce the environmental impact of asthma and its treatment across HNY. However, guideline publication alone is not enough to bring about practice change at scale. Therefore, the HNY Asthma Guideline Steering Committee has developed this strategy to support wide-scale guideline implementation across the region. The implementation strategy is based on the COM-B model of behaviour change, leveraging opportunities to increase systems and individuals capabilities and opportunities to implement guideline recommended care while actively considering factors that will motivate healthcare professionals and people living with asthma to effect change.