

RAISING THE BAR

Improving asthma care
in Wales



ASTHMA+
LUNG UK

May 2023

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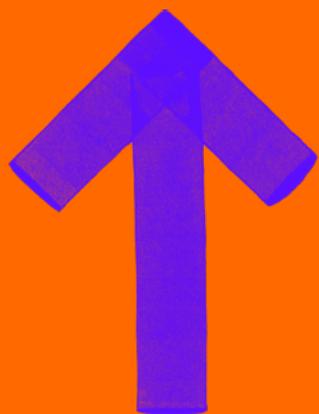
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“In our most recent survey, we found that only 23.8% of people with asthma received basic care in 2023.”

Executive summary

The legacy of the pandemic looms over much of the Welsh NHS and lung health, including asthma care which has suffered. Poor access to care, a reliance on reliever (rather than preventer) medication and the absence of a new delivery plan, has left Wales with some of the worst asthma outcomes in Europe.



Lung health outcomes in Wales are poor

Wales has the highest respiratory deaths of any nation in Western Europe¹ and our asthma deaths remain high. Yet, we know that two thirds of asthma deaths are preventable with better basic care. Women are the worst impacted - they almost twice as likely to die from an asthma attack than men. We have innovative and life-changing treatments which are available on the NHS, but, across Wales, the blue reliever inhaler remains the mainstay of asthma treatment, despite calls for its removal as sole treatment in the over 12s due to safety concerns².

Worst levels of basic asthma care since 2014

In our most recent survey, we found that only 23.8% of people with asthma received basic care in 2023. This equates to almost 240,000 people with asthma in Wales missing out on even the most basic elements of care of primary care. The COVID-19 pandemic forced a move to remote care, but we don't yet have the technology or skills in primary care to be delivering good quality basic care remotely. This has meant a huge reduction in access to basic asthma care.

People with poorly controlled asthma are being failed by the system

Poorly controlled asthma - that is, having frequent symptoms that interfere with everyday life, requiring three or more reliever inhalers per week – can have a devastating impact on every part of someone's life. Almost half (48%) of people with asthma have poorly controlled asthma. This is being fuelled by the lack of basic care, and not enough research into different types of asthma and how they should be treated. Asthma is more prevalent within poorer communities, with people from disadvantaged socio-economic groups more likely to be exposed to triggers of asthma, such as smoking and air pollution.

“Our survey found that the vast majority of people with asthma still use a separate reliever inhaler, with one in five people (22%) using six or more.”

Despite evidence that poor inhaler technique increases the likelihood of asthma attacks, we found that just 47.8% of people with uncontrolled asthma had their inhaler technique checked in our most recent survey. As well as being dangerous to the individual this is also costly to the NHS and negatively impacts our environment. We need to move towards pathways that make sure those with evidence of poorly controlled asthma are proactively identified, have their treatment optimised and be referred for specialists assessment and consideration of life-changing biologic drugs when necessary.

Misunderstanding about asthma is leaving people exposed

Our survey found that the vast majority of people with asthma still use a separate reliever inhaler, with one in five people (22%) using six or more. Almost 90% (88%) of people are at risk of being over-reliant on their reliever inhaler. This reinforces wider evidence that reliever inhalers are being over-relied upon, leaving many people with asthma at risk of asthma symptoms and life-threatening asthma attacks because reliever inhalers do not address the inflammation that causes symptoms. It's time for asthma to get the attention it deserves.

The NHS Wales app needs to be rolled out further

Most people with asthma in Wales are not aware of the free NHS Wales app and the support it can give people to manage their condition. With 36% of app users reducing their visits to the GP and 19% reducing their admissions to Accident and Emergency departments, this app has potential to improve the outcomes of tens of thousands of people with asthma who are happy to engage with digital health.

We're demanding a new way forward

We're calling on the Welsh Government to make asthma a priority and deliver the following recommendations:

- ➔ Invest in an awareness raising campaign to increase public and healthcare professional awareness of what asthma is, how serious it can be, and how it should be treated.
- ➔ Ensure lung health is made a priority in plans to tackle health disparities, in order to improve asthma outcomes across Wales.
- ➔ Invest in more research into better diagnosis and treatments for people with asthma.
- ➔ Develop a Respiratory Disease Improvement Plan to implement the new quality statement.
- ➔ Continue funding a national clinical lead and provide the clinical network with a budget to fund national projects and services.
- ➔ Take urgent action to support improvements to self-care, increase access to basic care and address the backlog created by the COVID-19 pandemic.
- ➔ Ensure more proactive identification of reliever overuse and exacerbations, so that people with uncontrolled or difficult asthma can be treated through structured assessment in primary care and appropriate referral to secondary care asthma services.
- ➔ Restart quality assured diagnostic tests in primary care to ensure easy and timely access to diagnostics locally, so everyone with suspected asthma gets the timely and accurate diagnosis they deserve. This must include improving access to current diagnostic tests (including FeNO testing and spirometry).
- ➔ Ensure health boards are following the new All Wales asthma guidance, reducing the number of people with asthma who are prescribed reliever inhalers without any preventer therapies, so that reliever inhalers are no longer over-relied upon.
- ➔ Redevelop the asthma pathway so that people with suspected severe asthma are identified, referred and considered for biologic treatments faster.
- ➔ Support the long-term funding and roll out of the **Asthmahub** and **Asthmahub for Parents** apps to anyone who is able to use the technology.
- ➔ Use behavioural insight to identify the barriers to people with asthma using the apps, increase the usage and the benefit to people's health.
- ➔ Develop a system that would allow patient recorded data from the apps to interact with GP systems.
- ➔ Ensure that people who are unable to use digital apps can still access their treatment and support face-to-face and through paper asthma action plans.
- ➔ Provide adequate resources so that healthcare professionals can provide effective person-centred asthma reviews, with follow-up as required
- ➔ Prescribe the right inhaler medication and device for each individual patient. This should be chosen appropriate to the patient's lifestyle, disease severity and preference while also minimises the effect on the environment.
- ➔ Ensure that changes to inhalers and prescriptions occur in consultation with patients and with adequate assessment of inhaler technique and appropriate follow up.

Asthma is serious

Asthma is serious. It can have a devastating impact on people's lives and tragically 75 people still die every year from an asthma attack in Wales.

In our recent survey half of people (53%) with asthma don't think that their asthma is taken seriously. More than 2 in 5 (42.5%) have faced discrimination because of their asthma. This is despite 314,000 people being affected by asthma in Wales.

Two thirds (66%) of people with asthma have uncontrolled asthma symptoms that require oral steroids (which can cause devastating side effects such as bone damage and weight gain) or multiple reliever inhalers every year. Many people with asthma therefore live in constant fear of their next asthma attack. And we know that too often- people are relying on their reliever inhaler instead of optimising effective preventative treatments, which is putting them at increased risk of a life-threatening asthma attack⁴.

The poorest people are affected the most

Uncontrolled asthma, or sometimes referred to as 'difficult' asthma, is caused by a range of factors, often underpinned by a lack of basic care and poor self-care or self-management. These factors include poor adherence to prescribed medication, other untreated health conditions, poor mental health, smoking, lifestyle factors and even the wrong diagnosis altogether. 73.5% from our lowest household income bracket (below £20,000 a year) have uncontrolled asthma symptoms, compared to 47.8% from the highest income bracket (above £70,000 a year).

Women are more likely to die and have uncontrolled symptoms

Uncontrolled asthma, or sometimes referred to as 'difficult' asthma, is caused by a range of factors, often underpinned by a lack of basic care and poor self-care or self-management. These factors include poor adherence to prescribed medication, other untreated health conditions, poor mental health, smoking, lifestyle factors and even the wrong diagnosis altogether. Once again, the poorest are hit hardest. Our survey shows 73.5% from our lowest household income bracket (below £20,000 a year) have uncontrolled asthma symptoms, compared to 47.8% from the highest income bracket (above £70,000 a year).

We need change

Welsh Government need to:

- Invest in an awareness raising campaign to increase public and healthcare professional awareness of what asthma is, how serious it can be and how it should be treated.
- Ensure lung health is made a priority in plans to tackle health disparities, in order to improve asthma outcomes across Wales.
- Invest in more research into better diagnosis and treatments for people with asthma.

A woman with long, wavy brown hair is sitting at a wooden table. She is wearing a light-colored, sleeveless button-down shirt. She is holding a small, round container to her mouth with her right hand. The background is a wall with a checkered pattern and some framed pictures. The entire image has a warm, orange-toned overlay. A blue text box is positioned in the lower-left corner of the image.

“Our recent analysis shows that women are almost twice as likely to die from an asthma attack than men.”

The Respiratory Health Delivery Plan

In 2014 Welsh Government published their first Respiratory Health Delivery Plan⁷, an ambitious document developed in the context of the Together for Health plan and designed to direct Health Boards to improve lung health, including asthma care. The document provided a 'framework for action by Local Health Boards (LHBs) and NHS Trusts' and 'set out the Welsh Government's expectation of the NHS in Wales to tackle lung diseases in adults and young people wherever they live in Wales and whatever their circumstances.' The delivery plan would be overseen by a Respiratory Health Implementation Group (RHIG) including representation from Asthma UK and British Lung Foundation (our legacy charities)

Writing his foreword, the acting Chief Executive of NHS Wales, Simon Dean, wrote:

'I commit Local Health Boards and NHS Trusts, working together with their partners, to plan and deliver safe, sustainable, high quality respiratory care for their populations. I will support them in this endeavour, holding Local Health Boards to account on the outcomes they deliver for their populations and their contribution to the overall health of the people of Wales.'

Rather than focussing on conditions, the 2014 plan focussed on six themes –

- Preventing poor respiratory health.
- Detecting respiratory disease quickly.
- Delivering fast, effective treatment and care.
- Supporting people living with lung disease.
- Improving Information.
- Targeting research.

To treat asthma, health boards were required to:

- Provide patients, and carers, with relevant, appropriate and adequate information about their respiratory conditions and allergic disorders.
- Audit data on treatment steps, concordance with treatment and asthma self-management plans to support the development of improved service delivery.
- All patients attending hospital with acute asthma to have a discharge letter delivered to the GP within 24 hours, or by the next working day.
- During the four years the delivery plan led to the roll out of asthma action plans across Wales, new spirometers were distributed to every GP surgery, and a Welsh Difficult Asthma Group (WeDAG) was established to coordinate the diagnosis and treatment of severe asthma.

The 2018 Respiratory Health Delivery Plan

In 2018 the second Respiratory Health Delivery Plan⁸ was published with a chapter focussed on asthma. It was an ambitious 66-page document led by a National Clinical Lead, Dr Simon Barry.

The asthma chapter contained 8 actions for health boards and the Respiratory Health Implementation Group (RHIG). Health Boards to work together to:

1. Nominate a lead physician for asthma with a dedicated secondary care asthma clinic, supported by an asthma specialist nurse.
2. Employ an asthma clinical lead within primary care responsible for implementing the recommendations from national review of asthma deaths.
3. Support the development and implementation of an up-to-date All-Wales prescribing pathway on the management of asthma, to ensure cost-effective, evidence-based prescribing.
4. Integrate asthma diagnostic guidelines into clinical practice. This will require different ways of working, such as the establishment of diagnostic hubs within primary care, with support from secondary care.
5. Ensure their asthma service is sufficiently resourced to ensure patients with severe asthma are able to access new therapies within 3 months of publication of relevant NICE guidance.

RHIG will engage with Health Boards to:

6. Support the development of an All-Wales Prescribing Pathway.
7. Support the development of the WeDAG MDT including coordinator support and database development to allow accurate record of patients discussed, recommendations and outcomes.
8. Develop an All-Wales airways database.

The 2018 delivery plan was envisaged as a three year document, but due to the pandemic and changes in government, it remained until 2023. During this time, the NHS asthma app was launched, All Wales asthma guidelines were developed, All Wales standards and education were developed for health care professionals, and Quality Improvement projects were rolled out. RHIG received a £1 million a year to fund local pilots or national programmes during this time. Without this funding, the apps, databases and education wouldn't exist.

“The 2018 delivery plan was envisaged as a three year document, but due to the pandemic and changes in government, it remained until 2023.”

During the 2021 Welsh General Election we called on the next government to commit to a new Respiratory Health Delivery Plan. The existing plan had not achieved its objectives and evidence from our own annual asthma survey supported by the primary care audit, showed that services were getting worse. Nevertheless, we believed that an ambitious document with clear objectives for health boards was needed to rebuild asthma services and improve people's lives. Unfortunately, the Welsh Government chose a different approach.

Quality Statement for Respiratory Disease

Following the parliamentary review of health and social services, the Welsh Government published 'Healthier Wales: Our plan for health and social care' in 2018. This new strategy marked a shift from delivery plans to quality statements, defined as:

“A series of ‘quality statements’ which describe the outcomes and standards we would expect to see in high quality, patient focussed services will be developed for the NHS. These will set out ambitions to be delivered consistently across Wales.”

Starting with cancer, Welsh Government has published a series of quality statements, including one for respiratory disease in November 2022. The quality statement is fairly short at just 8 pages and contains 23 quality attributes¹⁰ that cut across different respiratory conditions. There are specific commitments for health boards to provide specialist teams competent in the management of asthma, to provide difficult asthma services, and to offer the NHS Wales asthma app to children and adults. RHIG will become a clinical network and the £1 million a year funding pot will be absorbed into the NHS Wales Executive.

The quality statement contains positive aspirations, but without an implementation plan, it is difficult to see how change will be delivered within health boards. The Welsh Government announced a Cancer Services Improvement Plan in January 2023, but are not planning to develop improvement plans for other conditions. With 1 in 5 people affected by lung conditions and Wales having the highest level of respiratory deaths of any nation in Western Europe, we believe we need an improvement plan to implement the new quality statement.

We need change

Welsh Government need to:

- Develop a Respiratory Disease Improvement Plan to implement the new quality statement.
- Continue funding a national clinical lead and provide the clinical network with a budget to fund national projects and services.

A photograph of a person's hand hovering over a laptop keyboard. In the foreground, a white inhaler lies on the keyboard. The image has a purple tint. An orange box with white text is overlaid on the bottom left.

“Half of people with asthma don’t think that their asthma is taken seriously.”

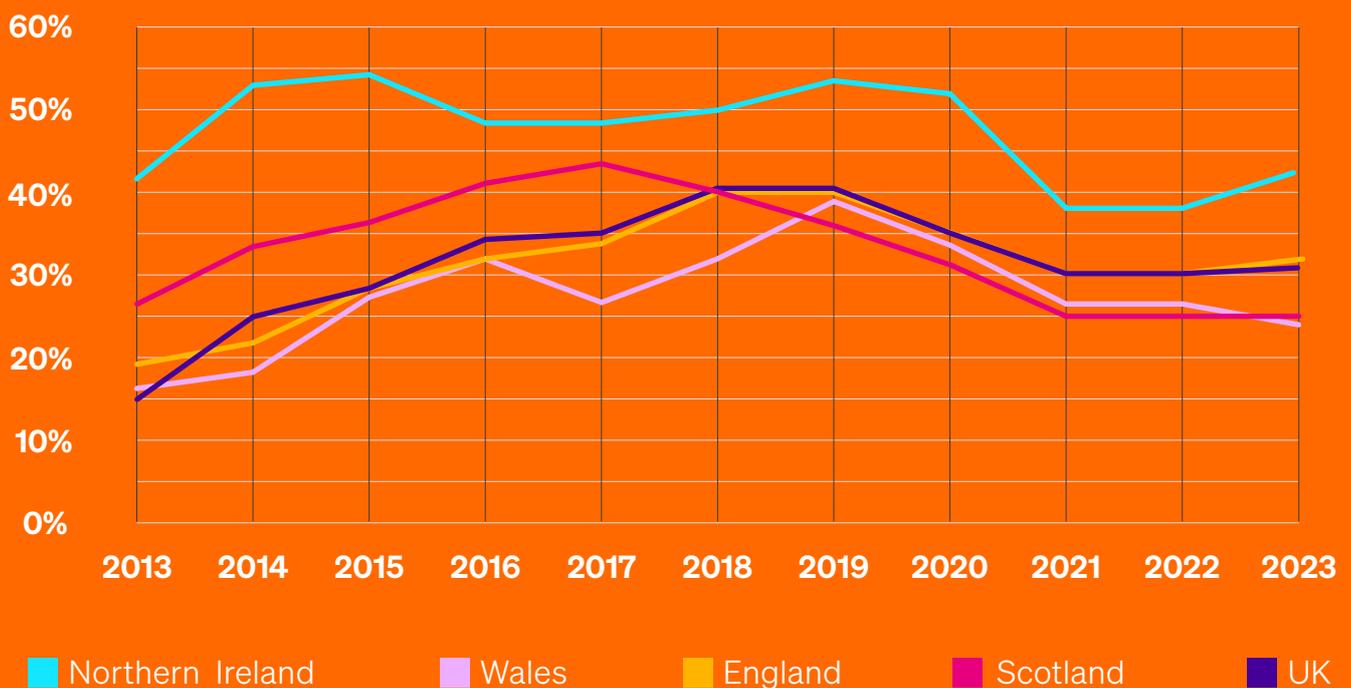
Fighting for the right to basic asthma care

We're fighting for everyone's right to basic asthma care, including a written asthma action plan, inhaler technique check and annual review. Our recent survey found the lowest levels of asthma basic care since 2017. Only 23.8% of people were receiving basic care across Wales, but this varied between health board, with the highest levels in Hywel Dda (38.2%) and the lowest in Cwm Taf Morgannwg (14%). This is equivalent to almost 240,000 people with asthma not getting the fundamental basics needed to help them manage their condition.'

“The components of basic care are opportunities to help people with asthma to understand their condition, to know how to keep their asthma under control and know when to seek help. Without good access to basic care, people with asthma can't be expected to know how to self-manage their condition well.”

Dr. Andy Whittamore, GP

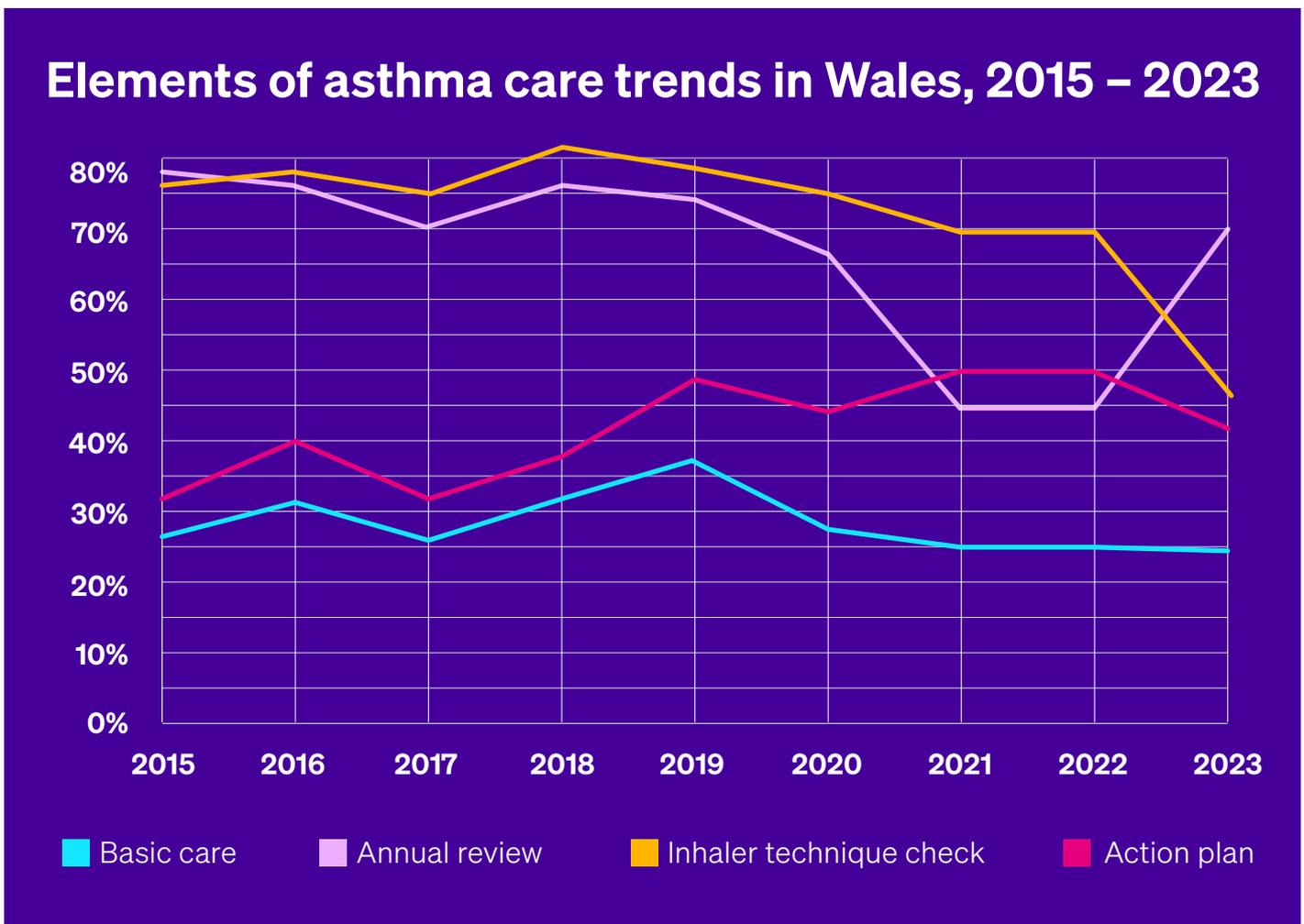
Basic care trends by nation, 2013 – 2023



Pressure on primary care

The first phase of the pandemic brought a complete stop to annual reviews for chronic conditions such as asthma. Whilst some GP practices were able to restart services via phone or video, many weren't able to deliver annual reviews and we saw the proportion of people having an annual review drop from 76.8% in 2018 to 70.6% in 2023. This key aspect of basic care being missed is likely to result in more people having poorly controlled asthma, poor inhaler technique and a lack of an up to date effective asthma action plan. In turn this will lead many more people being at increased risk of symptoms and asthma attacks and to higher unscheduled episodes at GP surgeries and at accident and emergency departments.

Our survey showed that only 46.9% had had their inhaler technique checked. Inhalers are produced in two categories – dry powder inhalers (DPIs) and metered dose inhalers (MDIs), but even within these categories, devices can vary and without being shown the right technique increasing the possibility of an asthma attack or other side effects. Inhaler technique training is incredibly cost-effective, ensuring medication is not wasted, reduces the risk of asthma attacks, reduces unscheduled admissions and enables people with asthma to stay well¹¹.



Our data is based on a patient survey, but the Welsh Government has also funded a primary care audit of asthma and COPD services through the National Asthma and COPD Audit Programme (NACAP) which audited patient records from 314 out of 389 practices. This audit asked a similar question on inhaler technique checks and found that as little as 25.1% had received one. There are many different types of inhalers, each with different inhaler techniques. It is crucial that health care professionals tailor inhaler devices to each individual person with asthma.

The third criteria to receiving basic care is having a written asthma action plan. Our survey found that 43.2% had one, but the NACAP audit showed only 25% of people were listed as having one on their GP record. This could mean that GPs are not recording it on their notes or potential people with asthma are using the NHS Wales asthma app or paper-based action plans, without their GPs involvement.

“We’re fighting for everyone’s right to basic asthma care, including a written asthma action plan, inhaler technique check and annual review.”

Diagnostic tests have also been hit hard by the pandemic. Spirometry has still not restarted in most of primary care, despite Welsh Government instructing health boards to restart services, and fractional exhaled nitric oxide (FeNO) testing is not routinely available. The recent NACAP audit found that only 43.9% of adults and 34% of children had a record of at least one objective measurement to confirm their diagnosis. Overdiagnosis leads to unnecessary treatment such as expensive inhaled medication and repeated courses of high-dose oral corticosteroids (OCS) - both of which carry risks of side effects and significant costs to the NHS. Similarly, underdiagnosis risks daily symptoms, (potentially serious) exacerbations and long-term airway remodelling. In the 2018-20 audit, 76.3% of adults and 67.4% of children and young people had a record of at least one objective measurement, suggesting a significant number of children and adults may have an incorrect diagnosis of asthma.

Follow up for emergency or unscheduled care is also lacking

Although we have seen some improvement, our survey has shown that 65.1% of people who received emergency or unscheduled care did not get a follow-up within 2 working days as recommended by the National Institute of Health and Care Excellence (NICE) clinical guidelines. In fact, 37% said they did not feel supported after receiving emergency care. This follow-up care is crucial in preventing future asthma attacks through proper assessment. It is an opportunity to deliver basic care and optimise their treatment to prevent asthma attacks.

Treating uncontrolled asthma should be simple

If we tackled uncontrolled asthma, a huge difference could be made to asthma outcomes across the UK. An approach has been developed called SIMPLES to review a person with uncontrolled asthma after a confirmed diagnosis that should be adopted across the UK. This includes:¹²

- Support to stop smoking.
- Inhaler technique (i.e. being shown how to use their inhaler by a trained healthcare professional).
- Monitoring (assessing symptoms and monitoring peak flow).
- Pharmacotherapy (including increasing inhaled corticosteroids and addressing adherence).
- Lifestyle (advice on diet, exercise, alcohol and weight maintenance, as well addressing and treating comorbidities).
- Education (understanding of the condition and written asthma action plan in place).
- Support (e.g. structured reviews).

Multiple opportunities are being missed to transform people's lives.

We found that in the last year most people with uncontrolled asthma (figure 6) didn't get the support they deserve and need:

- More than one in two (51%) weren't even asked about their asthma symptoms.
- Only a third (36.7%) of people who smoke were offered support to quit.
- Just 23% had their inhaler technique checked.
- Over two thirds (69%) didn't believe they had been given enough information to understand their condition or their treatments and similar numbers weren't given the tools to help them monitor their symptoms.
- Just over a third (35%) had different treatment options discussed with them or had their inhaler changed (such as to a stronger dose preventer).
- Hardly anyone (14%) was given lifestyle advice or asked how their mental health might be impacting their asthma.

We need change

Welsh Government need to:

- Take urgent action to support improvements to self-care, increase access to basic care and address the backlog created by the COVID-19 pandemic.
- Ensure more proactive identification of reliever overuse and exacerbations, so that people with uncontrolled or difficult asthma can be treated through structured assessment in primary care and appropriate referral to secondary care asthma services.
- Restart quality assured diagnostic tests in primary care to ensure easy and timely access to diagnostics locally, so everyone with suspected asthma gets the timely and accurate diagnosis they deserve. This must include improving access to current diagnostic tests (including FeNO testing and spirometry).

**“We need
to develop a
respiratory
disease
Improvement
plan to implement
the new quality
statement.”**



The problem with reliever inhalers

Reliever inhalers are lifesaving in an asthma attack, but they don't treat the inflammation that causes asthma symptoms. It is estimated that 20% of people with asthma aren't prescribed a preventer inhaler, which means over a million people with asthma solely rely on a reliever inhaler for treating their condition leaving them at risk of a life threatening asthma attack.¹³ We know that many people with asthma also don't take their preventer medication regularly and instead rely on their reliever.

More than a third of people are high risk of being over-reliant

Wales has a huge problem with overuse and over-reliance on reliever inhalers. Most people we surveyed have a separate reliever inhaler (92%) and more than one in five (22%) used six or more relievers in the last year, even though people should be using one or two a year at most. Using the validated reliever reliance questionnaire, we assessed the risk of over-reliance on reliever inhalers in the general asthma population. Alarmingly, we found that more than a third (37%) of people are considered at high risk of being over-reliant on their reliever inhaler and more than half are medium risk. In fact, there is evidence to suggest that some people develop a complex behavioural relationship with their reliever and this is often referred to as 'over-reliance'.

We also found:

- Almost a quarter (22%) of people said that their reliever inhaler is the only asthma treatment they can rely on.
- 19% (almost one in five) said they prefer to rely on their reliever inhaler rather than their preventer.
- More than half (57.6%) said they don't worry about their asthma if they have their reliever.

This is even though the standard blue reliever inhaler does not treat the underlying causes of asthma. A regular preventer inhaler dampens down the inflammation that causes asthma symptoms, and increases the risk of life-threatening asthma attacks.

This is putting lives at risk

Overuse of reliever inhalers is associated with increased risk of asthma attacks, hospital admissions and even death¹⁴. Often, people with asthma are being encouraged to treat their symptoms with their reliever inhaler rather than to address the root causes of these symptoms. Every single day, people's lives are being put at risk. Many are unaware of the rationale behind the treatments that they are given, and many healthcare professionals do not adequately monitor or assess patients who appear to be overusing their reliever or underusing their preventer therapies. Since relievers give instant relief to symptoms, it is often perceived as more effective than preventer medication¹⁵. Although someone should have a reliever on them all the time, they should hardly be needed because the preventer inhaler is working quietly in the background.

We need change

Welsh Government need to:

- Ensure health boards are following the new All Wales asthma guidance, reducing the number of people with asthma who are prescribed reliever inhalers without any preventer therapies, so that reliever inhalers are no longer over-relied upon.
- Redevelop the asthma pathway so that people with suspected severe asthma are identified, referred and considered for biologic treatments faster.

NHS Wales asthma self-management app

Building on the NHS Wales respiratory education videos, in 2020 NHS Wales launched the *Asthmahub* and *Asthmahub for Parents* – two free-to-use self-management apps designed to help people manage their asthma treatment and care.

The purpose of the apps was to support the long-term management of patients with asthma and COPD, to ensure every patient has a personalised management plan that is clear and easily accessible in emergencies, as well as providing appropriate supplementary advice, education, and support. The apps also help healthcare professionals as a tool to promote self-management and a reliable resource to which they can signpost patients.

Together with the COPDhub the apps have had over 20,000 downloads, and 99% of GP practices in Wales have patients using them. Previous data from users have shown that there is no variation in uptake geographically, nor by deprivation index of GP surgeries. The developers of the app, ICST, have found that 90% of users find the app helps them manage their condition, and that 60% of users were introduced to the apps through their healthcare professional.

How successful are the apps?

In November 2022 ICST conducted a survey sent out to 10,000 current app users receiving responses from 370 of them.¹⁶ They used this sample to evaluate the success of the app.

When looking at results for all users, there is an improvement in condition management after using the app and many people report a decrease in GP visits and accident and emergency admissions for their respiratory condition. Initially respondents are asked prior to downloading the app, how well managed their condition was. The average was 6 out of 10 and it rose to 7 out of 10 for people using the apps. When asked to compare how often they are visiting their GP now versus how often they would visit before they used the app, 22.28% of people said the number of visits had reduced.

Respondents were asked a similar question about the number of times they had been admitted to hospital, and on average it had fallen by 15.8%.

The evaluation showed that people who had used the app for over six months were more likely to have seen a benefit, with GP visits decreasing by 35.71% and hospital admissions down by 18.57%.

Feedback from users

"It would be good if inputted data was sent to GP or asthma nurse or if they had access to the information."

"It is keeping a good PF record for my consultant and evidenced changing to a new biologic."

"I use the app to show my manager that I'm taking appropriate action to care for my asthma. Prior to the App I was always told if I'm not taking steroids, I'm not managing my asthma. The app has helped me educate my manager."

"It's brilliant. Great information. Useful things to show and discuss with my GP."

"It would be useful if GP could be more aware and accepting of the app."

The survey results are valuable when it comes to assessing how medical apps can be used to improve patient self-management of a long-term condition. Not only do users report improved measures of wellness, but also fewer GP visits and hospital admissions, reducing the burden of these conditions on the already stretched post-pandemic health system.

The benefits of using digital health solutions in healthcare seem obvious; there can be more convenience and agency for users in monitoring their own health, healthcare costs to the NHS can be drastically cut down and there can be easier and more efficient patient data collection for healthcare professionals to make informed decisions about care. The challenge lies in encouraging people to download them and continuing to use them. 20,000 downloads in a population of 3.1 million people is a good start, but we need to roll these apps out far wider to make positive change to people with asthma across Wales. High quality engaging content on the app is key, but in the long term there needs to be an interface with NHS Wales IT systems so people feel that the data they are inputting is actually being used by their health care professional.

Ongoing evaluation and deeper understanding of patient use of the apps will be invaluable. We need to further understand how many are using it regularly, how many drop off after 6 weeks, what would help more people use it, what are clinician barriers and how can we integrate this into the new NHS Wales app. Across the UK, the lack of uptake of condition-specific apps might be explained by a desire from people not to constantly monitor their long-term condition. Insights from our work with Public Health England¹⁷ have found that many people with asthma do not want to routinely acknowledge their asthma and continually monitor it. We hope to apply this research as the *Asthmahub* and *Asthmahub for Parents* develop.

We need change

Welsh Government need to:

- Support the long term funding and roll out of the *Asthmahub* and *Asthmahub for Parents* apps to anyone who is able to use the technology.
- Use behavioural insight to identify the barriers to people with asthma using the apps, increase the usage and the benefit to people's health.
- Develop a system that would allow patient recorded data from the apps to interact with GP systems.
- Ensure that people who are unable to use digital apps can still access their treatment and support face-to-face and through paper asthma action plans.

A woman with long dark hair is shown from the chest up, looking down at a small object she is holding in her hands. The background is a bookshelf filled with books. The entire image has a warm, orange-red color cast. A blue rectangular box is overlaid on the bottom left, containing white text.

“Inhalers are key treatments for patients with asthma as they deliver drugs directly to the lungs.”

Green inhalers

What is the Welsh Government proposing?

In the NHS Wales Decarbonisation Strategy¹⁸ the Welsh Government has set a target of moving to '80% of inhalers being low global warming potential alternatives (dry powder inhalers), to put Wales in line with the current European leaders in the field, but only where it is clear patients' stabilisation will not be affected.'

The All Wales asthma guidelines have been designed to show health care professionals which devices are better for the environment, but not everyone will be able to change to a DPI or SMI. Together with your healthcare professional, you can decide on the best type of lower-carbon inhaler for you and your lung condition.

Changing to a lower-carbon inhaler works well for most people and can improve condition management. In other European countries, most people who need inhalers use lower-carbon inhalers. In Sweden, for example, 13% of inhaler sales are for pMDIs, compared to 70% in UK.¹⁹ Most adults find dry powder inhalers (DPIs) easier to use than pMDIs, because it's easier to get the technique right. Another benefit of dry powder inhalers is that you don't need to use a spacer, which makes these inhalers easier to carry around. Some older people, some children (particularly under 12) or people with more severe lung conditions may find it hard to do this, especially when they have acute asthma symptoms.

What do people think about switching to dry powder inhalers?

In the 2020 annual asthma survey, people were asked 'If you were offered the choice, would you consider switching to a dry powder inhaler for environmental reasons?' 54.6% of respondents in Wales said they would consider switching, 24.3% said they wouldn't and 21.3% didn't know. Switching from a pMDI to a DPI is a huge change in device with a very different technique, but a majority of people with asthma feel happy to consider switching to benefit the environment.

Feedback from users

"My biggest barrier to switching is my severe allergies. I had a prescription (for a DPI) but one puff was one too many, so now I stay with Ventolin Evohaler."

"prefer my dry powder inhaler as it doesn't have the challenge of simultaneously synchronising the operation of a pressurised inhaler pump with the intake of a deep breath. I find it much easier to use."

"Changing inhalers needs to be part of good asthma management, and should never be carried out without engaging the person with asthma or a health care professional observing that they can use the new inhaler effectively. It needs to be part of a package of measures including good control, good inhaler technique, using a spacer if they use a pMDI and returning devices to community pharmacy."

We need change

Welsh Government need to:

- Provide adequate resources so that healthcare professionals can provide effective person-centred asthma reviews, with follow-up as required
- Prescribe the right inhaler medication and device for each individual patient. This should be chosen appropriate to the patient's lifestyle, disease severity and preference while also minimises the effect on the environment.
- Ensure that changes to inhalers and prescriptions occur in consultation with patients and with adequate assessment of inhaler technique and appropriate follow up.

Concluding remarks

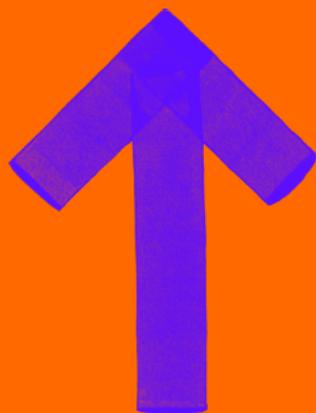
It is time the voices of people with asthma are heard at the very top. The Welsh Government must start taking asthma seriously.

Over 240,000 people in Wales aren't receiving basic care and this is getting worse. We have one of the worst asthma death rates in Europe and access to life-changing treatments remains stubbornly low. A better life with asthma is entirely possible for everyone, with bold improvements to treatment, care and support.

Our vision is for a Wales where everyone breathes with healthy lungs. A Wales where no one has to unnecessarily fight for breath because their treatment, care or support wasn't fit for purpose. Where no one with asthma ends up unnecessarily hospitalised, and where innovation is put at the heart of lung health research to transform the condition for future generations.

We are calling on the Welsh Government to develop a Respiratory Disease Improvement Plan to implement the new quality statement, fund the plan and the clinical lead, fund more research, invest in treatment and support for people with asthma that is better for them and better for the environment.

We're calling on politicians to act now!



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