Royal College of Physicians | NACAP

National Asthma and Chronic Obstructive Pulmonary Disease Audit Programme (NACAP)

Wales primary care clinical audit 2021

(asthma and COPD data extracted from 314 general practices in Wales to capture activity up to 31 July 2021)

Clinical audit report

Published July 2022

In association with:

British Thoracic Society

Imperial College London

PCRS

ASTHMA+ LUNG UK

RCPCH
Royal College of Paediatrics and Child Health
Leading the way in Children's Health

ARNS
Association of Respiratory Nurse Specialists

Y Grŵp Gweithredu ar Iechyd Anadlol
Respiratory Health Implementation Group

RCGP Royal College of General Practitioners

BREATHE Health Data Research Hub

SAIL DATABANK

Commissioned by:

HQIP
Healthcare Quality Improvement Partnership

Noddir gan **Lywodraeth Cymru**
Sponsored by **Welsh Government**

Contents

Report at a glance 4
How to use this report....5
Foreword 6
What can people with asthma and/or COPD do to help make their care better? 7
Recommended improvement priorities 8
Section 1: Getting the diagnosis right 9
Section 2: Assessing severity and risk 13
Section 3: Providing high-value care 15

Important note about the 2020/2021 data in this report

National denominators for the Wales primary care report include people coded for asthma and COPD within a specific time period. For the 2021 audit, this was April 2020 – July 2021. Due to the impact of the COVID-19 pandemic during this time, as well as differences in reporting time periods and participation rates to previous audit rounds, denominators for this report do not mirror previous rounds of the audit. Analysis methodology used to calculate these denominators remained the same, so we feel that they represent an accurate picture of people treated during this time period for their asthma and/or COPD.

However, due to aforementioned reasons we do not recommend that comparisons between the 2021 audit period and previous rounds of the audit are made. Some results for the 2020 audit remain in this report for information only and to add context to improvement priorities but should not be used to track changes over time.

This audit report provides a glimpse of asthma and COPD care during a national pandemic, a unique period that presented significant challenges to primary care services. We hope that these results provide some insight into respiratory care during these exceptional times and provide an opportunity to reflect and identify areas for improvement.

Report at a glance

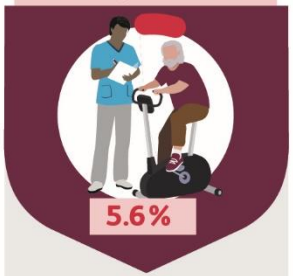
All Wales results data obtained from 314/389 general practices capturing activity up to 31 July 2021

Adults with COPD

Diagnosing COPD

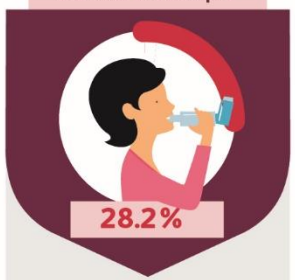
Adults who have received the gold standard diagnostic test for COPD (post-bronchodilator spirometry) in the past 2 years.

Pulmonary rehabilitation



Adults with COPD with a Medical Research Council (MRC) score 3–5 who have been referred to pulmonary rehabilitation (PR) in the past 3 years.

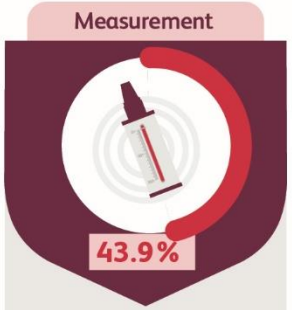
Inhaler technique



Adults with COPD who had been prescribed an inhaler, had their inhaler technique checked in the past year.

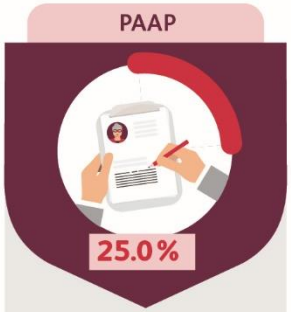
Adults with asthma

Measurement



Adults diagnosed with asthma in the past 2 years who have a record of any objective measurement.*

PAAP



Adults with asthma who have had a personalised asthma action plan (PAAP) anytime in the past year.

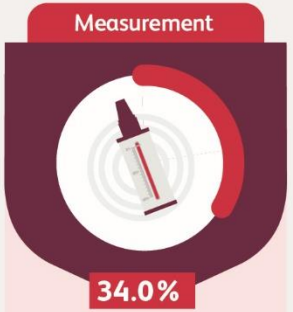
Inhaler technique

Adults with asthma who had been prescribed an inhaler, had their inhaler technique checked in the past year.

*includes spirometry, peak flow (>1 reading or evidence of peak flow diary) or fractional exhaled nitric oxide (FeNO)

Children and young people with asthma

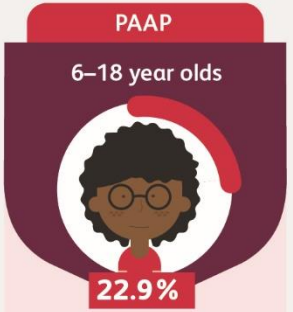
Measurement



Children diagnosed with asthma (6–18 year olds) who have a record of any objective measurement.*

PAAP

6–18 year olds



Children with asthma who have had a personalised asthma action plan (PAAP) anytime in the past year.

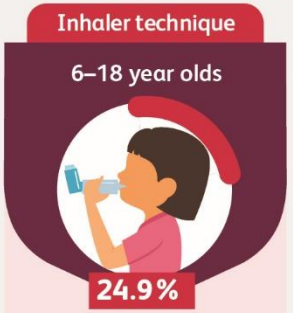
Second-hand smoke

6–18 year olds

Children with asthma where a check of exposure to second-hand smoke was recorded in the past year.

Inhaler technique

6–18 year olds



Children with asthma who have been prescribed an inhaler and have evidence of an inhaler technique check in the past year.

How to use this report

1. Scope and data collection

This report presents results from an analysis of asthma and chronic obstructive pulmonary disease (COPD) primary care data in Wales from the third round of the Welsh primary care audit component of the National Asthma and COPD Audit Programme (NACAP). Data were accessed within SAIL from 314 (80%; 57% in 2020) general practices in Wales in October 2021 to capture activity between 1 April 2020 and 31 July 2021.

The audit builds upon the learning from the 2020 report (www.rcp.ac.uk/pc2020). Contributing to the overarching national improvement objectives of the NACAP, this report aims to empower stakeholders to use audit data to facilitate improvements in the quality of care for people diagnosed with asthma and COPD.

2. Report structure

This report brings together the key findings, recommendations and national improvement priorities (previously known as QI priorities) from the 2021 Welsh primary care audit. Embedded within this report are QR codes that link to webpages which include video content about the audit data and the vision for improvement and ideas for taking small steps towards change.
It also presents patient-focused recommendations in order to ensure that people with asthma and COPD who read this report know what to expect when they are treated for their asthma and/or COPD and how they can improve their own care.

A separate data analysis and methodology report is available at www.rcp.ac.uk/pc2021 and provides the following information:

- the full data analysis (including results from previous rounds of audit)
- unadjusted summary of key indicators for local health boards in Wales
- appendices, including the methodology for the audit.

Participating practices can view individualised practice-level results via the Data Health and Care Wales (DHCW) Primary Care Information Portal (http://isdapps.wales.nhs.uk/pcip) from summer 2022. These reports will include benchmarking against national and health board results to support practices in improving the quality of patient care. Local health board reports, including cluster results, are available at www.rcp.ac.uk/pc2021, along with a set of interactive maps, which will be published in summer 2022.

3. Data interpretation

In total, 80.7% of Welsh practices participated in the 2021 audit. However, we advise caution when reviewing the 2021 results and making assumptions about the quality of care provided nationally. This is because the audit period was impacted significantly by the COVID-19 pandemic. Direct comparisons with data from prior datasets are therefore not appropriate due to extraction timeframes being different and the unique and challenging circumstances COVID-19 presented to primary care teams. Younger children aged 1–5 have not been included in this round of the audit. Full data and interpretation caveats can be found in the data analysis and methodology report available at www.rcp.ac.uk/pc2021.

4. Audience and links to guidelines and standards

This report is intended to be read by primary care healthcare professionals, NHS managers, local health boards (LHB) and policy makers, as well as voluntary organisations and people with asthma and COPD. References to the appropriate National Institute for Health and Care Excellence (NICE) clinical guidelines and quality statements, and British Thoracic Society (BTS) guidelines relevant to asthma and COPD care are inserted throughout. We strongly advise that primary care clinicians and managers discuss these findings at the new professional collaboratives and pan-cluster planning groups being implemented as part of Accelerated Cluster Development, so that their concerns are shared with their health and regional partnership boards as a basis for service development.

Foreword

In the 2 minutes that it takes to read this foreword, 12 people in the UK – one every 10 seconds[1] – will have had a potentially life-threatening asthma attack. If you continue reading for a further 3 minutes, somebody will have died from lung disease.[2] This is the reality for patients living with lung disease in the UK. For many of us looking through results in an audit report, there can be a disconnect between what the numbers say to us and what they *really* mean to our patients with lived experience of lung disease. Every percentage gap represents a person: a person with asthma without a personal asthma action plan (PAAP), a child whose parents continue to smoke in the house, or a person with COPD not referred for pulmonary rehabilitation.

The Respiratory Health Implementation Group (RHIG) has created the respiratory health delivery plan 2018–20 to address respiratory health across Wales. The main goals of this plan have been to link policy to patients through implementing key innovations. These include:

- national prescribing guidelines
- National Welsh Standard educational packages across different aspects of respiratory medicine – simple quality improvement tools
- patient-facing applications (apps).

All of these innovations are hosted on a freely accessible digital platform and the improvement priorities outlined in this report align with this. The goal is not just for healthcare professionals in primary and secondary care to become experts at doing the things that matter most, but also that patients become better at managing their own respiratory illnesses.

The 2021 audit data were accessed within the Secure Anonymised Information Linkage (SAIL) Databank. The majority of practices in Wales already had a data-sharing agreement in place with SAIL, which allowed us to increase our uptake compared with the 2020 audit (from 57% to 80% of practices), giving a much more complete representation of patient care across Wales. We were also able to provide prescribing data for the first time. As expected, there has not been a significant improvement in the figures from the last report as the data were collected in the middle of a global pandemic when there was an unprecedented shift away from routine care. This report provides practices with a baseline of where they are and indicates where they need to get to. Change doesn't happen overnight.

Respiratory consultations in primary care are only one small part of our day job where often we have no idea what will walk through the door. Some of us might go days or weeks not seeing a patient with asthma or COPD and, when they present acutely, we can all be guilty of reactive rather than proactive care to prevent future exacerbations. Remembering to do everything we *should* be doing for our patients with asthma and COPD is one thing but having the tools to do it is another. This, combined with juggling workforce pressures, a global pandemic and time pressures is a perfect storm. We cannot always remember to do everything; we are not superhuman. I hope that the improvement projects cited in this report provide you with tools to support you to do the best you can under difficult circumstances – the tools to turn audit results into people with respiratory disease sitting in front of you. People who are entitled to basic quality care that I know all of you are capable of delivering given the necessary support. In the words of Maya Angelou, 'Do the best you can until you know better. Then when you know better, do better.' In addition, although this report represents practices in Wales, all codes and analysis scripts used to analyse the data are in the public domain, allowing others to replicate this work in their locality.

Dr Katherine Hickman
Primary care audit clinical lead

What can people with asthma and/or COPD do to help make their care better?

These patient-focused recommendations aim to help people with asthma and/or COPD understand what to expect when they visit their primary care service for their asthma and/or COPD and know what ***they*** can do to make their care better. We also hope that having practice and patient recommendations side by side will help join up clinical and patient thinking, informed discussions and decision making.

If you have asthma and/or COPD the following points are important to know. You should:

Diagnosis

COPD only

> Know your diagnosis was CONFIRMED with a breathing test called spirometry

Asthma only

> Have had your diagnosis EXPLAINED to you after at LEAST TWO tests*

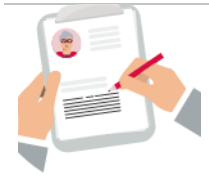
Inhalers (asthma and COPD)

> Know WHY you are taking your medicine/inhalers
> Know HOW to take your inhalers

Smoking cessation and exposure to second-hand smoke (asthma only)

> If you or your carer, family and/or household members smoke, know WHERE to get support to stop

Personalised asthma action plan (PAAP) (asthma only)



> Know what 'NORMAL' means to you and WHEN to seek help if you have worsening asthma symptoms
> Know WHAT to do if you are having an asthma attack

Pulmonary rehabilitation (PR) (COPD only)

> UNDERSTAND the importance of keeping active and if/how PR would benefit you

**includes spirometry, peak flow (>1 reading or evidence of peak flow diary) or fractional exhaled nitric oxide (FeNO)*

An accompanying patient specific resource will be made available in autumn 2022 at www.rcp.ac.uk/pc2021. Younger children (aged 6–10), as well as their carers, should refer to and use the 2020 audit postcard which provides information and questions to raise with local doctors/nurses on asthma care. Where an area of care or service provision from this report has been highlighted as a patient priority (something of particular importance to patients) by the NACAP patient panel, this is shown with the patient priority icon.

Recommended improvement priorities

In order to start making small steps towards improvement, primary care practices in Wales should:

1		Record quality assured **post-bronchodilator spirometry** ratio <0.7 for people on the COPD register. Ensure they have an accurate record in their notes, including a spirometry trace, correct ratio and appropriate SNOMED code*. **National target for Wales: 40% or more of people on the COPD register by April 2023.**
2		Evidence and code* appropriately **objective variability** for people diagnosed with asthma as demonstrated by at least one of the following: > Spirometric evidence of a significant FEV1 response to a short-acting beta-2 agonist (SABA) or after a trial of treatment with inhaled corticosteroids (ICS) (increase of 12% or more + 200 mL response to beta-2 agonist or ICS). > Oral corticosteroids (OCS) or prescription for ICS using medication codes in conjunction with significant reversibility > Evidence of significantly variable peak expiratory flow rate (PEFR) (>20% variability after ≥twice daily for 2–4 weeks) > Positive fractional exhaled nitric oxide (FeNO) result. **National target for Wales: 80% or more of people with asthma by April 2023.**
3		Ask parents about **second-hand smoke exposure** and provide very brief advice (VBA) at their child's asthma review. Evidence with the appropriate SNOMED code* in the child's notes. **National target for Wales: 20% or more of parents who have children and/or young people with asthma by April 2023.**
4		Refer people with COPD and a Medical Research Council (MRC) breathlessness score 3–5 to **pulmonary rehabilitation (PR)** and evidence this with the appropriate SNOMED code* in their notes. **National target for Wales: 70% or more of people with COPD by April 2023.**
5		Provide people with asthma with a **personalised asthma action plan (PAAP)** (written or electronic) and evidence this with the appropriate SNOMED code* in their notes. **National target for Wales: 50% or more of people with asthma by April 2023.**
6		Evidence an **inhaler technique check** in the last year for people with asthma and/or COPD with the appropriate SNOMED code* in their notes. **National target for Wales: 70% or more of people with asthma and/or COPD by April 2023.**

* Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Key findings and improvement opportunities

Section 1: Getting the diagnosis right

1.1 Adults with COPD

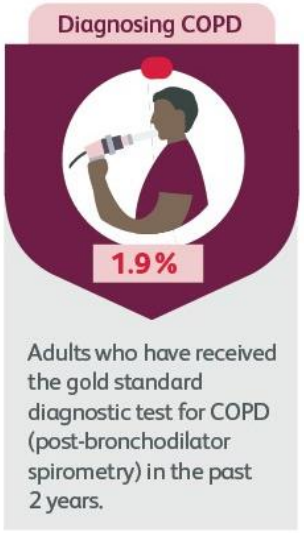
Back to contents

Key standards

Diagnosing COPD

- NICE 2016 QS10 (QS1): People aged over 35 years who present with a risk factor and one or more symptoms of COPD have post-bronchodilator spirometry.[3]
- NICE 2019 NG115: At the time of their initial diagnostic evaluation, in addition to spirometry, all patients should have a chest radiograph to exclude other pathologies.[2]

Results summary



Why is this important to healthcare services?

The COPD Patient Charter principle 1[5] states: 'I deserve timely access for the diagnosis and assessment of my COPD'. An incorrect diagnosis of COPD sets the patient on the wrong trajectory from the outset which may result in unnecessary and expensive medication being prescribed with potential side effects and a subsequent cost to the wider healthcare system. In order to make an accurate diagnosis of COPD, confirmatory quality assured post-bronchodilator spirometry demonstrating an FEV1/FVC ratio of <0.7 must be performed and interpreted by appropriately trained and competent persons.[4]

Impact of COVID-19

At the start of the COVID-19 pandemic, provision of spirometry in primary care greatly reduced or ceased altogether. This is reflected in our figures with 1.9% of adults diagnosed with COPD in the past 2 years who had a record of gold standard diagnostic post-bronchodilator spirometry. A total of 11.5% of people with COPD had a gold standard diagnostic test in the 2018/20 audit. Although recommendations are in place to restart spirometry, uptake is likely to be slow as primary care services deal with a backlog across all specialties. It is imperative that spirometry is prioritised in order to ensure the timely and accurate diagnosis of patients with COPD in order to minimise harm and further deterioration.

Improvement priority 1: Record **post-bronchodilator spirometry** ratio <0.7 for people on the COPD register. Ensure they have an accurate record in their notes, including a spirometry trace, correct ratio and appropriate SNOMED code.*

National target for Wales: 40% or more of people on the COPD register by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care.

Why is this important to patients?

Under most circumstances, it would be incomprehensible for a patient to appear on a primary care register in error for myocardial infarction, a cerebrovascular accident, a diagnosis of cancer or diabetes. So why do we allow it to happen for people with COPD? Diagnostic spirometry is not always readily available and in many areas has not resumed to pre-pandemic levels. However, we should not abandon patients while we wait for spirometry services to resume. These are patients who could be current or ex-smokers and who present with classic symptoms of breathlessness, productive cough, and/or a predisposition to winter chest infections. Patients may attribute these symptoms to the fact that they are smoking but they are also the hallmark of COPD and as clinicians, we need to raise awareness with our patients, encourage them to present sooner rather than later, and investigate appropriately. Before adding a patient to a COPD register we must be sure in our minds that the diagnosis is correct as the consequences of a wrong diagnosis are manifold. While spirometry services restart there are other tools that we can use in the meantime to help support making a final diagnosis, including peak expiratory flow, COPD assessment test, referral to stop smoking, and baseline investigations such as bloods and a chest X-ray. These patients need our support. Support that is routinely provided for patients who present with symptoms of cardiovascular disease or diabetes, where there are clear processes in place for a new or suspected diagnosis.

People with COPD should KNOW their diagnosis was CONFIRMED with a breathing test called spirometry

1.2 Adults and children and young people (6–18 years old) with asthma

Back to contents

Key standards

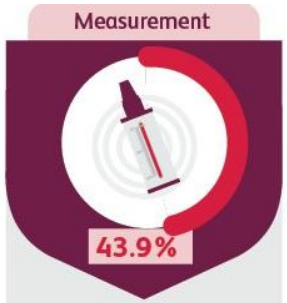
Diagnosing asthma

- NICE 2018 QS25 (QS1): People aged 5 years and over with suspected asthma have objective tests to support diagnosis.[6]
- NICE 2017 NG80: Offer a FeNO test to adults (aged 17 years and over) if a diagnosis of asthma is being considered. Regard a FeNO level of 40 parts per billion (ppb) or more as a positive test. Consider a FeNO test in children and young people (aged 5–16) if there is diagnostic uncertainty after initial assessment and they have either normal spirometry or obstructive spirometry with a negative bronchodilator reversibility test.[7]

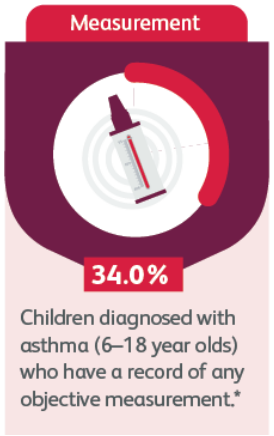
*includes spirometry, peak flow (>1 reading or evidence of peak flow diary) or fractional exhaled nitric oxide (FeNO)

Results summary

Adults:



Children:



Why is this important to healthcare services?

There is evidence that asthma is widely misdiagnosed. Overdiagnosis leads to unnecessary treatment such as repeated courses of high-dose oral corticosteroids (OCS) and a delay in making a correct diagnosis. Similarly, underdiagnosis risks daily symptoms, (potentially serious) exacerbations and long-term airway remodelling.[8] Repeated courses of high-dose OCS can also be a sign that someone has severe asthma, the most life-threatening form of the condition, which currently affects around 200,000 people in the UK. Asthma + Lung UK's report *Do no harm: safer and better treatment options for people with asthma* reveals that around 46,000 people are still missing out on life-changing biologic treatment because they haven't been properly diagnosed with severe asthma. As a last resort, they are often forced to rely on regular or long-term high-dose OCS that have potential toxic side effects.

Impact of COVID

As we saw for COPD, the pandemic has also had an impact on the accurate diagnosis of asthma. Of those diagnosed with asthma in the past 2 years, only 43.9% of adults and 34.0% of children and young people had a record of >1 objective measurement. Central to all definitions of an asthma diagnosis is the presence of symptoms (more than one of wheeze, breathlessness, chest tightness, cough) and a demonstration of variable airflow obstruction.[9] 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.

These tests support the diagnosis in conjunction with a thorough history and examination and it is essential that they are resumed to ensure the accurate diagnosis of patients with asthma.

Improvement priority 2: Evidence and code* appropriately **objective variability** for people diagnosed with asthma as demonstrated by at least one of the following:

- Spirometric evidence of a significant FEV1 response to a short-acting beta-2 agonist (SABA) or after a trial of treatment with inhaled corticosteroids (ICS)
- Oral corticosteroids (OCS) or prescription for ICS using medication codes in conjunction with significant reversibility
- Evidence of significantly variable peak expiratory flow rate (PEFR)
- Positive fractional exhaled nitric oxide (FeNO) result

National target for Wales: 80% or more of people with asthma by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Why is this important to patients?

Accurate diagnosis, as demonstrated by objective variability in lung function, reduces the risk of under-/over-diagnosis and the unforeseen consequences of not getting the diagnosis of asthma right from the outset. When a patient is diagnosed with asthma they are starting on a journey. If a patient is given the wrong diagnosis, it is very unlikely that they will have the desired improvement in their symptoms or health outcome. The information they received at diagnosis may have been minimal and they leave with no idea of how to manage their asthma themselves. Equally, they may have been bombarded with untailored information – leaflets, videos, websites, apps, and just a piece of paper for their personalised asthma action plan (PAAP), rather than information that is personal to them and their condition.

Living with asthma is rarely a smooth journey but it can and should be a lot smoother for our patients. It is our duty of care to ensure we start them on the right path after diagnosis knowing how to take their inhaler, why they are taking it, and what to do in an emergency. We must support patients to accept their asthma, enable them to live well with it, and ensure that they are not burdened by it.

People with asthma should have had their asthma diagnosis EXPLAINED to them after at LEAST TWO tests~

~includes spirometry, peak flow (>1 reading or evidence of peak flow diary) or fractional exhaled nitric oxide (FeNO)

Section 2: Assessing severity and risk

2.1 Exposure to second-hand smoke in children and young people with asthma (6–18 years old)

Back to contents

Key standards

Smoking

> BTS/SIGN 2019 [6.2.3]: People with asthma and parents/carers of children with asthma should be advised about the dangers of smoking and second-hand tobacco smoke exposure, and should be offered appropriate support to stop smoking.[9]

> NICE 2013 QS43 (QS1): People should be asked if they smoke by their healthcare practitioner, and those who smoke should be offered advice on how to stop.[10]

Results summary

Children with asthma where a check of exposure to second-hand smoke was recorded in the past year.

Why is this important to healthcare services?

Exposure to other people's tobacco smoke increases the risk of lung cancer in non-smokers by 20–30% and coronary heart disease by 25–35%. Compared with children raised in smoke-free environments, second-hand smoke-exposed children have a higher risk of sudden infant death syndrome, respiratory infection, ear infection, asthma, meningitis and reduced lung growth.[11]

Improvements in this area

Emerging evidence from a YouGov COVID-19 tracker shows that 12% of smokers who live with children report that they are smoking more indoors than they did before lockdown. Meanwhile, people who live in households that include children are 50% more likely to report being exposed to second-hand smoke since lockdown compared to those without children. A separate survey carried out between February and March 2020 found that in Wales 13% of people with children in their household reported that someone smokes in their home most days.

1.3% of children had a record of exposure to second-hand smoke being checked. For adults, this was 0.8%. 0.6% of children and young people and 0.8% of adults had this record in the 2018/20 audit. There is still a lot of work to do, in particular around coding these conversations, which are inevitably happening but not being recorded correctly.

Improvement priority 3: Ask parents about **second-hand smoke exposure** and provide very brief advice (VBA) at their children's asthma review. Evidence with the appropriate SNOMED code* in the child's notes.

National target for Wales: 20% or more of parents who have children and/or young people with asthma by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Why is this important to patients?

Nicotine dependency is a long-term relapsing condition that usually starts in childhood.[12] This is a time of experimentation and uptake of smoking. Many adults who smoke experimented in childhood and they made a mistake; a mistake many have lived to regret and one, that for many, will cost them their livelihood and ultimately their life. The consequences of smoking, though, don't stop with smokers but also affect children directly. Children whose caregiver(s) smoke are four times more likely to start smoking themselves.[13] The best way to protect children from exposure to second hand smoke is for their parents and other carers to stop smoking altogether. In Wales, around 70% of smokers want to quit.[14] Clinicians who have contact with smoking families are in a unique position to offer very brief advice (VBA) that includes help and support to those who wish to make their homes and cars smoke-free:

Providing very brief advice on second-hand smoke consists of three simple steps:

ASK	Establish who smokes in the home and/or car, where the smoking happens and if these smoking 'rules' ever change.
ADVISE	Explain the benefits of reducing children's exposure to second-hand smoke and that there is help available to achieve this.
ACT	Offer practical support and help around creating and maintaining smoke-free homes and cars.

Most carers know that they should not smoke around their children or in their homes and cars, but often they're unsure of where to start and how to make changes. We have a duty of care to our patients to have these discussions, support their caregivers to quit, and reduce the risk from exposure but also the risk of them starting smoking themselves.

Children and young people with asthma, and their carers, should know WHERE to get support if they or their carer, family or household member(s) smokes.

Section 3: Providing high-value care

3.1 Referral to pulmonary rehabilitation (PR)

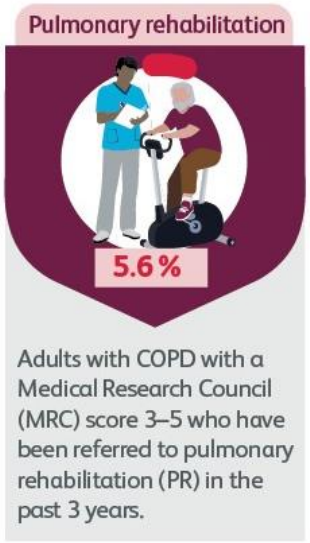
Back to contents

Key standards

Referral for PR

- NICE 2019 NG115: Make PR available to all appropriate people with COPD, including people who have had a recent hospitalisation for an acute exacerbation. Offer PR to all people who view themselves as functionally disabled by COPD (usually MRC grade 3 and above).[4]
- BTS quality statement 1: People with COPD and self-reported exercise limitation (MRC dyspnoea 3–5) are offered PR.[15]

Results summary



Why is this important to healthcare services?

PR is a life-changing package of exercise and support to manage lung disease more effectively and which has proven to be more effective than a lot of drug-based interventions. Many patients report significant improvement in their symptoms, exercise capacity and quality of life[16] following a course of PR. PR also reduces the number and duration of respiratory hospital admissions (including readmissions) experienced by individuals, and can support self-management.[17]

NICE guidelines and the BTS quality standards advise that PR should be available to all appropriate people with COPD who have a recorded MRC breathlessness score of 3 or above.[4,15] PR should be seen as essential in a person's management. If clinicians fail to accurately record MRC status they run the risk of missing a significant number of people who may benefit from referral and completion of a PR course, and with that a better quality of life.

Impact of COVID-19

During the pandemic conventional face-to-face PR programmes were widely suspended in order to protect vulnerable groups and many staff were redeployed in order to support the care of those acutely unwell.[18] Many of the patients eligible for PR were recommended to shield or limit their exposure by accessing online or remote consultations with healthcare professionals. As a result, many patients missed out on the benefits of face-to-face PR. For adults with COPD: 39.8% with any MRC score in the past 3 years were referred for PR and 5.6% with an MRC score of 3–5 in the past 3 years were referred for PR. In the 2018/20 audit this was 36.6% with any MRC score and 56.4% of patients with an MRC score of 3–5.

Improvement priority 4: Refer people with COPD and a Medical Research Council (MRC) breathlessness score 3–5 for **pulmonary rehabilitation (PR)** and evidence this with the appropriate SNOMED code* in their notes.

National target for Wales: 70% or more of people with COPD by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Why is this important to patients?

The COPD Patient Charter principle 3 states:[5] 'I deserve access to the best available evidence-based, personalised treatment, to ensure I can live as well and as long as possible.' We know there are good interventions, both pharmacological and non-pharmacological, and patients with COPD should have access to both.

As clinicians treating people with COPD, we have a duty of care to understand what PR entails and why it is so important to refer as many suitable patients into the service as possible. People are deprived of essential, evidence-based healthcare if we do not refer to PR. This must go further than simply 'offering PR'. It is as important as any inhaled therapy, yet in the past 3 years in Wales only 5.6% of patients with COPD with an MRC score of 3–5 were referred for PR. It is difficult to imagine this happening with patients with heart failure or who have had a heart attack having access to cardiac rehabilitation. PR should not be seen as an added extra to a person's management but seen as an essential, evidence-based treatment that has a profound impact on the person's quality of life.

People with COPD should UNDERSTAND the importance of keeping active and if/how PR would benefit them

3.2 Personalised asthma action plans (PAAP)

Back to contents

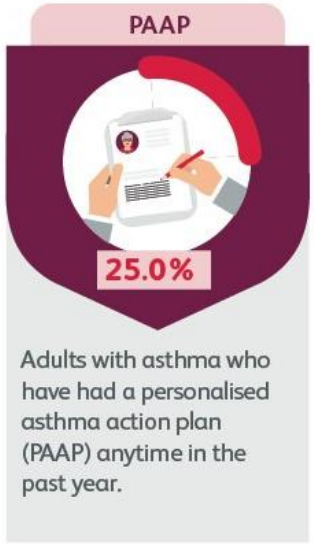
Key standards

Personalised asthma action plans (PAAPs)

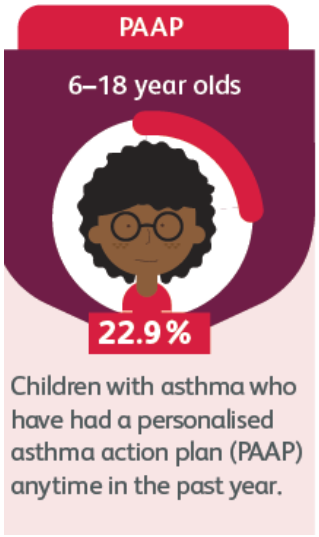
> NICE 2017 NG80: Offer an asthma self-management programme, comprising a written personalised action plan and education, to adults, young people and children aged 5 years and over with a diagnosis of asthma (and their families or carers if appropriate).[7]

Results summary

Adults:



Children:



Why is this important to healthcare services?

There is overwhelming evidence for supported self-management of patients with asthma. As part of its grade A recommendation, the British Thoracic Society/Scottish Intercollegiate Guideline Network (BTS/SIGN) asthma guidelines cite 261 randomised controlled trials in 22 systematic reviews to support the statement that 'all people with asthma (and/or their parents or carers) should be offered self-management education which should include a written personalised asthma action plan and be supported by regular professional review'.[19]

In the management of a variable condition such as asthma, the hallmark of self-management is the provision of an action plan with advice on recognising and responding to deterioration in control. With self-management, personalised asthma action plans, and regular medical reviews, hospitalisation risks are almost halved, emergency department visits are greatly reduced, and asthma markers are improved.[20]

Improvement priority 5: Provide people with asthma with a **personalised asthma action plan (PAAP)** (written or electronic) and evidence this with the appropriate SNOMED code* in their notes.

National target for Wales: 50% or more of people with asthma by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Why is this important to patients?

For the majority of the time, people with asthma manage their asthma without the support of their healthcare providers. They should be provided with the tools to do this safely, including access to a co-created asthma action plan. Asthma self-management education is not merely an optional extra. Healthcare professionals must ensure that every individual with asthma receives personalised advice to enable them to manage their condition optimally.[19] This could be a paper version which is written together or a PAAP set up via electronic methods such as the AsthmaHub App. It is not, though, just the piece of paper or electronic version that saves lives but the discussion around it and the plan being agreed and monitored by the patient and healthcare professional. A discussion that involves the patient, is appropriate for their level of language and understanding and which approach they want to use to recognise when they need to seek help, ie a symptom-based approach or peak expiratory flow.

We expect patients to self-manage their conditions, yet this is difficult when health literacy levels are low and resources are scarce. One in eight (12%; 216,000 people) adults in Wales lack basic literacy skills.[21] Even if we ignore differences in health education or cultural backgrounds, we cannot assume that everyone is proficient in written and technical English or Welsh. Our failure to recognise these disparities may cause us to miss opportunities to promote health equity.[22]

People with asthma should know:

1. **What 'NORMAL' means to them and WHEN to seek help if they have worsening asthma symptoms**
2. **WHAT to do if they have an asthma attack**

3.3 Inhaler technique checks

Back to contents

Key standards

COPD

> NICE 2016 QS10 (QS2): People with COPD who are prescribed an inhaler have their inhaler technique assessed when starting treatment and then regularly during treatment.[3]

Asthma

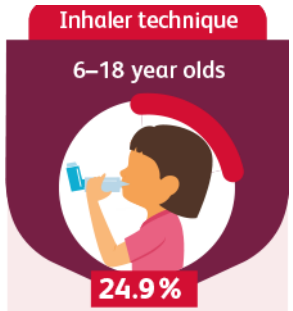
> NICE 2018 QS25 (QS3): People with asthma have their asthma control monitored at every asthma review. If suboptimal asthma control is identified, the person should have an assessment to identify possible reasons for this, including adherence and inhaler technique, before their treatment is adjusted.[6]

Results summary

Adults with asthma:

Adults with asthma who had been prescribed an inhaler, had their inhaler technique checked in the past year.

Children with asthma:



Children with asthma who have been prescribed an inhaler and have evidence of an inhaler technique check in the past year.

Adults with COPD:

Adults with COPD who had been prescribed an inhaler, had their inhaler technique checked in the past year.

Why is this important to healthcare services?

People who are unable to use their inhaler device(s) correctly may receive very little of their prescribed medication leading to reduced efficacy. This potentially results in poorly controlled asthma or COPD, increased exacerbations and reliance on oral corticosteroids to regain control. Poor inhaler technique and poor symptom control can lead to an increase in unplanned admissions for both asthma and COPD, which has wider financial implications for the health sector. In a study spanning the UK, Spain and Sweden, poor inhalation technique comprised 2.2–7.7% of direct costs, totalling €105 million across the three countries. When lost productivity costs were included, total expenditure increased to €1.4 billion, €1.7 billion and €3.3 billion respectively in Spain, Sweden and the UK, with €782 million attributable to poor inhalation technique across the three countries.[23]

Impact of COVID-19

Although many aspects of routine asthma care can be done remotely, assessing inhaler technique certainly can't be done over the phone and may be difficult even via a video link. With most routine appointments moving remotely during the pandemic it is not surprising that inhaler technique checks dropped considerably. Of those prescribed an inhaler in the past year only, 28.2% of adults with COPD had an inhaler technique check, and 25.1% of adults with asthma. These figures were 44.4% and 48.4% respectively in the 2018/20 audit. For children with asthma, only 24.9% had an inhaler technique check (42.8% in the 2018/20 audit). There must be caution when redesigning services as we move out of the pandemic and consider where remote consultations lie within the context of routine care. There are some aspects of a respiratory review that should be done face to face or, at the very least, via video consultation – inhaler technique is one of these.

Improvement priority 6: Evidence an **inhaler technique check** in the past year for people with asthma and/or COPD with the appropriate SNOMED code* in their notes.

National target for Wales: 70% or more of people with asthma and/or COPD by April 2023.

*Please use NACAP's recommended Read and SNOMED CT codes, which can be found at www.rcp.ac.uk/projects/outputs/support-service-teams-primary-care

Why is this important to patients?

Taking an inhaler effectively isn't always intuitive for healthcare professionals or people with asthma and/or COPD.[24] If inhaler technique isn't demonstrated and checked regularly, people run the risk of incorrect technique, reduced drug deposition, and subsequent poor control. Different inhalers need different techniques. We would never give someone an insulin pen prescription without demonstrating how to use it, and no one prescribed an inhaler should be sent home without having their technique checked. From a financial perspective, switching to a cheaper inhaler device may seem like a good idea, however, if the patient is unable to use it and has poor control and multiple trips to their doctor, the financial consequences are far greater. Unless we are demonstrating inhaler technique with the patient physically visible we cannot assume they understand how to take their inhaler. Face-to-face allows us to demonstrate inhaler technique but also, and probably more importantly, check the patient understands and has followed the instructions. Sending a video link is a good alternative but we can't always guarantee that it will be watched. In-person, we can assess understanding, language skills, technical expertise, and ensure we are confident they understand how to use their inhaler. Ideally, this should be backed up by a video link or written instructions in the language that they are able to read and understand.[22]

People with asthma and/or COPD should know:

1. **WHY they are taking their medicine/inhalers**
2. **HOW to take their inhalers**

Acknowledgements

This report was produced by:

NACAP team members

Lara Amusan, programme manager, NACAP, Care Quality Improvement Directorate (CQID), Royal College of Physicians (RCP)
Rachael Andrews, deputy programme manager, NACAP, CQID, RCP
Dr Katherine Hickman, primary care clinical lead, NACAP, CQID, RCP; and GP, Low Moor Medical Practice, Bradford; and respiratory lead for Leeds and Bradford clinical commissioning groups
Professor John R Hurst, senior clinical lead, NACAP, CQID, RCP; and professor and honorary consultant in respiratory medicine, University College London / Royal Free London NHS Foundation Trust, London
Professor Jennifer Quint, analysis lead, NACAP, CQID, RCP; professor of respiratory epidemiology, National Heart & Lung Institute, Imperial College London; honorary respiratory consultant, Royal Brompton and Imperial NHS trusts
Sean Scully, research and data coordinator, SAIL Databank and BREATHE Health Data Research Hub for Respiratory Health, Swansea University
Philip Stone, research assistant in statistics/epidemiology, National Heart & Lung Institute, Imperial College London

Senior management and governance group

Ms Teena Chowdhury, deputy director, CQID, RCP
Dr John Dean, improvement clinical director, RCP
NACAP Advisory Group
NACAP Board

NACAP patient panels

This report makes use of anonymised data held in the Secure Anonymised Information Linkage (SAIL) Databank. We would like to acknowledge the data providers who make anonymised data available for research.

Citation for this document: Amusan L, Andrews R, Hickman K, Hurst JR, Quint J, Scully, S, Stone P. *National Asthma and COPD Audit Programme (NACAP). Wales primary care clinical audit 2021. Clinical audit report*. London: RCP, 2022.

National Asthma and COPD Audit Programme (NACAP)

More than 9 million people live with a diagnosis of asthma or COPD in the UK. NACAP aims to improve the quality of their care, services and clinical outcomes. We do this by supporting and training clinicians, empowering patients and carers, and informing policy. We have a track record of delivery and are critical to assessing progress against the NHS Long Term Plan. For more information visit: www.rcp.ac.uk/nacap.

Healthcare Quality Improvement Partnership (HQIP)

NACAP is commissioned by HQIP as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP) and works within a governance structure that includes the Programme's Board, Advisory Group and Patient Panel groups. HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing, and National Voices. Its aim is to promote quality improvement in patient outcomes, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage and develop NCAPOP, comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh Government and, with some with some individual projects, other devolved administrations and crown dependencies: www.hqip.org.uk/national-programmes.

The Royal College of Physicians (RCP)

The RCP plays a leading role in the delivery of high-quality patient care by setting standards of medical practice and promoting clinical excellence. The RCP provides physicians in over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing 40,000 fellows and members worldwide, the RCP advises and works with government, patients, allied healthcare professionals and the public to improve health and healthcare.

ISBN 978-1-86016-865-9
eISBN 978-1-86016-866-6

National Asthma and COPD Audit Programme (NACAP)

Royal College of Physicians

11 St Andrews Place
Regent's Park
London NW1 4LE

The Spine
2 Paddington Village
Liverpool L7 3FA

+44 (020) 3075 1526
nacap@rcp.ac.uk
www.rcp.ac.uk/nacap

@NACAPaudit

Royal College of Physicians | NACAP