



Royal College
of Physicians

NACAP

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

Wales primary care clinical audit 2020

(asthma and COPD data extracted from 226 general
practices in Wales to capture activity up to
31 March 2020)

Clinical audit report

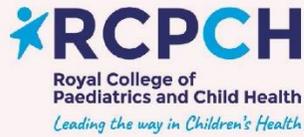
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THE ASTHMA UK AND
BRITISH LUNG FOUNDATION
PARTNERSHIP



Y Grŵp Gweithredu
ar Iechyd Anadlol
Respiratory Health
Implementation Group



Commissioned by:



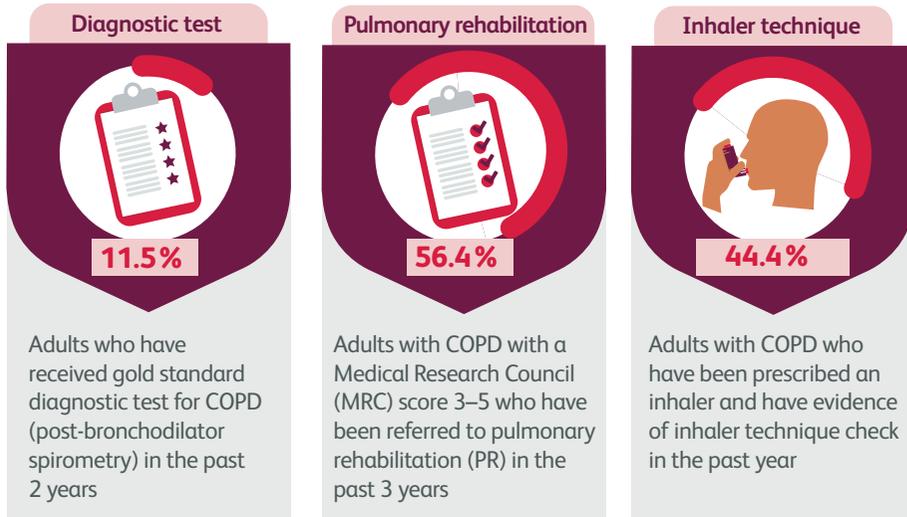
Contents

Report at a glance	4
How to use this report.....	5
Foreword	6
Recommended quality improvement priorities	7
Key findings and quality improvement opportunities.....	8
Section 1: Demographics and comorbidities.....	8
Section 2: Getting the diagnosis right	10
Section 3: Assessing severity and future risk	14
Section 4: Providing high-value care	17
Section 5: Ensuring equal and equitable care in people with a mental health diagnosis.....	22
References.....	26

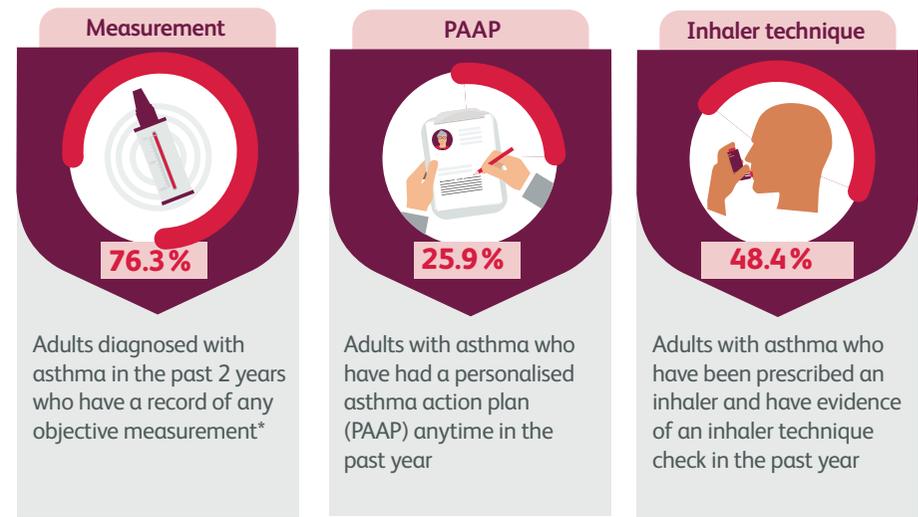
Report at a glance

All Wales results (data extracted from 226/398 GP practices capturing activity between 1 October 2018 and 31 March 2020)

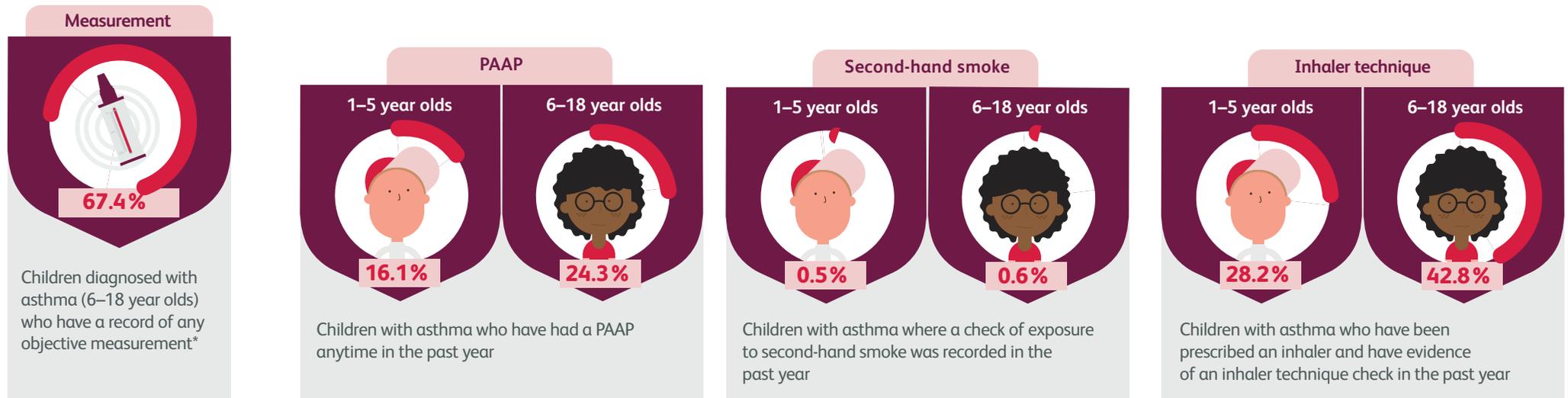
Adults with COPD



Adults with asthma



Children and young people with asthma



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

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 second round of the Welsh primary care audit component of the National Asthma and COPD Audit Programme (NACAP). Data were extracted from 226 (56.8%) general practices in Wales in October 2020 to capture activity up to 31 March 2020.

The audit builds upon the learning from the 2017/18 report (www.rcplondon.ac.uk/primary-care-2017-18), which was the first to report on both asthma and COPD patient care and management from primary care records in Wales. The National COPD Audit Programme previously reported on only COPD patient care and management from primary care records in Wales in 2015 and 2017. Contributing to the overarching national quality improvement (QI) 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 QI priorities from the 2020 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 to start taking small steps towards change. A separate data analysis and methodology report is available at: www.rcplondon.ac.uk/pc2020 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 reports via the NHS Wales Informatics Service (NWIS) Primary Care Information Portal (<http://isdapps.wales.nhs.uk/pcip>) from 12 March 2021. 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.rcplondon.ac.uk/pc2020.

3. Data interpretation

Only 56.8% of Welsh practices participated therefore caution must be taken when making assumptions about the quality of care delivered nationally. The data is stable and has not worsened since the previous extraction. Given the challenging circumstances GPs are currently working under this should be seen as an achievement. Direct comparisons with data from prior extractions are not appropriate as the extraction timeframes are different. Data and interpretation caveats can be found in the data analysis and methodology report available at: www.rcplondon.ac.uk/pc2020.

4. Audience and links to relevant guidelines and standards

This report is intended to be read by primary care healthcare professionals, NHS managers, local health boards (LHB), policy makers, as well as voluntary organisations. 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 teams discuss these findings with their LHBs as a basis for informing future integrated care partnership service development. Separate information has been produced for patients, carers and the public which will be made available in May 2021 at: www.rcplondon.ac.uk/pc2020. Where an area of care or service provision 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.

Foreword



As a busy GP juggling my day job with COVID-19 vaccinations and my respiratory lead roles I fully appreciate that there isn't always time to read audit reports such as these. I hope, though, that you can make time to read this report and see it as an opportunity to see where there are gaps, how far you have come, how far you need to go and what you need to do to improve the care of your patients. I hope this report will be the catalyst for change and lead to an improvement in care for people in Wales living with asthma and COPD.

Taking action under the right circumstances with the right support and the appropriate tools can ultimately lead you to make improvements, change behaviour and improve the care of your patients. These are patients who I know you want to do the best for as highlighted in the recent [COPD Patient Charter](#). Patients who we know deserve to have an accurate and timely diagnosis. Patients who warrant access to the correct medication and are not only able to take their inhaler but also know how to self-manage and access evidence-based personalised treatment. Acting ensures your patients live as well and as long as possible. They will understand what the disease means to them and how the disease may progress. I am confident that anybody reading this report wants nothing less for their patients with COPD and asthma.

How many of us in primary care are in fact working in ideal circumstances? How many of us have time to read audit reports, process the data and act by implementing quality improvement (QI) projects at practice? I would assume that those clinicians with an ideal set up for QI are few and far between. If you are still reading this, well done. Audit data isn't about you or me, it is about our patients. We need to strive towards a situation whereby our circumstances are more adapted to QI with the appropriate level of guidance and support. I have worked closely with the team in Wales to make this audit data come to life. We have focused on making the implementation of QI as

easy as possible even under the most taxing of work environments. We identified six QI projects that, if implemented, will result in significant improvement to the care and quality of life of your patients. This is not about overnight or even significant change for the next data extraction. With small incremental changes over time, you will start to see improvement in not only your data but ultimately in the quality of care of your patients.

The QR codes embedded in this report link to open source webpages which are available to everyone. The pages include hosted video content about the audit data, the collective vision for improvement and how you can start to take small steps towards change. For clinicians in Wales there is additional access to detailed education and QI resources which will take you through each of the six projects, step by step. The vision is for healthcare professionals in Wales to do the basic things consistently and well. Behaviour change is a key factor. It is not just about data, information, education, guidelines or incentivisation. The focus needs to be on ability, supporting behaviour change and celebrating improvement. It is about everybody becoming experts at the basics.

I hope that by reading this report, or simply clicking on the QR codes in this report, you get a sense that we have created something that supports improvement rather than highlighting failure. Take a moment to focus on how far you have come, not how far you need to go. You are all doing your best, and you know what you need to change but don't always have the tools or circumstances to implement change successfully. For those of you working in primary care in Wales this is your opportunity to demonstrate to the UK why the primary care audit, in combination with a QI strategy, is so important for the ongoing care of your patients. This is your opportunity to do something different, buck the trend and take action, however small, and improve the lives of those people living in Wales with asthma and COPD.

Dr Katherine Hickman,
Primary care audit clinical lead

Recommended quality improvement priorities*

Primary care practices in Wales should:

1	Record post-bronchodilator spirometry ratio <0.7 for 40% or more of people on the COPD register by November 2021. Ensure they have an accurate record in their notes including a spirometry trace, correct ratio and appropriate SNOMED code.	
2	Evidence and code appropriately objective variability for 80% or more of people diagnosed with asthma as demonstrated by at least one of the following by November 2021: <ul style="list-style-type: none">> Spirometric evidence of a significant FEV1 response to a short-acting beta-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.	
3	Ask 20% or more 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 by November 2021.	
4	Refer 70% or more of people with a Medical Research Council (MRC) score 3–5 to pulmonary rehabilitation (PR) and evidence this with the appropriate SNOMED code in their notes by November 2021.	
5	Provide 50% or more of people with asthma a personalised asthma action plan (PAAP) and evidence this with the appropriate SNOMED code in their notes by November 2021.	 
6	Evidence inhaler technique check in the last year for 70% or more of people with asthma and/or COPD with the appropriate SNOMED code in their notes by November 2021.	

* NACAP has an overarching improving quality strategy which can be found at: www.rcplondon.ac.uk/nacapqi-resources.

† The QR codes link to webpages which include video content about the audit data and the vision for improvement and ideas to start taking small steps towards change.

Key findings and quality improvement opportunities



Section 1: Demographics and comorbidities

[Back to contents](#)

Key findings

Adults with COPD

- > The COPD patient cohort were made up of a similar number of males and females (49.5% and 50.5%) with the average age being 69.8 years old.
- > The most common physical comorbidities were hypertension (51.1%) and obesity (32.7%).
- > 34.7% were diagnosed with depression although only 12.9% had been screened or diagnosed in the past 2 years.
- > 33.5% were diagnosed with anxiety although only 6% had been screened or diagnosed for either condition in the past 2 years.

Adults with asthma

- > There was a higher proportion of females (58.1%) to males (41.9%) in the adult asthma patient cohort, with the average age being 52.9 years old.
- > The most common physical comorbidities were atopy (46.1%), obesity (36.5%) and eczema (33.4%).
- > 33.8% were diagnosed with anxiety and 31.8% with depression, however, only 9.3% had been screened or diagnosed for either condition in the past 2 years.

Children with asthma

- > There was a higher proportion of males (61.2%, 1–5 year olds) (57.2%, 6–18 year olds) to females in the children with asthma patient cohort with the average ages being 4.2 and 12.1 years old.
- > The most common physical comorbidities for both age groups were eczema (39.4%, 1–5 year olds) (49.8%, 6–18 year olds) and atopy (31.4%, 1–5 year olds) (49.7%, 6–18 year olds). Obesity was prevalent however not as common (4.7%, 1–5 year olds) (6.0%, 6–18 year olds).
- > 9.9% of 6–18 year olds were diagnosed with mild/moderate mental health problems.

Key standards

Comorbidities

- > [NICE 2016 NG56](#): Taking account of multimorbidity in tailoring the approach to care and how to identify people who may benefit from an approach to care that takes account of multimorbidity.¹
- > [NICE 2009 CG91](#): Depression in adults with a chronic physical health problem: recognition and management recommends primary care be alert to possible depression (particularly in patients with a past history of depression or a chronic physical health problem with associated functional impairment) and consider asking patients who may have depression two screening questions.²
- > [NICE 2019 CG113](#): Generalised anxiety disorder and panic disorder in adults: management recommends primary care consider the diagnosis of generalised anxiety disorder in people presenting with anxiety or significant worry, and in people who attend primary care frequently who have a chronic physical health problem.³

Comorbidities

As demonstrated in this report, comorbidities are highly prevalent in people with COPD. Studies have shown that 94% of people with COPD have one comorbidity, and 46% have three or more. In people with mild to moderate COPD, the most common cause of death is lung cancer and cardiovascular disease, while respiratory failure is the major cause in severe COPD.⁴ The Comorbidities in Chronic Obstructive Lung Disease (COMCOLD) index is available to assess the presence of comorbidities and their prognostic value. It is useful to identify people at high risk and for patient-tailored treatment approaches. It may be used by primary care clinicians for a conventional assessment to establish a significant disease impact on patient-reported health status independent of FEV1.⁵

The data highlights that anxiety and depression are major comorbidities in COPD and can have a significant impact on physical functioning, breathlessness, quality of life, exacerbation rates, use of healthcare resources, length of hospital stay, readmission rates and mortality. [Section 5](#) highlights some of the discrepancies in care of people with a mental health comorbidity and reviews how to begin ensuring equal and equitable care for all.



Section 2: Getting the diagnosis right

[Back to contents](#)

Key findings

Adults with COPD

Of patients diagnosed with COPD in the past 2 years (n=9,395):

- > 11.5% had a record of the gold standard diagnostic test for COPD[‡]
- > 44.2% had a record of any spirometry code
- > 33.3% had a chest X-ray or computed tomography (CT) scan 6 months prior to or within 6 months of diagnosis.

Adults with asthma

Of adults diagnosed with asthma in the past 2 years (n=49,627):

- > 76.3% had one or more objective measurement[§] ever recorded
- > 2.8% had a spirometry test with reversibility
- > 72.3% had a record of any peak flow test^{**}
- > 0.3% had a record of a fractional exhaled nitric oxide (FeNO) test.

Children with asthma

Of children aged 6 years and above diagnosed with asthma in the past 2 years (n=8,444):

- > 67.4% had one or more objective measurement[§] ever recorded
- > 0.9% had a spirometry test with reversibility
- > 66.8% had a record of any peak flow test^{**}
- > 0.5% had a record of a FeNO test.

[‡] Post-bronchodilator FEV1/FVC, as recorded by Read code 339m.

[§] Spirometry, peak flow with >1 reading/evidence of peak flow diary or FeNO test.

^{**} Any peak flow Read code, including Read code 339A (peak flow rate before bronchodilation) and Read code 339B (peak flow rate after bronchodilation).

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.⁶
- > [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.⁷

Diagnosing asthma

- > [NICE 2018 QS25 \(QS1\)](#): People aged 5 years and over with suspected asthma have objective tests to support diagnosis.⁸
- > [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. For children under 5 years with suspected asthma, treat symptoms based on observation and clinical judgement, and review the child on a regular basis. If they still have symptoms when they reach 5 years, carry out objective tests.⁹

Asthma diagnosis

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 an alternative diagnosis. Similarly, underdiagnosis risks daily symptoms, (potentially serious) exacerbations and long-term airway remodelling.¹⁰ 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 UK's new 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.



QI project: Record **post-bronchodilator spirometry** ratio <0.7 for 40% or more of people on the COPD register by November 2021. Ensure they have an accurate record in their notes including a spirometry trace, correct ratio and appropriate SNOMED code.



Why does this matter?

The [COPD Patient Charter principle 1 states](#): 'I deserve timely access for the diagnosis and assessment of my COPD'. Not performing spirometry is the strongest predictor for an incorrect diagnosis of COPD.¹¹ 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 health system. Under most circumstances it would be incomprehensible for a patient to appear in a primary care register in error for a myocardial infarction, a cerebrovascular accident, a diagnosis of cancer or diabetes. Why do we allow it to happen for people with COPD?

Misdiagnosis and underdiagnosis of COPD is common. Symptoms of dyspnoea, cough and wheeze are nonspecific and can be attributed to a variety of diseases. In order to make an accurate diagnosis of COPD, a confirmatory post-bronchodilator spirometry demonstrating an FEV1/FVC ratio of <0.7 must be performed.¹² Review of the audit data suggests that many people are diagnosed with COPD based on history and physical

exam alone without confirmatory spirometry. Equally, a chest X-ray (CXR) can be reported as suggestive of COPD but it is not diagnostic and people must not be coded as COPD on the basis of a CXR report. A study reports one-third of people with positive X-ray reports did not have COPD on spirometry.¹³ This has the potential to cause misdiagnosis and errors in care for a significant number of people with COPD. It is, however, important to perform a CXR on all patients who have been diagnosed with COPD to identify any other underlying pathology such as lung cancer.

Not all people, though, are being misdiagnosed in primary care. Up to a third of people diagnosed and treated as COPD in the hospital may turn out to be inaccurately diagnosed as COPD when confirmatory spirometry is subsequently undertaken.¹⁴ It is essential, therefore, that any person who is discharged from hospital with a new diagnosis of COPD should not be entered on to the primary care COPD register until it has been confirmed with accurate, diagnostic spirometry. Confirmatory diagnostic spirometry should ideally happen in the secondary care setting prior to discharge if COPD is suspected.



QI project: Evidence and code appropriately **objective variability** for 80% or more of people diagnosed with asthma as demonstrated by at least one of the following by November 2021:

- > Spirometric evidence of a significant FEV1 response to a short-acting beta-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



Why does this matter?

Accurate diagnosis, as demonstrated by objective variability, reduces the risk of under-/over-diagnosis and the unforeseen consequences of not getting the diagnosis right from the outset. It sets the person up on the correct pathway from the outset giving them access to the right

treatment, self-management options and advice, ensuring that those people with milder disease are diagnosed and treated appropriately. It also ensures that people who have severe asthma can be identified quickly and a timely referral to a specialist multidisciplinary severe asthma service can be achieved. This is detailed in the [Charter to Improve Patient Care in Severe Asthma](#).



Section 3: Assessing severity and future risk

[Back to contents](#)

Key findings

Adults with COPD

- > 50.1% had a Medical Research Council (MRC) score recorded in the past year. Most had a score of 2 (20.9%) or 3 (14.1%).
- > Only 11.6% of the people with stable COPD and a single oxygen saturation level of 92% or less in the past 2 years had evidence of an arterial blood gas measurement or referral for home oxygen.
- > 21.9% of people with stable COPD and a persistent oxygen saturation level of 92% or less in the past 2 years had evidence of an arterial blood gas measurement or referral for home oxygen.
- > 22.9% were not asked about their smoking (tobacco) status in the past year. 41.9% reported they were ex-smokers.

Adults with asthma

- > 29.2% were not asked about their smoking (tobacco) status in the past year. 35.1% reported they had never smoked.
- > 0.7% were asked about exposure to second-hand smoke.

Children with asthma

- > 69.2% of children aged 6 years and above were not asked about their smoking (tobacco) status in the past year. 29.4% reported they had never smoked.
- > 0.5% of 1–5-year olds and 0.6% of 6–18-year olds had a record of a check of exposure to second-hand smoke.

Key standards

COPD

- > [NICE 2019 NG115](#): One of the primary symptoms of COPD is breathlessness. The MRC dyspnoea scale should be used to grade the breathlessness according to the level of exertion required to elicit it.
- > [NICE 2016 QS10 \(QS3\)](#): People with stable COPD and a persistent resting stable oxygen saturation level of 92% or less have their arterial blood gases measures to assess whether they need long-term oxygen therapy (LTOT).¹⁵
- > [NICE 2019 NG115](#): Document an up-to-date smoking history, including pack years smoked for everyone with COPD. At every opportunity, advise and encourage every person with COPD who is still smoking (regardless of their age) to stop, and offer them help to do so. Unless contraindicated, offer nicotine replacement therapy, varenicline or bupropion as appropriate to people who want to stop smoking, combined with an appropriate support programme to optimise smoking quit rates for people with COPD.
- > [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.¹⁶

Asthma

- > [NICE 2018 QS25 \(QS5\)](#): People with suspected severe asthma are referred to a specialist multidisciplinary severe asthma service.
- > [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.¹⁷
- > [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.

Second-hand smoke

Exposure to other people's 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.¹⁸

Currently we find ourselves with a confounding problem. Emerging evidence from a recent YouGov COVID-19 tracker¹⁹ 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.²⁰



QI project: Ask 20% or more 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 by November 2021.



Why does this matter?

A [Department of Health survey](#) of 1,000 children revealed the following statistics:

- > Over half (54%) of children with a parent who smokes say that their one wish for Christmas is that their mum or dad give up smoking.
- > Almost all (98%) children with a smoking parent wish that they would quit.
- > Almost three-quarters (73%) of children with a smoking parent worry about the risk of their parent dying. A further 58% worry about the risk of heart disease.
- > When it comes to what children would do to get their parents to quit, over a third (37%) would go without any Christmas presents.
- > As clinicians we have a duty of care to not only support children's parents to give up smoking but, more importantly, make some of their Christmas wishes come true.



Section 4: Providing high-value care

[Back to contents](#)

Key findings

Adults with COPD

- > 40,137 adults with COPD had any MRC score in the past 3 years.
 - 36.6% of these people were referred for PR.
- > 17,064 adults with COPD had an MRC score 3–5 in the past 3 years.
 - 56.4% of these people were referred for PR.
- > 44.4% of people were prescribed an inhaler and had an inhaler technique check in the past year.
- > 68.5% received an influenza vaccination in the preceding autumn and winter months (1 August to 31 March).



Adults with asthma

- > Only 25.9% had a PAAP in the past year.
- > 54.5% had a record of being asked the RCP 'three questions'.²¹
- > 48.4% were prescribed an inhaler and had an inhaler technique check in the past year.
- > 54.0% received an influenza vaccination in the preceding autumn and winter months (1 August to 31 March).

Children with asthma

- > Only 16.1% of 1–5-year olds and 24.3% of 6–18-year olds had a PAAP in the past year.
- > 32.4% of 1–5-year olds and 46.5% of 6–18 year olds had a record of being asked the RCP 'three questions'.²¹
- > 28.2% of 1–5-year olds and 42.8% of 6–18 year olds were prescribed an inhaler and had an inhaler technique check in the past year.
- > 44.8% of 1–5-year olds and 49.1% of 6–18 year olds received an influenza vaccination in the preceding autumn and winter months (1 August to 31 March).



Key standards

COPD

- > [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).
- > [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.
- > [BTS Quality statement 1](#): People with COPD and self-reported exercise limitation (MRC dyspnoea 3–5) are offered PR.²²

Asthma

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

Pulmonary rehabilitation (PR)

PR was defined by the American College of Chest Physicians in 1974: ‘pulmonary rehabilitation is an art of medical practice wherein an individually tailored, multidisciplinary programme is formulated, which through accurate diagnosis, therapy, emotional support and education, stabilizes or reverses both physiopathological and psychopathological manifestations of pulmonary diseases and attempts to return the patient to the highest possible functional capacity allowed by his handicap and overall life situation.’²³

A referral to PR improves a patient’s COPD symptoms, leading to improvements in their exercise capacity and quality of life.²⁴ PR reduces the number and duration of respiratory hospital admissions experienced by individuals, the number of readmissions, and can promote self-management skills.²⁵

NICE guidelines and the BTS quality standards advise that PR should be available to all appropriate people with COPD who are normally identified by recording an MRC status of 3 or above.²⁶ 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. PR should not be seen as an added extra to a person’s management but seen as an essential, evidence-based treatment which has a profound impact on the person’s quality of life.

Personalised asthma action plan (PAAP)

For 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. Self-management, including provision of a PAAP, and support by regular medical review almost halves the risk of hospitalisation, significantly reduces emergency department attendances and unscheduled consultations and improves markers of asthma control and quality of life.²⁷

[The National Review of Asthma Deaths \(NRAD\)](#) highlighted that 77% of those who died had no evidence in their medical records of being provided with a PAAP detailing how their medication was to be taken, how to recognise danger signals and when to call for help.

Inhaler technique

Among the 135 cases in the [NRAD report](#), where the last asthma review was recorded in primary care, 71% (96) had an assessment of inhaler technique recorded. This is in fact significantly higher than the figure in Wales where less than 50% of people with either COPD or asthma had their inhaler technique check documented. This, in both cases, may be partly due to inaccuracies of coding in primary care.

People who are unable to use their inhaler device 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 in Spain, Sweden and the UK, respectively, with €782 million attributable to poor inhalation technique across the three countries.²⁸



QI project: Refer 70% or more of people with a Medical Research Council (MRC) score 3–5 to **pulmonary rehabilitation (PR)** and evidence this with the appropriate SNOMED code in their notes by November 2021.



Why does this matter?

The [COPD Patient Charter principle 3 states](#): ‘I deserve access to the best available evidence-based, personalised treatment, to ensure I can live as well and as long as possible.’ PR should never be seen as something that a clinician chooses whether or not to offer or discuss with a person who may

be suitable for referral. 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 people into the service as possible. By not offering a referral to PR we are denying people access to essential, evidence-based care and potentially reducing their quality of life.



QI project: Provide 50% or more of people with asthma a **personalised asthma action plan (PAAP)** and evidence this with the appropriate SNOMED code in their notes by November 2021.



Why does this matter?

For the majority of the year, people with asthma are managing their asthma without support from their healthcare professional. They need to have the tools to do this safely with a co-created PAAP readily available to them at all times. Self-management education in asthma is not an optional extra. Healthcare professionals have a responsibility to ensure that

everyone with asthma has personalised advice to enable them to optimise how they self-manage their condition.²⁹ Asthma self-management, supported by regular professional review, improves asthma control, reduces exacerbations and admissions, and improves quality of life. Self-management education should be reinforced by a written PAAP which provides a summary of the regular management strategy, how to recognise deterioration and the action to take.



QI project: Evidence **inhaler technique check** in the past year for 70% or more of people with asthma and/or COPD with the appropriate SNOMED code in their notes by November 2021.



Why does this matter?

If inhaler technique is not demonstrated and checked on a regular basis, people run the risk of poor technique, reduced medication deposition and resultant poor control. Taking an inhaler is not always intuitive to either healthcare professionals³⁰ or people with asthma and/or COPD, and it needs to be demonstrated by a trained professional.

Just as we would never send a person away with a prescription for an insulin pen without a clear demonstration of how to use it, no person prescribed an inhaler should be sent away without a plan in place to have their technique checked. Switching people onto a cheaper inhaler device may be an attractive proposition from a financial perspective but if that patient can't use it and ends up with poor control and multiple trips to their GP and/or hospital as a consequence, the financial implications will be far greater.



Section 5: Ensuring equal and equitable care in people with a mental health diagnosis

[Back to contents](#)

Key findings

Adults with COPD

- > 8.5% of the cohort had a serious mental health diagnosis with 39.0% reporting anxiety and/or depression.
- > People with COPD and a serious mental health diagnosis had a lower prevalence of:
 - Post-bronchodilator spirometry in the past 2 years, 9.4% compared with 12.4%.
 - People with an MRC score 3–5 being referred to PR, 54.3% compared with 57.2%.

Adults with asthma

- > 6.4% of the cohort had a serious mental health diagnosis with 38.6% reporting anxiety and/or depression.
- > People with asthma and a serious mental health diagnosis had:
 - A similar prevalence of recording of peak flow, 92.5% compared with 93.0%.
 - A slightly lower prevalence of being asked the RCP three questions, 51.3% compared with 55.6%.

Children with asthma

- > 2.4% of 1–5 year olds and 9.4% of 6–18 year olds reported a mild/moderate mental health diagnosis.
- > 0.3% of 1–5 year olds and 1.4% of 6–18 year olds reported learning disabilities.
- > 1–5 year olds with a mild/moderate mental health diagnosis had a slightly higher prevalence of being asked the RCP three questions, 35.7% compared with 32.3%.
- > 6–18 year olds with a mild/moderate mental health diagnosis had:
 - A higher prevalence of recording of peak flow, 82.3% compared with 78.2%.
 - A slightly lower prevalence of being asked the RCP three questions, 44.4% compared with 46.6%.

Key standards

- > [NICE 2016 NG56](#): Taking account of multimorbidity in tailoring the approach to care and how to identify people who may benefit from an approach to care that takes account of multimorbidity.
- > [NICE 2009 CG91](#): Depression in adults with a chronic physical health problem: recognition and management recommends primary care be alert to possible depression (particularly in patients with a past history of depression or a chronic physical health problem with associated functional impairment) and consider asking patients who may have depression two screening questions.
- > [NICE 2019 CG113](#): Generalised anxiety disorder and panic disorder in adults: management recommends primary care consider the diagnosis of generalised anxiety disorder in people presenting with anxiety or significant worry, and in people who attend primary care frequently who have a chronic physical health problem.

Mental illness

People with psychological difficulties are less able to manage symptoms and are less likely to be physically active or attend PR. Karen Heslop-Marshall *et al* conducted a randomised controlled trial which demonstrated that cognitive behavioural therapy (CBT) delivered by respiratory nurses was found to be a clinically and cost-effective treatment for anxiety in people with COPD relative to self-help leaflets. The primary outcome for anxiety was the change in the group mean HADS-Anxiety Subscale at 3 months from baseline.³¹ [The HADS-Anxiety Subscale](#) is a brief self-completed questionnaire, validated in COPD and widely available in clinical practice.

NICE guidelines for the treatment of anxiety and depression recommend psychological treatment (CBT, counselling and self-help approaches) and pharmacological treatment, or a combination of both.

It is known that anyone who has a long-term condition is at increased risk of having a co-existing mental health problem such as anxiety or depression and also that current provision of mental health support for people with long-term conditions is both inadequate and costly.³²

The Welsh government's [Together for Mental Health: delivery plan 2019 to 2022](#) includes a scheme to support people to manage their own health including those with long-term conditions, through administering a self-management and well-being grant. The grant will support initiatives that enable people to improve their physical functioning, psychological (and spiritual) wellbeing and social connectedness.

National Asthma and COPD Audit Programme: Wales primary care clinical audit 2020

This report was prepared by the following people, on behalf of the COPD and asthma advisory group. The full list of members can be found on the NACAP resources page here: www.rcplondon.ac.uk/nacap-resources

Dr Katherine Hickman, primary care clinical lead, NACAP, Care Quality Improvement Department (CQID), RCP; and GP, Low Moor Medical Practice, Bradford; and respiratory lead for Leeds and Bradford clinical commissioning groups

Lara Amusan, programme manager, NACAP, CQID, RCP

Kajal Mortier, project manager, NACAP, CQID, RCP

Philip Stone, research assistant in statistics/epidemiology, National Heart & Lung Institute, Imperial College 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

Professor C Michael Roberts, senior clinical lead, NACAP, CQID, RCP; managing director of academic science partnership, UCLPartners, professor in medical education for clinical practice, Institute of Population Health Sciences, Queen Mary University London; and deputy director of NIHR North Thames Applied Research Collaboration.

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

NACAP is a programme of work that aims to improve the quality of care, services and clinical outcomes for patients with asthma and COPD in England, Scotland* and Wales. Spanning the entire patient care pathway, NACAP includes strong collaboration with asthma and COPD patients, as well as healthcare professionals, and aspires to set out a vision for a service which puts patient needs first. To find out more about the NACAP visit: www.rcplondon.ac.uk/nacap.

**Scotland ceased to commission NACAP as of 1 March 2021.*

Healthcare Quality Improvement Partnership (HQIP)

NACAP is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP). 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

Royal College of Physicians (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 over 39,000 fellows and members worldwide, the RCP advises and works with government, patients, allied healthcare professionals and the public to improve health and healthcare.

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National Asthma and COPD Audit Programme (NACAP)

Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

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

 @NACAPaudit