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Primary Care Respiratory Update



Edition Highlights

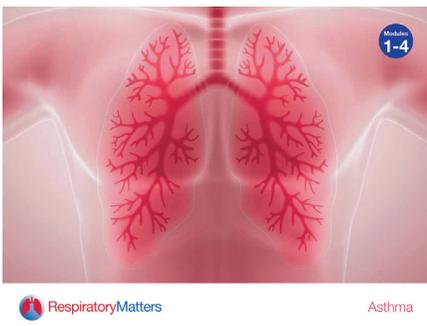
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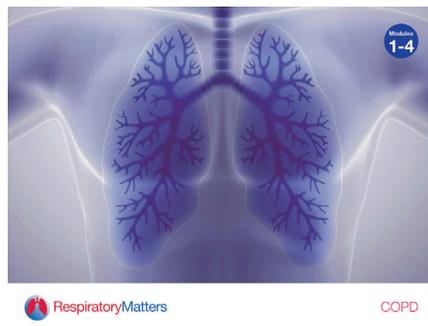


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to co-ordinate actuation with inspiration of breath should be told to use a Volumatic[™] spacer device to ensure proper administration of the product. Young children may find it difficult to use the inhaler properly and will require help. Using the inhaler with the Volumatic[™] spacer device with a face mask may help in children under 5 years. Advise the patient to thoroughly rinse the mouth or gargle with water or brush the teeth immediately after using the inhaler. The patient should be told of the importance of cleaning the inhaler at least weekly to prevent any blockage and to carefully follow the instructions on cleaning the inhaler printed on the PIL. The inhaler must not be washed or put in water. The patient should be told also to refer to the PIL accompanying the Volumatic[™] spacer device for the correct instructions on its use and cleaning. **Contraindications:** Hypersensitivity to any of the components. **Warnings and precautions:** Patients should be properly instructed on the use of the inhaler to ensure that the drug reaches the target areas within the lungs. Patients should also be informed that Soprobec should be used on a regular basis, even when they are asymptomatic. Soprobec does not provide relief of acute asthma symptoms, which require a short-acting inhaled bronchodilator. Patients should have relief medication available. Severe asthma requires regular medical assessment, including lung-function testing, as there is a risk of severe attacks and even death. Patients should be instructed to seek medical attention if short-acting relief bronchodilator treatment becomes less effective, or more inhalations than usual are required as this may indicate deterioration of asthma control. If this occurs, patients should be assessed and the need for increased therapy considered (e.g. higher doses of inhaled corticosteroid or a course of oral corticosteroid). Treatment with Soprobec should not be stopped abruptly. Systemic effects of inhaled corticosteroids may occur, particularly when prescribed at high doses for prolonged periods. Possible systemic effects include adrenal suppression, growth retardation in children and adolescents, decrease in bone mineral density, cataract and glaucoma and more rarely, a range of psychological or behavioural effects including psychomotor hyperactivity, sleep disorders, anxiety, depression or aggression (particularly in children). It is important that the dose of inhaled corticosteroid is titrated to the lowest dose at which effective control of asthma is maintained. It is recommended that the height of children receiving prolonged treatment with inhaled corticosteroids is regularly monitored. If growth is slowed, therapy should be reviewed with the aim of reducing the dose of inhaled corticosteroids, if possible, to the lowest dose at which effective control of asthma is maintained. In addition, consideration should also be given to referring the patient to a paediatric respiratory specialist. Prolonged treatment with high doses of inhaled corticosteroids may result in clinically significant adrenal suppression. Additional systemic corticosteroid cover should be considered during periods of stress or elective surgery. The transfer to Soprobec of patients who have been treated with systemic steroids for long periods of time or at high doses, needs special care, since recovery from possible adrenocortical suppression may take considerable time. Reduction of the dose of systemic steroid can be commenced approximately one week after initiating treatment with Soprobec. The size of the reduction should correspond to the maintenance dose of systemic steroid. For patients receiving maintenance doses of 10 mg daily or less of prednisolone (or equivalent) reductions in dose of not more than 1 mg are suitable. For higher maintenance doses, larger

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PIP codes: Soprobec 50 mcg/actuation - 4098620, Soprobec 100 mcg/actuation - 4098638, Soprobec 200 mcg/actuation - 4098646, Soprobec 250 mcg/actuation - 4098653.

References: 1. MHRA April 2019 Public Assessment Report: Soprobec 50, 100, 200, 250 mcg, UK/H/6818/001-004/DC. Available at: mhraproductsprod.blob.core.windows.net/docs-20200302/3bc836d25349185931b189bf3ba25c395c23447b. Accessed May 2020. 2. BNF, May 2020. (See NHS indicative price). Available at: bnf.nice.org.uk/medicinal-forms/beclometasone-dipropionate.html. Accessed May 2020. 3. Data on file, Glenmark Pharmaceuticals Europe Ltd (Device equivalence). 4. Soprobec Summary of Product Characteristics.

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WE'RE HERE TO SUPPORT YOUR PULMONARY FIBROSIS PATIENTS



ABOUT THE PULMONARY FIBROSIS TRUST

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Our aim is to help patients with PF or IPF live their lives to the full and ensure they can live as independently, and as comfortably, as possible. We can provide patients with the help they need quickly and with minimal fuss.



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The support we provide

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- An emotional support service (no medical advice can be given) for patients and their carers/families
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- Provision of mobility scooters
- Arrangement of portable oxygen concentrators for holidays
- Payment of transport fees to hospitals and specialist centres
- Caravan holidays
- Other ad-hoc services

In addition, the PFTrust works hard to raise awareness of Pulmonary Fibrosis, in particular the challenges people face on a daily basis, and also provides grants towards research projects.

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Editor's Round-Up

Dr Iain Small, *Editor Primary Care Respiratory Update*



There's an apocryphal ancient curse that says "may you live in interesting times". I'm sure you will agree with me that we have been living through not only interesting but challenging and for some, devastating times. All of us have been asked to do things we never expected to do, to respond to situations in ways that may be very different to our usual practice, and to step into an ever changing, and sometimes, dangerous environment, dangerous for our patients and ourselves.

As we have trained the concentrated eye of the health and social care system onto one single focus, rightly adjudging that this was our only sensible option, we have done so in the knowledge that there will be unintended consequences, again, for our patients and ourselves.

But the NHS, and in particular primary care, has remained 'open for business' throughout, coping not only with the additional demands placed on us, but with a population of worried, vulnerable and bewildered patients.

So it is with that in mind that this edition of PCRU will not be about treating people in a viral pandemic, but rather, we will be highlighting examples of novel and innovative practice that will become the norm when this storm has passed. New ways of practice that allow us to deliver effective evidence based care for our patients, one of the keystones in the foundations of the Primary Care Respiratory Society.

Here at PCRU, we have been working on a series of articles about Lung Cancer for some time. With what feels like critical timing, we are able to bring them to you in this edition. At a time when patients developing this dreadful disease are caught in a 'triple whammy' of risk; delayed presentation, delayed investigation/treatment, and "I thought my cough was the virus", it's really important for us to reflect on what we can do, in Primary Care, to speed them through to definitive intervention.

With regard to PCRS, I want to highlight two other items in this edition. One is Bronwen Thomson's tribute to our outgoing Chief Executive Anne Smith. There are no adequate words with which to mark Anne's contribution, but Bronwen has given it a good go. The second is to draw your attention to news regarding PCRS's annual conference. You will find this on page 25.

Finally - a word of thanks. Having been in a position of decision making and leadership during the past few months, I have been only too aware of the size of the 'ask' you have all faced, and of the way in which you have all stepped up and stepped in. In the 37 years (and counting) of my NHS career, this has been our darkest, and yet our finest hour.

Are you working in respiratory care?



In these challenging times, supporting people living with lung conditions is more important than ever. Become a BLF Professional, and we'll help you to improve care and develop effective services for people with lung disease.

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My COVID-19 reflections

Clare Cook, *Physiotherapist, clinical lead of an integrated community respiratory team in Bristol, member of PCRS Executive Committee and Chair of PCRS Respiratory Leaders Group*



Spring 2020 has brought us many unexpected challenges in the respiratory community. Never before have we been so focused to work so urgently across organisations to bring about the best response to Coronavirus for a whole population. Clinicians and support staff across health, social care and the charity sector have been working to deliver a collective response to this challenge. COVID-19 reaches a population far greater and far quicker than we usually experience. Yet as the prevalence unfolds we are likely to learn that like most respiratory disease the outcomes from the virus are an indicator of health inequalities. With the magnifying glass on population-based health outcomes. Will it show that as well as clinical risk factors that the people with the security net of savings in the bank, a private back garden and emotional support are the ones more likely to better weather the storm?

A month into the decision to cease routine care, after that initial flurry of planning and communication we now sit in a temporary space where we have re-framed what day-to-day care looks like. For most of us, clinical assessments have moved from mostly face-to-face, to being predominantly virtual or telephone based. We have moved from following guidelines, using our solid clinical experience of familiar scenarios, to using clinical judgement to find a best fit rather than follow best evidence.

In response to the questions raised by many primary care colleagues who are concerned about best care for respiratory patients with COVID-19. PCRS has produced a pragmatic guide for crisis management of asthma and COPD during the covid-19 epidemic. I have found this Q&A style document very reassuring while I gauge the new questions that are posed to our

team. The rapidly changing advice and limited research base has made this novel disease hard to navigate.

In the thirst for knowledge I have tried to make sure I follow the informed and balanced perspectives of societies and professionals I trust. The COVID-19 section of the PCRS-UK website has been a great platform to bring all these resources into one place and has sign-posted me to other helpful articles and communities.

COVID-19 had caused many of us to expedite conversations to explore a patient's wishes and expectations. Listening to primary care colleagues throughout the UK I have heard how many have prioritised the time to hold and document conversations reflecting individuals' fears and wishes about pre-existing health conditions and COVID-19. Despite the challenges of having these conversations from a physical distance, I have mostly heard the relief from the positive impact an open conversation has had. The RCGP has provided open access e-learning and a guide to community palliative, end-of-life and bereavement care in COVID-19 which I have found especially helpful. <https://elearning.rcgp.org.uk/mod/page/view.php?id=10537>

Chronic disease standards are underpinned by regular and detailed assessments and we are now being asked to pause investigations, treatments and withhold clinical examination. For many of us we worry about the impact this hiatus will have on long term health outcomes. While we understand the immediate risk COVID-19 places on our patient population we are witnessing a compromise in the care we would usually deliver and understandably this is causing clinicians upset and anxiety.



Primary Care Respiratory Update

Compassionate and supportive leadership can help us to see these compromises in care as a collective decision. Not a wrong or bad decision, but the best decision with the information we have available at this time.

It is important to acknowledge that in primary and community care many of these decisions to withhold care are subtle but it is the accumulative effect of compromises in care that place clinical outcomes at risk and can drive staff concerns.

These are some of the things that have helped my team and I to feel more clinically secure:

1. To share the complex and compromised decisions - so that the risk is shared with peers.
2. To regularly schedule time to reflect as clinicians on the decisions we have made, and think about what the patient can do to mitigate these compromises.
3. Being honest about my confidence in my decision making and to promote a culture where colleagues seek help.
4. Explaining the decision process to pause clinical services has been made in conjunction with the respiratory board at the local CCG and is in line with national directives.

While we work to deliver best care, we also acknowledge the impact the lockdown has had on our homes, families and communities. Our ambition to deliver our 'best response' has not only meant a compromise for the usual clinical care we provide, but also our personal work-life balance.

It can feel a bit naive to ask the question, "Are you Okay?" Okay - in the context of a global pandemic, when I have had to redesign the service I have delivered for the past 7 years in only 7 days and I am supporting people to make clinical decisions with minimal guideline and evidence! Okay ?? doesn't seem to cover it.

But the check-in' chat, "are you Okay?" – I have really appreciated. If we feel connected we feel more confident.

The acknowledgement that this is new and scary can often be all the security we need to be our best. I have long followed the Joyful Doctor on Twitter and I find her advice especially grounding. <https://www.joyfuldoctor.com/>

Some top tips I have read to help self-mange anxiety at this time:

1. Normalise general anxiety- this is a highly unusual and uncertain time, it's okay to feel anxious about the medium term work and home landscape.
2. Connect with people whose opinion you trust. Go where you would usually go for support and information.
3. Be kind to yourself, set realistic expectations. Ensure you take time to create space between the clinical and operational decisions you make. Enabling time for reflection will ensure you can keep going over long shifts, over several months.
4. Celebrate and share success stories.
5. Take rest days, to relax not just the body but the mind too.

Maintain usual habits that support your mental well-being. I feel like my learning and networking has grown exponentially since this outbreak. My clinical reasoning and decision-making skills have been tested like never before. Trying to support a team remotely, especially when written communication is not my strength has been really hard. Yet I feel so proud to be a clinician in the respiratory community at this time and so grateful to be connected to PCRS. The overwhelming feeling that I am supported by the people I have met along the way in my career both locally and nationally has a huge impact on me and makes me feel a little less scared.

Take time to protect yourself, while you protect others. Connect with who and what you need.

You got this.
See you soon,
Clare

Date of Preparation: June 2020 Version 1

Asthma Guidelines in Practice: a PCRS consensus

Asthma Guidelines in Practice is a PCRS consensus-based article to provide clarity on aspects of diagnosis, management and monitoring of asthma that are uncertain due to differences between current national guidelines. The article has been written by Luke Daines (GP and Academic Clinical Fellow, University of Edinburgh) in conjunction with GP colleagues Noel Baxter, Kevin Gruffydd Jones, Steve Holmes, Duncan Keeley, nurse colleagues Val Gerrard and Carol Stonham and pharmacist Deborah Leese. It is based on the recently published PCRS briefing paper (see <https://www.pcrs-uk.org/resource/btssign-british-asthma-guideline-update-july-2019>).

Key points

Having two UK asthma guidelines has led to conflicting advice and is confusing for clinicians. This article aims to bring clarity on a number of issues and has been updated in line with the recently released BTS/SIGN 2019 guideline.

Asthma diagnosis

- Following a structured clinical assessment, weigh up the probability that an individual has asthma: use a monitored trial of treatment if asthma is highly probable; conduct further investigations (spirometry, peak expiratory flow variability) if an individual is at intermediate probability.
- Achieving an accurate diagnosis may take time and may require the comparison of repeated measurements and clinical assessments
- Objective evidence to support an asthma diagnosis should be sought however likely the diagnosis appears to be.
- The basis for asthma diagnosis should be clearly documented in medical records.

Asthma management

- Regular inhaled corticosteroid (ICS) is regarded as the foundation of asthma pharmacological treatment.
- When prescribing ICS for children, the starting dose is usually a 'very low dose' and the highest dose is classed as a 'medium dose'.

- In line with the NICE recommendation, PCRS suggests a trial of leukotriene receptor antagonists (LTRA) as the first line add-on therapy to ICS with careful review.
- Maintenance and Reliever Therapy (MART) may be considered in adults who have a history of asthma attacks despite medium dose ICS or ICS/LABA (long-acting beta-agonist).

Asthma monitoring

- A regular review of individuals with asthma provides the chance to assess current symptom control and consider the future risk of an asthma attack.
- Record asthma control, a measure of lung function, asthma attacks, oral corticosteroids, absence from work/school and smoking status at each review.
- Identify the future risk of an asthma attack in all individuals with asthma: previous asthma attack, poor asthma control and short-acting beta agonist (SABA) over-reliance increase the risk substantially.
- Recognise individuals with severe asthma and refer for specialist review

Introduction

Asthma is a chronic respiratory condition affecting an estimated 5.4 million people in the UK.¹ Individuals with asthma suffer from wheeze, shortness of breath, cough and chest tightness, limiting everyday activities and fulfilment of roles at home and work.²

In the UK, public sector spending for asthma exceeds £1.1 billion each year, with the majority of costs (74%) arising from prescriptions and the estimated 6.4 million primary care consultations that occur each year.³ Evidence-based management can maintain good day-to-day control for most people with asthma and substantially reduce the risk of asthma attacks.²

However, knowing which evidence-based strategies to implement has been made confusing by the presence of multiple guide-

lines for asthma care. In the UK, the National Institute for Health and Care Excellence (NICE) guideline (published 2017) concentrates on diagnosis, monitoring and chronic management and incorporates economic evaluation with interpretation from a multidisciplinary guideline group.⁴ The British Thoracic Society/Scottish Intercollegiate Guideline Network (BTS/SIGN) guideline (updated 2019) covers all aspects of asthma care and is led by a multidisciplinary clinical group.² Whilst the evidence considered by the NICE and BTS/SIGN guideline groups is broadly the same, the methodology used to produce the guidelines is different, and has resulted in different recommendations.⁵ Thankfully, following calls from PCRS (amongst others),⁶ an agreement between BTS/SIGN and NICE has been reached, meaning that future asthma guidelines will be jointly produced.

Rationale for PCRS consensus

We look forward to the joint guideline but, in the meantime, we want to support primary care clinicians who are facing uncertainty due to conflicting recommendations between the national guidelines. This article, developed by PCRS members, aims to provide a clear, concise and pragmatic view on the diagnosis, management and monitoring of asthma in primary care. It does not attempt to reproduce all the details contained in each guideline, but instead focuses on the areas that vary substantially between NICE and BTS/SIGN versions, offering a workable solution.

Recommendations

Asthma diagnosis

Achieving a clear consensus for the best diagnostic strategy for asthma is a particular challenge as, on top of economic and implementation considerations,⁴ the definition of asthma is also evolving. Traditionally a diagnosis of asthma was based on symptoms and demonstration of variable obstructive airflow on lung function testing.^{2,7} Yet, more recent definitions of asthma include airway inflammation and airway hyper-responsiveness to incorporate the subtypes of asthma identified through recent research on genetics and pathophysiological mechanisms.² This changing understanding of asthma has delivered new ways in which to test and treat for asthma subtypes and may in the future lead to asthma being 'deconstructed' into distinct 'treatable traits'.^{7,8} Until then, a clear pragmatic way forward is needed to guide clinicians in non-specialist settings, where most asthma cases are diagnosed.⁸

There is no definitive gold standard test which can categorically confirm or refute the diagnosis of asthma. Therefore, the diagnosis of asthma is made clinically following a structured clinical assess-

ment; a careful integration of evidence from a wide variety of sources.^{2,4} Key components of a structured clinical assessment include a detailed history, examination, review of the patient's clinical records and previously completed investigation results (for example, peak expiratory flow, spirometry, blood eosinophils from a full blood count).

When taking a history, ask about wheeze, shortness of breath, cough and chest tightness, the most suggestive symptoms of asthma.^{2,4} Symptoms usually occur in episodes with no (or minimal) symptoms between episodes.² Combinations of symptoms (particularly wheeze, cough and shortness of breath) occurring in episodes are more useful for identifying asthma than individual symptoms, particularly in children.⁹ Ask about variability in symptoms through the day and between seasons. Clarify any triggers that provoke or worsen symptoms⁴ and, in adults, check specifically for work-related factors. Remember to enquire about personal or family history of other atopic conditions such as allergic rhinitis or eczema.⁴ Information from the patient clinical record, including previous respiratory illnesses, treatments and responses and previous examination findings (particularly wheeze heard on chest auscultation by a health professional), can further build the clinical picture.

On auscultation of the chest, asthmatic wheeze tends to be end-expiratory, scattered and polyphonic. Consider alternative diagnoses if wheeze is never heard during symptomatic episodes (Table 1). Remember that respiratory examination may well be normal in an asymptomatic individual, so it is important not to exclude asthma solely on examination findings.⁴ In addition to a respiratory examination, check the throat for enlarged tonsils and look out for other signs of atopic disease such as eczema or rhinitis.

Following a structured clinical assessment, the BTS/SIGN guide-

Table 1: Clinical features to suggest an alternative diagnosis to asthma in adults

Clinical clue	Possible diagnosis
No airflow obstruction	
Predominant cough with no lung function abnormality	Chronic cough syndromes; pertussis
Prominent dizziness, light-headedness or peripheral tingling	Dysfunctional breathing
Recurrent severe 'asthma attacks' without objective evidence to confirm	Vocal cord dysfunction
Predominant nasal symptoms without lung function abnormality	Rhinitis
Postural and food-related symptoms, predominant cough	Gastro-oesophageal reflux disease
Orthopnoea, paroxysmal nocturnal dyspnoea, peripheral oedema, pre-existing cardiac disease	Cardiac failure
Crackles on auscultation	Pulmonary fibrosis
With airflow obstruction	
Significant smoking history (ie, over 30 pack-years), age of onset over 35 years	COPD
Chronic productive cough in the absence of wheeze or breathlessness	Bronchiectasis*, inhaled foreign body*, obliterative bronchiolitis, large airway stenosis
New onset in smoker, systemic symptoms, weight loss, haemoptysis	Lung cancer*, sarcoidosis*

*May also be associated with non-obstructive spirometry.

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line recommends weighing up the probability that the individual has asthma based on three categories: high, intermediate and low.²

If a patient (whether adult or child) has all of the following typical clinical features, they are considered to have a high probability of asthma:²

- Recurrent episodes of symptoms ('attacks')
- Wheeze confirmed by a healthcare professional
- A personal or family history of atopy
- A past record of variable airflow obstruction
- No features to suggest an alternative diagnosis (Table 1).

If there is any doubt, the diagnosis should be considered as intermediate probability. Adults and children who have none of the typical features of asthma or whose symptoms are suggestive of an alternative diagnosis have a low probability of asthma.² The probability of asthma informs the next steps in the diagnostic work-up, as demonstrated in Figure 1.

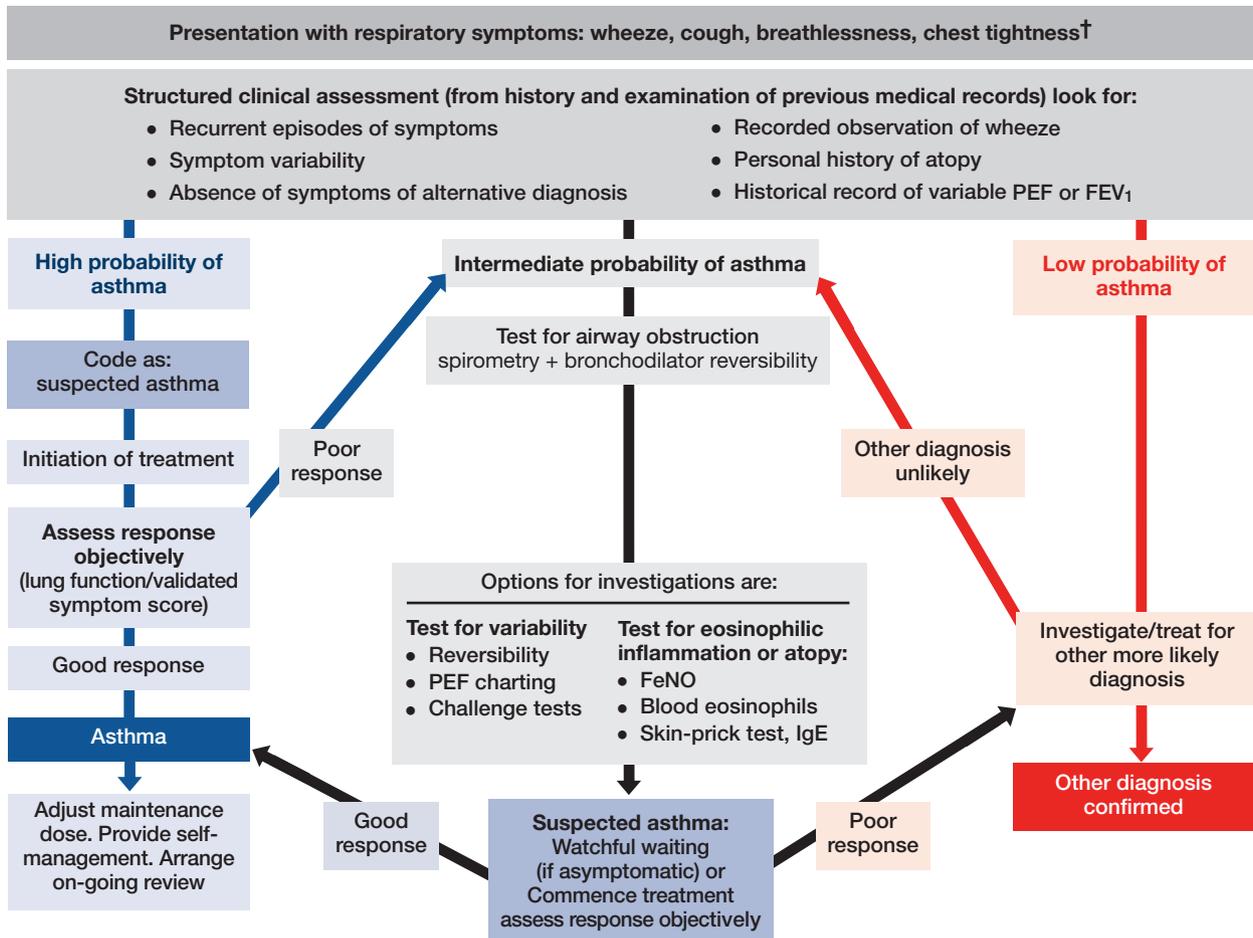
Even with a careful structured clinical assessment and diagnostic work-up, the diagnosis of asthma can be challenging, particularly

due to the variable nature of symptoms and lung function over time and the heterogeneity of presentation. Primary care is ideally placed to collect, record and appraise the information required to make an asthma diagnosis and provide continuity to allow repeated assessments over time so that treatment response and natural variation can be evaluated. Consequently, a diagnostic strategy based on repeated clinical assessments, supported by objective clinical tests (including peak expiratory flow monitoring) and sensitively using trials of initiating and discontinuing therapy is recommended as a practical way forward.

It is important to refer to specialist services in cases of doubt or difficulty (Table 2).

Whilst investigating asthma, and until a diagnosis is confirmed, use the code 'suspected asthma'.^{2,4} Once a diagnosis of asthma has been made, record the basis for the decision in a single entry in the person's medical records, alongside the coded diagnostic entry. The diagnosis of asthma should ideally be revisited and checked regularly – especially when you first take over the care of a patient thought to

Figure 1 - Diagnostic algorithm for individuals presenting with symptoms suggestive of asthma



† In children under 5 years and others unable to undertake spirometry in whom there is a high or intermediate probability of asthma, the options are monitored initiation of treatment or watchful waiting according to the assessed probability of asthma

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Table 2 Reasons for specialist referral

Adults	Children
Referral for tests not available in primary care	
Diagnosis unclear	Diagnosis unclear
Suspected occupational asthma (symptoms that improve when patient is not at work, adult-onset asthma and workers in high-risk occupations)	
Poor response to asthma treatment	Poor response to monitored initiation of asthma treatment
Severe/life-threatening asthma attack	Severe/life-threatening asthma attack
'Red flags' and indicators of other diagnoses	
Prominent systemic features (myalgia, fever, weight loss)	Failure to thrive
Unexpected clinical findings (eg crackles, clubbing, cyanosis, cardiac disease, monophonic wheeze or stridor)	Unexplained clinical findings (eg focal signs, abnormal voice or cry, dysphagia, inspiratory stridor)
Persistent non-variable breathlessness	Symptoms present from birth or perinatal lung problem
Chronic sputum production	Excessive vomiting or possetting
Unexplained restrictive spirometry	Severe upper respiratory tract infection
Chest X-ray shadowing	Persistent wet or productive cough
Marked blood eosinophilia	Family history of unusual chest disease
	Nasal polyps
Patient or parental anxiety or need for reassurance	
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have asthma. Good documentation is strongly recommended as the variable nature of asthma can lead to individuals experiencing long periods without symptoms, leading patients and clinicians to question the original diagnosis.¹⁰

Objective tests

Objective tests should be done in all patients old enough to perform them, as part of an initial diagnostic assessment to support a confident diagnosis of asthma. Increasing the quality and availability of objective testing across healthcare is an important policy priority. Understanding that each diagnostic test available for asthma has strengths and limitations is therefore valuable in order to use tests most effectively to build up sufficient evidence so that a differential diagnosis can be confirmed or refuted correctly.

Tests for demonstrating variability in airflow obstruction

A defining feature of asthma is variable airflow obstruction caused by airway bronchoconstriction. Yet, demonstrating variable airflow obstruction can be a challenge as airway physiology may be normal when an individual with asthma is asymptomatic. This is reflected in estimates for the negative predictive value of spirometry in adults and children which varies between 18% and 54%,² indicating that more than half of patients who have a negative result (non-obstructive spirometry) will have asthma.¹¹

Therefore, relying on objective tests of airflow obstruction completed only at a single point of time risks missing asthma, particularly if the patient is asymptomatic at the time of testing. Instead, testing

for variable airflow obstruction should be repeated over time.

In primary care, peak expiratory flow monitoring and spirometry with bronchodilator reversibility testing are recommended measures to demonstrate variable airflow obstruction. When interpreting spirometry, BTS/SIGN recommend the use of lower limit of normal for FEV₁/FVC ratio (instead of the fixed ratio of 70%) in order to avoid the substantial under-diagnosis in children and over-diagnosis of obstruction in older people.^{2,5} Spirometry is a useful diagnostic test in all patients with suspected asthma, yet if resources are limited, prioritising those individuals who are considered intermediate probability is likely to be the best strategy. Although sometimes undervalued, peak expiratory flow monitoring can provide useful measurements. The value of peak expiratory flow monitoring as an important initial test in the assessment of asthma was discussed in the Spring 2017 edition of *Primary Care Respiratory Update* (see <https://pcrs-uk.org/peak-flow-and-microspirometry-support-diagnosis>).

Tests for demonstrating eosinophilic inflammation

A positive fractional exhaled nitric oxide (FeNO) test indicates the presence of eosinophilic inflammation, providing supporting (rather than conclusive) evidence for an asthma diagnosis. A systematic review of the accuracy of FeNO in diagnosing asthma in adults and children reported a pooled sensitivity of 65% and specificity of 82%, indicating that FeNO has a higher potential for ruling in – as opposed to ruling out – the diagnosis of asthma.¹² In adults, a FeNO reading of 40 ppb or more should be regarded as a positive test.^{2,4} Accurate

Box 1 Factors that may confound the accuracy of fractional exhaled nitric oxide (FeNO) in making an asthma diagnosis^{2,13,14}

- Increased levels in men, tall people and those with a diet high in nitrates (eg, spinach, broccoli)
- Increased levels in individuals with allergic rhinitis exposed to an allergen (even without respiratory symptoms)
- Increased levels in those with rhinovirus infection (inconsistent effect in those with asthma)
- Lower levels observed in children (N.B. accordingly a lower reference range is used)
- Reduced levels in cigarette smokers
- Reduced levels by inhaled or oral steroids

interpretation of a FeNO result requires an understanding of the potential confounding factors that may produce false positive and false negative results (Box 1).

NICE (2017) recommendations for the role of FeNO in the diagnosis of asthma are different from those advocated by BTS/SIGN.^{2,4} Given the limitations of FeNO, a central role in the diagnostic work-up of all people suspected of asthma, as advocated by NICE, seems over-emphasised and may lead to unintended consequences. Currently, FeNO is not widely available in UK primary care so, if FeNO is perceived as a required test, referrals to secondary care may increase, adding to the workload in specialist settings and potentially de-skilling clinicians in primary care. Cost may be a barrier for individual practices adopting FeNO, as ongoing consumables are required in addition to an initial investment. A future solution might be for practices to pool resources and develop a locality-based diagnostic service, as successfully implemented in the Netherlands and currently being trialled in the UK.^{4,15}

Despite these concerns, there are clear benefits to be gained from using FeNO, which could be realised if appropriately implemented. For instance, if an individual has an intermediate probability of asthma following a structured clinical assessment, a positive FeNO test increases the probability of asthma, providing further supporting evidence to confirm or refute a diagnosis. Therefore, in primary care, PCRS recommend using FeNO as an optional investigation to test for eosinophilic inflammation in individuals where diagnostic uncertainty remains. Routine use of FeNO testing in adults and children is not recommended except in specialist respiratory clinics. The PCRS position statement on FeNO testing is available from <https://www.pcrs-uk.org/resource/feno-testing-asthma-diagnosis>.

Diagnosis in children

Confirmation of variable airflow obstruction by objective demonstration of peak flow monitoring or spirometry with reversibility is desirable in children old enough to perform these tests. However, the use of spirometry is not well established in children in primary care and additional training may be needed to ensure accurate results. If FeNO

is used in children aged 5–16 years, a result of 35 ppb or more is regarded as a positive test.^{2,4}

In children under 5 years of age, a diagnosis of asthma is based on establishing the probability of asthma after an initial structured clinical assessment.² If the probability of asthma is high, a trial of an inhaled corticosteroid (ICS) using a dosage of 400 µg/day beclomethasone or equivalent may be considered.^{2,16} If a child is started on a trial of treatment, it should last for 6–8 weeks and be stopped at the end of the trial.^{2,16} If the child has had no response to treatment and the medication has been taken, the diagnosis of asthma is unlikely.¹⁶ If symptoms improve with ICS but recur when stopped, then settle again with reintroduction of treatment, a diagnosis of asthma can be made.¹⁶ Where diagnostic doubt persists, referral for specialist assessment should be considered (Table 2).

Asthma management

Management of asthma should be patient-centred, encouraging and supporting self-management and making treatment decisions in partnership with the individual. This should include promoting non-pharmacological approaches including weight control, encouraging physical activity and addressing tobacco dependency. Supported self-management, which includes the provision of an asthma action plan, improves individual asthma control whilst reducing visits to unscheduled care.¹⁷

ICS are regarded as the foundation of asthma pharmacological treatment.^{2,5} Therefore, a regular (low-dose) ICS with a short-acting beta-agonist (SABA) as required is the recommended first-line maintenance treatment for adults. In children, once a diagnosis has been made, the starting dose of ICS is 'very low dose' (200 µg/day beclomethasone or equivalent). If the dose needs to be increased, be aware that 'medium dose' (800 µg/day beclomethasone or equivalent) represents a level of treatment to be used only if referring to specialist care.²

If asthma is well controlled there should be little or no need for SABA.² Three or more doses of SABA per week may indicate poor asthma control and a need to move up treatment. Over-reliance on SABAs is well established as a risk factor for fatal asthma¹⁸ (see Monitoring section for further details), therefore anyone prescribed more than one SABA a month should have their asthma urgently assessed.²

Prescribing inhalers by brand name and device ensures that patients receive the inhaler that the prescriber intends for them. Prescribing a generic inhaler or not specifying the device should be avoided as it may result in a patient receiving an inhaler they have not been taught to use. If prescribing a metered dose inhaler (MDI), remember to issue with a spacer to increase the efficacy of drug delivery.

A further consideration when prescribing inhalers is environmental impact. MDIs have a higher global warming potential than dry powder inhalers (DPIs),¹⁹ so if there is no obvious clinical reason to

choose between inhaler types, opt for the lower carbon footprint DPIs. Remember, however, that any decisions about inhaler choice should be made on an individual basis between clinicians and patients, so PCRS warn against any 'blanket switching' from MDIs to DPIs.

Add-on therapies

The choice of initial add-on treatment to low-dose ICS remains a contentious issue and, therefore, was one of the key questions addressed by the BTS/SIGN 2019 update.² To understand why the two guidelines continue to offer different advice, remember that the NICE multidisciplinary guideline group considers an economic evaluation in addition to clinical evidence^{4,5} whilst BTS/SIGN make recommendations based purely on a critical appraisal of the literature.^{2,5}

Adding long-acting beta-agonists (LABA) to ICS alone improves symptoms, lung function and decreases asthma attacks in adults and children.² In comparison to leukotriene receptor antagonists (LTRA), LABA are more effective in reducing the number of exacerbations,²⁰ leading BTS/SIGN to recommend LABA as first-line add-on treatment in adults.² If prescribing, LABA should always be issued in combination inhalers with ICS, reducing the risk of harm from using LABA as monotherapy²¹ and improving the likelihood of adherence to an additional medication. In children, BTS/SIGN state there is insufficient evidence to choose between LABA or LTRA as initial add-on therapy.²

NICE recommends LTRA as the first-line add-on therapy in adults and children because the marginal superiority in efficacy of LABA (noted in adults)²⁰ is outweighed by its greater cost.⁴ As an oral medication, LTRA may offer an advantage for some for whom an inhaler is impractical. LTRA also offer treatment benefit for those with allergic rhinitis.

PCRS supports the value-based approach²² that NICE used, and therefore recommend LTRA as the first-line add-on therapy to ICS. Effectiveness and tolerability should be reviewed in 4–6 weeks. If LTRA is found ineffective it should be withdrawn, as adding a LABA on top of a LTRA removes any cost advantage. In children, the use of a paediatric low-dose ICS with LTRA as first-line add-on treatment is recommended. If this combination is ineffective, then switch the LTRA for a LABA.

Ultimately, the decision to opt for LTRA or LABA as initial add-on therapy should be made after discussion between the clinician and patient and should take consideration of other factors including patient preference, adherence (including the potential for additional prescription costs), concomitant diseases (eg, rhinitis) and risk of exacerbation. Furthermore, there is no need to change the medication of patients who are already well controlled on ICS/LABA.

Single combination inhaler for maintenance and reliever therapy

Particular types of ICS/LABA combination inhaler may be used to provide both a regular daily dose and relief from symptoms when needed, so-called Maintenance and Reliever Therapy (MART). In

comparison with the more traditional fixed daily dosing regimens, MART may have advantages for some individuals as only one inhaler is needed and every inhalation contains ICS, reducing the risk of undertreated airway inflammation.

There are, however, important points to consider with MART. Firstly, only those inhalers which contain formoterol as the LABA are suitable for MART, as formoterol has a rapid onset of action. Secondly, the evidence to support MART is based on trials done on adults, and whilst there was a reduction in asthma attacks (compared with standard ICS/LABA treatment), there was no difference to quality of life, asthma control, lung function or asthma medication use.²³ Thirdly, with limited evidence²³ and no licensed product for under-12-year-olds, MART is not recommended in children.

In summary, MART may be considered as an option in adults who have a history of asthma attacks despite medium-dose ICS or ICS/LABA.² To become more widely used, there is a need for better training and greater clarity on self-management instructions for MART.

Asthma monitoring

A regular review of individuals with asthma provides the chance to assess current symptom control and consider the future risk of an asthma attack. Primary care is best placed to monitor asthma by staff who are trained, competent and confident, and should be completed regularly (at least annually in stable patients with a definite diagnosis) as a pre-planned appointment but also opportunistically. A more frequent review may be necessary when a diagnosis is first made, or for those with poor asthma control. At each review, asthma control, lung function, asthma attacks, oral corticosteroids, absence from work or school and smoking status should be recorded in the notes. In children, growth (height and weight centile) should also be measured.²

Monitoring asthma symptom control

Asthma control should be assessed using the validated asthma control questionnaire or asthma control test and are recommended over the Royal College of Physician's three questions which has greater value as a screening test for poor control.² Peak flow or spirometry (or both) should be used to assess lung function. If asthma control is sub-optimal, check for and address the common causes of poor asthma control listed in Box 2. For more information on supporting smokers to quit (be that individuals with asthma or parents/carers of children with asthma), see the PCRS article on tobacco dependency (https://www.pcrs-uk.org/sites/pcrs-uk.org/files/TobaccoDependency_FINAL.pdf).

Currently there is insufficient evidence from real-life primary care to support using FeNO routinely to monitor asthma control. However, it may be an option to support asthma management in people who are symptomatic despite using ICS as it can help to identify poor adherence.

Box 2 Common causes of poor asthma control

- Incorrect diagnosis, or co-morbidity that has been missed
- Lack of medication adherence
- Current treatment is unsuitable
- Under-use of ICS or overuse of SABAs
- Inappropriate inhaler technique
- Failure to use a spacer with ICS delivered by a metered dose inhaler
- Smoking (active or passive) – ideally use a carbon monoxide meter to monitor smoking
- Exposure to occupational triggers
- Seasonal or environmental factors
- Psychosocial reasons, including ideas and concerns about asthma/treatment

As well as during a routine review, inhaler technique should be observed and errors in technique corrected at every opportunity when there is a deterioration in asthma control, when the inhaler is changed and if the patient requests a check.

Predicting future risk of asthma attacks

In line with the delivery of personalised asthma care, identifying the future risk of an asthma attack for children and adults should be incorporated into any asthma review. In children aged 5–12 years (Table 3), the factors associated with a greatly increased risk of asthma attack are persistent asthma symptoms and past history of asthma attack.²⁴ School-aged children are at moderately increased risk if they are over-reliant on SABA, have a co-existing atopic disease, are vitamin D deficient or from a low-income family.²⁴ Additional

factors known to slightly increase the risk of asthma attack are exposure to tobacco smoke, obesity, low parental education and younger aged children (ie, closer to 5 than 12 years).²⁴

In adults (Table 4), having a history of previous asthma attacks is associated with a greatly increased risk of asthma attack.²⁵ Poor asthma control and SABA over-reliance are both associated with a moderately increased risk of an asthma attack.²⁶ Smoking, obesity, depression, older age, reduced lung function and female gender are all associated with a slightly increased risk of a future asthma attack.

Understanding the factors associated with an increased risk of attack can help clinicians to know what to enquire about in consultation, but should also lead to proactive care by identifying at-risk individuals who do not consult regularly (for instance, by searching the practice record to identify those individuals over-using SABAs). At-risk individuals should receive targeted care by increasing the frequency of review, optimising medication choice and adherence and reviewing self-management strategies. For ideas and tools to facilitate action on SABA over-reliance, see the work of the Asthma Right Care Project (<https://www.pcrs-uk.org/asthma-right-care>).

Severe asthma

When monitoring individuals and weighing up future risk of attack, have in mind the possibility of severe asthma as such patients require referral for specialist review. BTS/SIGN define severe asthma as more than two asthma attacks a year or persistent symptoms with SABA use more than twice a week despite adequate adherence (>80%) and therapies beyond initial or add-on controller treatments (ie, 'specialist therapies').² Severe asthma is increasingly regarded as a distinct disease entity requiring specialist treatment and is the subject of a PCRS pragmatic guide for clinicians (available at

Table 3 Factors associated with increased risk of future asthma attacks in school-aged children

Level of increased risk	Children
Greatly increased risk	<ul style="list-style-type: none"> • History of previous asthma attacks • Persistent asthma symptoms
Moderately increased risk	<ul style="list-style-type: none"> • Suboptimal drug regimen (the ratio of the number of prescriptions for controller medication to total number of prescriptions for asthma medication <0.5) • Comorbid atopic/allergic disease • Low-income family • Vitamin D deficiency
Slightly increased risk	<ul style="list-style-type: none"> • Younger age • Exposure to environmental tobacco smoke • Obesity • Low parental education
Unclear (evidence limited or equivocal)	<ul style="list-style-type: none"> • Reduced lung function • Raised FeNO at routine interviews • Positive skin prick tests • History of allergen exposure

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Table 4 Factors associated with increased risk of future asthma attacks in adults

Level of increased risk	Children
Greatly increased risk	<ul style="list-style-type: none"> History of previous asthma attacks
Moderately increased risk	<ul style="list-style-type: none"> Poor control (assess review using objective patient reported control questionnaire such as ACT or ACQ) Inappropriate or excessive SABA use
Slightly increased risk	<ul style="list-style-type: none"> Older age Female Reduced lung function Obesity Smoking Depression
No increased risk	<ul style="list-style-type: none"> Gender Urban residence
Unclear (evidence limited or equivocal)	<ul style="list-style-type: none"> History of anaphylaxis Comorbid gastro-oesophageal reflux COPD Raised FeNO at routine reviews Blood eosinophilia Poor adherence

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<https://www.pcrs-uk.org/resource/triggers-referral-poorly-controlled-and-severe-asthma>.

Conclusions

We look forward to the return of a single asthma guideline developed through the collaboration of NICE and BTS/SIGN. In the meantime, we have proposed clear guidance to address particular concerns over conflicting aspects of asthma diagnosis, management and monitoring that will support non-specialists to continue providing high quality asthma care.

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Imagine a world where every lung cancer patient is screened before the disease spreads. Where every patient gets the right drug at the right time, and the goal of any treatment plan is to cure. Where every patient, everywhere in the world, can expect to receive the highest quality care that provides the best odds in the fight against the disease. Where no patient dies from lung cancer.

Together, AstraZeneca, the International Association for the Study of Lung Cancer, the Global Lung Cancer Coalition and Guardant Health have come to form the Lung Ambition Alliance. We share one goal: to double long-term survival in lung cancer by 2025.

Through initiatives that increase early diagnosis, accelerate delivery of innovative precision medicines and improve quality care, we believe there is a way to solve the seemingly impossible and ultimately eliminate lung cancer as a cause of death.

Please visit LungAmbitionAlliance.org to know more about our projects and help shape our priorities. Your insights will serve as an important first step on our life-changing journey toward accomplishing the impossible ... together.

Join us at LungAmbitionAlliance.org.



Focus on Lung Cancer

Lung cancer: a personal perspective



Professor Mick Peake Clinical Director, Centre for Cancer Outcomes, University College London Hospitals; Honorary Professor of Respiratory Medicine, University of Leicester; Chair Clinical Advisory Group, UK Lung Cancer Coalition

I entered my first patient into a lung cancer clinical trial in the late 1970s and my career has gradually become more focused on this common condition ever since. In the 1980s and 1990s there was a widespread culture of nihilism in both the professional and research community about lung cancer. Medical students (and therefore the GPs that many of them became) were, if anything, taught only two things that they carried into their professional life: firstly, that because smoking was the 'only' cause, it was a self-induced disease and, secondly, the outlook was so bad with so few effective treatments that the best advice to patients related to avoiding the purchase of long playing records rather than seeing an expert opinion and treatment.

However, over the last 15–20 years there has been a huge transformation, with an upsurge of interest in lung cancer; in the quality of care, of the understanding of its basic biology, of the treatments available and finally progress in survival rates. The proportion of patients who survived 5 years from diagnosis in England between 1991 and 1993 was 5%, but the most recent figures from the Office for National Statistics show that, for patients diagnosed with lung cancer in 2011, 14% of men and 17.5% women will be alive 5 years after diagnosis. This improvement is largely a result of more and more patients receiving surgical and other radical therapies.

There has also been an increasing recognition of the vital role that primary care plays in the diagnosis and support of lung cancer patients, a change which the PCRS has seen as very important in promoting. Whilst there have been major improvements in the options for treatment – especially better surgery, stereotactic radiotherapy, combination chemo-radiotherapy and the explosion of new systemic therapies in the form of tyrosine kinase

inhibitors and immunotherapy – the overall prognosis at a population level remains poor, the major reason for this being late diagnosis.

Well over 90% of patients with non-small cell lung cancer diagnosed at stage IA and treated surgically will be alive at 5 years, but by the time the tumour is diagnosed at stage IIA the 5-year survival rate halves to 46%. In the UK, by the time they reach specialist care, almost two-thirds of patients will have stage IIIB or IV disease, the 5-year survival rate for which is around 5%. The proportion of patients diagnosed at stages I and II has been increasing in England in recent years, going from 19.5% in 2012 to 28% in 2017 (data from the National Lung Cancer Audit), but this remains a lower proportion than that seen in many other western countries and is likely to be one of the main reasons why our survival rates do not compare well at an international level.

Non-small cell lung cancer 5-year survival¹

Stage 1A	Stage IIA	Stage IIIB or IV
90%	46%	5%

So, apart from the discovery of some sort of magic bullet, if earlier diagnosis is the key to improving our long-term survival rates, what do we need to do and what part does the primary care community (including commissioners) have in improving the situation? The most important single step is to introduce population-based screening for high-risk patients using low-dose CT scanning. The evidence for this is now overwhelming, though at the time of writing we are still waiting to see the final results of the European NELSON trial on which the UK's National Screening Committee will base its decision.

Screening, in various guises, is however, already happening in parts of the UK, with large clinical trials



going on in London and Yorkshire and 'Targeted Lung Health Checks' being funded by NHS England and rolled out in over 10 areas of the country.

Screening alone, however, will not solve all the issues and GPs (and other members of the primary care community) need to have a high index of suspicion and low threshold to refer patients. The 2015 NICE guidance on the urgent referral for suspected cancer (NG12, updated in 2017) is significantly more evidence-based than previous guidance and sets a threshold for referral at around 5%. The large majority of lung cancer patients presenting with symptoms will have an abnormal chest x-ray, so patients identified in that way should be sent quickly for a chest x-ray and, if abnormal, the pathway to a local rapid access lung cancer clinic is clear. However, these guidelines are based heavily on smoking history and around 6,000 people in England who have never smoked develop lung cancer each year, so at least doing a chest x-ray in those with suspicious symptoms (particularly persistent cough) should be considered. The NICE guideline for 'Suspected cancer: recognition and referral' recommends that patients who are never smokers should be considered for referral if

they present with two or more symptoms of lung cancer and, of course, any incidence of unexplained haemoptysis in the over-40s should be followed up as a priority irrespective of smoking status.

The more difficult issue is how GPs handle what they perceive as high-risk patients in whom the chest x-ray is normal. My view is that GPs should have easy access to CT scans in this situation – a mechanism that applies in many countries in Europe. It is relatively easy to identify high-risk patients in terms of their being over the age of 50, smokers or ex-smokers, particularly if they have evidence of airflow limitation, so I would support a low threshold for doing a CT scan in patients such as this.

We are living in a time of increasing opportunity for the early diagnosis and more effective treatment of this common cancer. GPs and their colleagues in primary care have a vital role to play in trying to identify patients as early as possible to ensure that patients have access to the very best that the specialist lung cancer teams can offer.

Reference

1. Rami-Porta et al. *J Thorac Oncol*, 2015;10:990-1003

Lung Cancer Diagnosis in Primary Care – A GP perspective



Dr Daryl Freeman GP and Associate Clinical Director for Norfolk Community Health & Care

With the advent of newer treatments, it has never been more important to get an earlier diagnosis of lung cancer.

In primary care, lung cancer is rarely seen – GPs see an average of one patient per year who is diagnosed with lung cancer.¹ It is critical that all healthcare professionals including practice nurses and allied healthcare professionals working in primary care have an understanding and awareness of lung cancer signs and symptoms and also are aware of high risk groups (eg, smokers/COPD) in whom lung cancer is more common.

Primary care professionals also need to be aware of current screening programmes available in some parts of the country (see Appendix 1 and support tools available to help in the identification of high-risk patients and diagnosis of lung cancer).

I personally have seen the effects of late diagnoses of lung cancer; my father and several of my

'regular' patients have contracted and died from the disease.

The solution to earlier diagnosis inevitably lies in primary care, as these are patients we may see in the chronic respiratory disease clinics and when they develop acute respiratory infections. We need to address the following:

Maintaining a high index of suspicion in patients at risk

- Recognising that patients at risk must be investigated as soon as their symptoms change – a respiratory infection which is slow to clear, a cough which is 'different', an odd pain in the chest or lower neck. The older guidelines used to suggest symptoms for 2–3 weeks; however this has been removed to allow clinicians to lower their threshold to arrange an urgent chest x-ray.

Primary Care Respiratory Update

- Recognising that the established red flags, whilst important, are too often a sign of distant disease and understanding that we have an important role in helping to identify disease earlier.
- Having prompt access to thoracic CT scans is an important step in ensuring we have the tools in primary care to identify patients with earlier disease and ensure prompt onward referral. At the current time there are no specific recommendations on CT scan investigations by general practitioners in investigating suspected lung cancer. The guideline does highlight referral if there are concerns even if the chest x-ray is normal, which fits in with a recent review of the literature by Bradley *et al* (2019) which suggests that 20–23% of lung cancers will not be seen on chest x-ray at presentation.²

We also need to ensure that everyone in the primary healthcare team is aware of the NICE guidance and importance of recognising what may be vague signs in our high-risk patients. Patients attending with a lower respiratory tract infection may not see the respiratory lead in the practice as increasingly acute on-the-day problems are often seen by advanced nurse practitioners, GPs, paramedic practitioners, clinical pharmacists, etc. Educating all of our workforce is a priority.

I am sure all of us working in the community would support and welcome an evidence-based national screening programme.

Identifying patients with lung cancer requires a raised awareness of the signs and symptoms

The National Institute for Health and Care Excellence (NICE) guideline for ‘Suspected cancer: recognition and referral’³ recommends referral in the instances shown in Table 1.

All patients should be referred to their local lung cancer urgent referral service using the locally agreed methods of urgent referral to ensure prompt assessment by the specialist MDT service.

The NICE guidance can be confusing for primary care as there is one set of symptoms where an urgent chest x-ray is mandatory and another where a chest x-ray ‘should be considered’.

The key here is recognition of the important symptoms and prompt access to radiology and onward referral.

Primary care healthcare professionals need support in recognising the often vague symptoms suggestive of lung cancer (fatigue, increased breathlessness, loss of appetite) and must be aware of the access they have to radiology and onward referral pathways to their local lung cancer service.

Table 1 NICE recommendations for referral for patients with suspected lung cancer assessment)

The guideline recommends urgent referral (without chest x-ray) for people over the age of 40 years with unexplained haemoptysis

Patients should be referred for an urgent chest x-ray (to be performed within 2 weeks) if...		Patients should be considered for urgent referral for chest x-ray (within 2 weeks)
<ul style="list-style-type: none"> • Aged 40 and over • Present with 2 or more unexplained common symptoms • Cough • Fatigue • Shortness of breath • Chest pain • Weight loss • Appetite loss 	<ul style="list-style-type: none"> • Have ever smoked • Aged 40 and over • Present with 1 or more unexplained common symptoms • Cough • Fatigue • Shortness of breath • Chest pain • Weight loss • Appetite loss 	<ul style="list-style-type: none"> • Aged 40 and over • Present with any of the following red flag symptoms • Persistent or recurrent chest infection • Finger clubbing • Supraclavicular lymphadenopathy or persistent cervical lymphadenopathy • Chest signs consistent with lung cancer • Thrombocytosis

Clinicians who may not be respiratory experts in the practice are often the first contact clinicians: they may be advanced nurse practitioners, paramedic practitioners or clinical pharmacists, so raising awareness of the red flag signs in this group of clinicians is key to earlier diagnosis.

References

1. Cancer Research UK. Lung Cancer Statistics. <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/lung-cancer>
2. Bradley SH, Abraham S, Callister ME, *et al*. Sensitivity of chest X-ray for detecting lung cancer in people presenting with symptoms: a systematic review. *Br J Gen Pract* 2019 Oct 21. pii: bjgp19X706853 [Epub ahead of print]. <https://doi.org/10.3399/bjgp19X706853>
3. National Institute for Health and Care Excellence. Suspected cancer: recognition and referral. [NG12]. 2017. <https://www.nice.org.uk/guidance/ng12>

Multi-agency support for early diagnosis of lung cancer

Dr Kathryn Whitmore Early Diagnosis Officer
(Cancer Outcomes), Policy and Information,
Cancer Research UK



Cancer Research UK's determination to help improve the picture for lung cancer is reflected in our research strategy, which highlights lung cancer as a disease of unmet need, and in our policy and information activity across prevention, early diagnosis and treatment, because reducing the burden of lung cancer and improving the outlook for patients requires action on a range of fronts.

From a research perspective, a major investment has been made in the TRACERx Lung Study, which is using cutting edge methods to collect comprehensive clinical and genomic data on hundreds of patients diagnosed with non-small lung cancer, from the point of diagnosis and throughout their treatment. The study aims to generate more understanding about the biology of lung cancer and how it can change, and to pave the way for more targeted treatments in the future (see <https://scienceblog.cancerresearchuk.org/2019/03/20/the-immune-system-preys-on-growing-lung-cancers-forcing-them-to-evolve-to-survive/>).

In terms of prevention, tobacco exposure remains the single biggest risk factor for lung cancer, and our efforts to influence Government to achieve a smoke-free future and investment in evidence-based smoking cessation services continues. We have also developed some guidance on very brief advice for smoking cessation for GPs and others working in primary care, and our network of facilitators can offer training on this too. While efforts to reduce the damage caused by tobacco are crucial, it is also important to remember that there are thousands of patients diagnosed with lung cancer each year who have never smoked, and research efforts to understand much more about this are needed. For further information, see <https://www.cancerresearchuk.org/health-professional/awareness-and-prevention/smoking-cessation>

When it comes to early diagnosis, there has been a lot of interest over the years in exploring the potential of doing low-dose CT scans in people identified as being at increased risk. A major European trial (NELSON) presented results showing a

reduction in lung cancer mortality in those who had had the scans, and a peer-reviewed publication of this study is eagerly awaited so that it can feed into formal decision-making processes in the UK. In the meantime, the NHS in England has launched the lung health check programme, which involves lung screening projects in 10 cancer alliances. It is vital that these projects are well supported and conducted to a high standard, with robust evaluation and opportunities for research (see <https://scienceblog.cancerresearchuk.org/2018/12/04/lung-cancer-screening-part-1-the-benefits-and-harms-according-to-clinical-trials/>).

It is important to remember that, even if a decision to roll out lung health checks/lung screening is made in the UK, not everyone will be eligible for the lung health check, and not everyone who has a lung health check will reach the risk threshold for a low-dose CT scan. So it is important that both the public and health professionals remain alert to the possibility of lung cancer.

All four nations of the UK have delivered at least one national public awareness campaign focused on lung cancer, but there has been much variation in how often these have run and what sort of investment they have had available. Sustained public awareness targeted to those most in need and complemented by information and support for primary care is an important part of our efforts to improve outcomes.

Once patients have been diagnosed with lung cancer, access to optimal treatment is key. Audits pointing to unwarranted variation have been important for driving change, but there is more to be done.

Macmillan Cancer Support

Sophia Nicola Primary Care Advisor,
Macmillan Cancer Support



Macmillan recognises the vital role that primary care professionals play in diagnosing lung cancer early. With this in mind, Macmillan has worked with our 200-strong primary care community across the UK to develop a wealth of tools and resources to support primary care professionals in this area. As local primary care cancer leads, our Macmillan GPs regularly deliver education and training to colleagues within primary care which extends to emerging roles such as social prescribers.

GPs are vital to the early diagnosis of cancer; however, recognising the signs and symptoms of lung cancer can be difficult, particularly as the average GP may only see one new case of lung cancer a year.¹ To support with this, Macmillan has developed a NICE endorsed summary of the NG12 guidance for 'Suspected cancer: recognition and referral'. Our Rapid Referral Guidelines (https://www.macmillan.org.uk/_images/rapid-referral-toolkit-desktop-2019_tcm9-354239.pdf) can be accessed online or can be ordered as a hard copy for free from Be.Macmillan (<https://be.macmillan.org.uk/be/p-23666-rapid-referral-guidelines.aspx>) and includes accompanying notes with supporting guidance developed by GPs for GPs.

Building on the work of Professors Julia Hippisley-Cox and Willie Hamilton, Macmillan has also worked with the main GP IT providers to integrate a Cancer Decision Support (CDS) tool into each of the main GP IT systems, with lung cancer being one of the sites included in this tool. The CDS tool uses evidence-based algorithms (QCancer and eRAT) to identify patients who may be at a low risk – but not no risk – of cancer. Through the use of an alert and symptom checker function, this integrated tool encourages primary care professionals to 'think cancer' in patients with a positive predictive value risk of 2% or more as identified by the tool. Further information on the CDS tool can be accessed from <https://www.macmillan.org.uk/about-us/health-professionals/programmes-and-services/prevention-early-diagnosis-programme/cancer-decision-support-tool.html>.

There is no national screening programme for lung cancer, but there is increasing evidence that tar-

geting health checks at high-risk individuals can lead to more cancers being diagnosed at an earlier stage. A pilot in Manchester funded by Macmillan carried out 2,500 checks with those at highest risk receiving low-dose CT scans. Of these, 42 cancers were diagnosed, with the majority (80%) being early stage and 90% being offered potentially curative treatment.² NHS England are now running further pilots, with primary care being an essential partner in identifying those at risk.

Emerging treatments for lung cancer provide another vital role for primary care professionals in supporting patients through treatment and managing potential consequences. Oncological immunotherapy harnesses a person's own immune system to target malignant cells. Either alone or in combination with conventional treatments, immunotherapy can significantly improve patient outcomes with non-small cell lung cancer along with other cancers. These therapies are often better tolerated than conventional treatments with a different toxicity profile. It is important in primary care for us to be aware of these newer treatments that our patients may be receiving and the potential improved outcomes, and also the different side effects they produce. These are highlighted in a tool produced by Macmillan and UKONS (https://www.macmillan.org.uk/_images/oncology-treatment-toxicity-risk-assessment-tool_tcm9-317392.pdf).

References

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2. Crosbie PA, Balata H, Evison M, et al. Second round results from the Manchester 'Lung Health Check' community-based targeted lung cancer screening pilot. *Thorax* 2019;**74**(7):700–4.

Roy Castle Lung Cancer Foundation – Saving ‘Bills’



Paula Chadwick Chief Executive



I remember when we first met Bill Simpson, one of the people whose lung cancer was detected early through our lung health check in Nottingham, he said something that still echoes in my ears: *“If I hadn’t gone for that scan, I could have been dead in a year’s time.”*

It’s a statement that still gives me goose bumps, the bluntness of it, and yet this has been the reality for lung cancer; people living unbeknown with the disease, the tumour growing undetected until there is nothing that can be done.

But now, with the roll-out of targeted lung health checks at 10 sites across England, there are going to be more people like Bill. More people for whom something can be done. More people whose lives can be saved.

That is the possibility that lung health checks bring and, we believe, if implemented properly, it will have a major impact on lung cancer survival rates and improve quality of life, as well as providing further evidence to support a national screening programme.

As a leading UK lung cancer charity, we are pleased to be working with NHS England and the 10 pilot sites. Using our extensive experience in community engagement, as well as learning gleaned from our own lung health check in Nottingham, we can provide marketing and community engagement support to overcome some of the potential hurdles that lie ahead.

Speaking with the pilot sites, similar problems continue to arise: diverse populations, language barriers, workforce and a general fear of lung cancer.

This nihilistic perception is something we have encountered many times, and one we addressed as part of our lung cancer awareness month campaign last year, the assets of which, including an innovative VR experience, now form part of our community engagement toolkit.

The *Face your Fear* campaign was driven by stories of people who had either benefited from an early diagnosis or were living well with incurable lung cancer. This is something we are aiming to replicate for all the sites; local champions who have been where the target audience are, experienced the same apprehension and anxiety, but *faced their fear* and have come out the other side.

Peer-to-peer encouragement can be much more powerful and persuasive than primary care or a charity explaining the benefits of attending. It could be a particularly crucial tool for areas who are facing a ‘mistrust’ of screening.

That said, primary care has a huge role to play in making these health checks a success, and we





are producing specific literature to assist GPs, nurses and support staff in answering the common questions that could discourage people from attending.

Because, ultimately, we need to come together to make these pilot programmes as successful as possible. Then we have further evidence to push for a national screening programme. We have the evidence we need to save even more Bills.

<https://www.roycastle.org/>

Summary

Identifying lung cancer early is the only way we, as primary healthcare professionals, can start to improve the hitherto terrible 5-year survival rates from this disease.

Maintaining a high index of suspicion alongside a knowledge of the NICE guidance for the identification and diagnosis of lung cancer is the optimal way forward, and primary care networks should ensure that the new tools mentioned above are advertised and integrated into daily clinical practice.

Healthcare professionals who see patients with respiratory disease on a regular basis (whether in routine chronic clinics or as first contact clinicians) should be directed to these tools and encouraged to act as champions within their own healthcare setting, increasing awareness of the tools and other means of identifying patients with lung cancer earlier.

What to be aware of in respiratory reviews – having a high index of suspicion

- Smoking status
- Increasing shortness of breath
- A cough which is 'different'
- Increased fatigue or malaise
- Respiratory infections which require more than one course of antibiotics
- An 'odd' pain in the chest
- A sudden change in lung function
- They just 'look ill'
- Finger clubbing
- Supraclavicular/cervical lymphadenopathy

Audit suggestions

- Patients seen for respiratory infections in whom more than one antibiotic required
- Smokers over 40 years of age with recorded visit for cough and known recent weight loss
- Review of all diagnoses made in the last 12 months in a practice
 - o How many times had the patients been seen by a member of the primary healthcare team before referral/chest x-ray was performed
 - o How many patients were diagnosed at stage I
 - o How many patients were seen by the lung cancer MDT within 2 weeks of referral

Appendix

Lung Health Check Screening Programme Areas

- Blackburn with Darwen
- Blackpool
- Corby
- Doncaster
- Halton
- Hull
- Knowsley
- Luton
- Mansfield and Ashfield
- Newcastle Gateshead
- North Kirklees
- Southampton
- Thameside & Glossop
- Thurrock

There are also other independently funded programmes in other parts of the UK including Nottingham, Leeds, Manchester and London.



The PCRS Respiratory Conference 2020
25th-26th September 2020



The must-attend event for all healthcare professionals interested in developing best-practice and integrated respiratory care

- Holistic
- Supporting
- Integrated
- Greener

The online PCRS Respiratory Conference 2020

The PCRS Respiratory Conference will for the first time this year be held online because of the COVID-19 pandemic

It will be delivered to delegates in their own homes or workplaces and will feature high quality virtual educational sessions with leading respiratory speakers. Delegates will be able to interact and ask questions.

Conference Organising Committee Chair, GP Katherine Hickman says: "The PCRS conference is the highlight of the year for the respiratory community and this year's event will be no different. We have built on the planning that we had already undertaken and have adapted the content for a virtual audience.

"We have kept the focus on greener, patient centred healthcare and key clinical topics and have introduced some key learning from the COVID-19 pandemic along with a focus on what our priorities need to be for the future with coronavirus circulating in the community.

"Speakers will pre-record their presentations then join the conference live to participate in discussions with delegates. We are aiming to make the conference as interactive as possible and to give delegates excellent value for money."

Elements of the popular hands-on workshops have been incorporated into the programme with sessions such as Tai Chi, singing and dancing techniques to improve breathing and relaxation techniques that delegates will be able to join in with at home or in their workplaces, giving them a break from their screens.

There will also be a virtual social programme and interactive activities via the conference app.

Nicola Wood, advanced nurse practitioner and joint Vice Conference Organising Committee Chair, says: "We know that delegates enjoy the interpersonal aspects of the PCRS Conference so this year we have tried to maintain the community feel of the event by ensuring that people will have every opportunity to participate in round table discussions with respiratory experts and to meet and interact with fellow healthcare professionals and reps via the online platform.

"This will be an opportunity for the wider audience to participate in and enjoy the fabulous energy and sense of fun that are always a big part of the ethos of the PCRS Conference."

Darush Attar-Zadeh, pharmacist and joint Vice Conference Organising Committee Chair, says: "We are working to make sure that the event will feel like a conference rather than a series of webinars.

"A lot of people are going to miss being in Telford, our usual conference venue, but we hope that we will still be able to make all our regular delegates feel welcome online and that we will also attract a lot of new respiratory interested healthcare professionals who will be able to sample the high quality learning that the PCRS Conference offers.

"Previously individuals came to the conference then took the learning back to their



practices but this year whole teams and practices will be able to share the online learning together.

“What I am looking forward to this year is all the learning from the COVID-19 pandemic that I can share in my local area. By the time September comes around we will have even more information about the virus and people will be able to learn

from each other’s experiences.

“This year we have some of the top respiratory experts in the country speaking at the conference and the standard of learning will be extremely high. As always, the programme will be relevant for all the different multidisciplinary members of the respiratory team.”

The programme

Opening address: delivered by PCRS Executive Chair Carol Stonham

Greener healthcare

- Greener healthcare that is kinder to the environment: a panel discussion including speakers: Dr Richard Smith, Chair, UK Health Alliance on Climate Change and former editor of the BMJ and Matthew Sawyer Director of environmental consultancy SEE Sustainability
- Inhaler devices: Switching to eco-friendly inhalers safely – how to ensure the patient has the right inhaler to help them control their asthma. Speaker: Matthew Sawyer. Plus a practical session on inhaler technique training led by Darush Attar-Zadeh.

Clinical: Asthma and COPD

- Asthma: Does my child have asthma? Speaker: Ian Sinha, Consultant Respiratory Paediatrician with a special interest in childhood asthma and neonatal lung disease and paediatric clinical lead for the National Asthma and COPD Audit Programme (NACAP)
- Severe asthma – the evidence for treatments. Speaker: Professor Andrew Menzies Gow, Consultant Respiratory Physician, Royal Brompton Hospital, London and NHS England National Clinical Director for Respiratory.
- COPD and post COVID-19. The acutely unwell COPD patient. Speaker: Patrick White, GP and Reader in Primary Care Respiratory Medicine in the School of Population Health Sciences at King's College, London.
- The acutely unwell post COVID-19 patient. Speakers: Daryl Freeman, GP and PCRS Service Development lead and Sarah Elkin.
- Diagnosis session - how to assess the acutely breathless patient making sure we don't miss anything. Speaker: Vince Mak, Consultant Physician, Imperial College Healthcare NHS Trust
- Diagnosis: how to diagnose asthma and COPD in the post COVID-19 era without the usual diagnostic tests.

Learning from COVID-19

- The new virtual respiratory review and group consultations.
- The impact of COVID-19 on the environment and how we can sustain the benefits
- Oxygen therapy treating COVID-19, ambulatory and palliative care
- Round table discussions – topics to include breathing pattern disorders, pulmonary rehabilitation, virtual monitoring, managing breathlessness, end of life care and advanced care planning.

Treating Tobacco dependence

- What nicotine delivery system should we be advising in the COVID-19 era? Speaker: Dr Nick Hopkinson, Medical Director of the British Lung Foundation.

Wellbeing and rehabilitation – both of ourselves and our patients

- Supporting mental health post COVID 19
- Looking after ourselves and others following COVID-19. Speaker Terry Stuart, GP and expert in managing stress
- Cognitive behavioural therapy (CBT) as a root to change behaviour. Speaker Karen Heslop Marshall, respiratory nurse consultant, Newcastle upon Tyne NHS Foundation Trust.
- Rehabilitation and supporting behaviour change in the post COVID era – virtual pulmonary rehabilitation, technology for pulmonary rehabilitation and what about patients who can't connect.
- Relaxation and breathing – Kate Binnie, mindfulness expert
- Tai Chi for managing stress
- Singing for Breath
- Mindfulness interactive session

Satellite symposia offered by our pharmaceutical partners

Research

Research at the conference will comprise a session to highlight the prize winners, a research round-up and an interactive researcher session.

Prizes will be awarded to the best abstract, the best research poster, the best poster for patient involvement and the best poster for service development. The best abstract will be announced by Carol Stonham in her opening address and the author will give a short oral presentation about their work. Luke Daines will then introduce each poster and discuss their key messages.

All the accepted posters and video presentations by their authors will be available in an interactive gallery giving delegates the opportunity to comment and contact the authors. They will

also be published in a special edition of Primary Care Respiratory Update. Poster prize winners will be eligible for a 50% discount on the article processing charge if their paper is accepted by *NPJ Primary Care Respiratory Medicine*.

Steve Holmes, PCRS Education Lead will deliver the Bite Size Journal Update highlighting the key primary care respiratory research conducted during the year.

Ann Hutchinson, research fellow at the University of Hull and acting PCRS Research Lead, says: "The PCRS Conference and annual researchers meeting are opportunities for primary care respiratory researchers to showcase their work to the wider community, gain inspiration from the work other researchers are doing and to network with the primary care research community."

Delegate fees are £50 for nurses and allied healthcare professionals and £75 for GPs. Members will have on demand access to all content for one month after the conference and then via the PCRS website. Non-members will not have the on demand access unless they join (the discount can be claimed by those who join and register for conference).

- Visit the **PCRS Conference website** for more details about the programme and how to register.
- Visit the **PCRS Research Network page** for further information about the research meeting.

Date of Preparation: June 2020 Version 1



The PCRS Respiratory Conference 2020

25th-26th September 2020



The must attend event for all healthcare professionals interested in developing best-practice and integrated respiratory care

- Holistic
- Supporting
- Integrated
- Greener

This year's virtual conference enables us to bring delegates even more content and experiences. Our virtual platform is packed with interactive features, amazing visuals, resources and tools – including, live interactive webinars, downloadable materials, abstract lounge with posters and videos, mindfulness sessions, networking lounges, a virtual exhibition and a social programme.

Virtual

Diverse programme

Designed by a multi-disciplinary team of general practice, community and integrated care respiratory experts, the programme features:-

- Latest clinical updates on respiratory conditions relevant to every-day practice including the latest in managing the post-COVID patient
- Innovative service delivery solutions in the COVID era
- Showcasing the latest in scientific data via our online poster room and winning abstract presentations

Who Should Attend

This is the must attend conference for all professionals involved in respiratory care in a primary or community care setting including doctors, nurses, pharmacists, physiotherapist, paramedics and researchers. Our testimonials show the diverse range of attendees who come together for this unique event.

Huge savings

Save money on travel and accommodation whilst being kinder to environment as you access the whole conference online from anywhere. The virtual conference platform is mobile friendly, and can be accessed via pc, tablet or mac. No special software or downloads are required.

Registration from as little as £50 for both days and members will also receive on-demand access for 30 day

View the programme and speakers and register now at <https://www.pcrs-uk.org/annual-conference>

2020 Conference
sponsors



Fit to Care: key knowledge skills and training for the multidisciplinary team providing respiratory care

The PCRS Fit to Care document enables healthcare professionals of all disciplines to assess their competencies and any training needs they have to ensure they are delivering safe and effective respiratory care.

Managers and commissioners can also use the document as a reference to ensure that the healthcare professionals they are responsible for are trained to do the job they are doing and to identify any gaps in their educational needs.

In this article three healthcare professionals describe how they use Fit to Care to improve standards of respiratory care in their teams.



Vikki Knowles *Respiratory Nurse Consultant, Guildford and Waverley CCG and member of the PCRS Education Committee*

I have used Fit to Care across my CCG in various ways. After losing several experienced practice nurses across Guildford and Waverley due to retirement, some of our practices have been recruiting new staff straight from training and also from different backgrounds. These nurses are often new to managing long-term conditions and the expectation has been in some cases that they are able to take over pre-existing asthma and COPD clinics without recognising that they do not necessarily have the appropriate training.

I have used the document to highlight what the training needs are of nurses who manage an asthma or COPD clinic. We mapped what the background was of each of the newly recruited nurses and what they were competent to do at each of the levels defined by Fit to Care – standard, expert or advanced.

Working with each nurse, we then set a ceiling on their skills for which they were qualified or felt competent to work based on their knowledge base. We looked to see what expertise they had, what they could cover within their scope of practice and what issues might put their licence at risk in relation to patient safety.

Then I highlighted any additional training they might need to run clinics at the level the practice

is expecting them to work. I put together a file for each nurse which pointed them in the direction of the training they can access such as the Primary Care Respiratory Academy roadshows or online modules, any useful PCRS resources and other courses or GP training run by providers such as Education for Health. We also looked at using Fit to Care to support mentoring within the practice while the healthcare professional gained the necessary knowledge.

Fit to Care gives nurses the self-assurance to stand up and ask their practice managers for the training they need to practise safely and it provides them with a framework to work towards so that they can be confident they are meeting the requirements of their job description.

I have also sent Fit to Care to all the practice managers in my CCG. One called me back and said she was very interested in the document because it gave her guidance about the needs of her nurses.

Practices want to do the right thing but training can be forgotten when they are under pressure to meet QOF deadlines. Fit to Care sets out clearly the importance of having healthcare professionals clinically trained and competent to manage respiratory disease.





Darush Attar-Zadeh *Respiratory Lead Pharmacist Barnet CCG, Behaviour Change Specialist, National Public Health Trainer and PCRS Executive Committee member*

Fit to Care can be used to support pharmacists as they take on increasing roles in respiratory care both in community pharmacies and in general practice.

A project I have been involved with upskilling the knowledge and skills of 22 community pharmacists providing asthma care has demonstrated that they can confidently work in partnership with patients, help them to change their behaviour and improve control of their condition.

There is an aim now for all community pharmacies to become Healthy Living Pharmacies - with pharmacy teams skilling up as behaviour change specialists to deliver services such as smoking cessation, promoting flu and pneumococcal vaccination service, Asthma Right Care in helping patients to reduce their overreliance on SABAs and underuse of ICS, antimicrobial stewardship and to improve their inhaler technique. Pharmacists can use Fit to Care as a checklist to check that they have the right knowledge, skills and accreditation to provide these services and to see what additional training or education they might need. Community pharmacy definitely has the skill set to work alongside general practice delivering respiratory care.



Clare Cook *Physiotherapist, clinical lead of an integrated community respiratory team in Bristol, member of PCRS Executive Committee and Chair of the PCRS Respiratory Leaders Group, has used Fit To Care as an employer, an employee and an education provider.*

Employer

As an employer I have used Fit to Care to write competencies for my team and to benchmark my expectations for them working at different levels. It clarifies what I would expect them to know and be competent to do.

It's a really useful, straightforward document. It has been written for the diversified clinical workforce and can be used by any healthcare professional delivering respiratory care.

Healthcare professionals have a wide range

of different skills, knowledge and training and I have used it to ensure that my team is delivering an equitable service across the community. This means that a housebound person is visited at home by a healthcare professional with the same standard of skills and knowledge as the one working in their GP practice.

Pharmacists can use Fit to Care to check the scope of their own limitations and this way they will keep both themselves and patients safe. Fit to Care can also be very helpful for practice pharmacists because it can be quite daunting being the only pharmacist in a GP practice which will not necessarily understand what level they can work at. If they are being asked to do various tasks – such as co-creating a patient self-management plan or reviewing a patient's medicines after discharge from hospital – for which they need more training, they can take Fit to Care into a practice team meeting and use it to explain that they cannot deliver a particular service until they have done the necessary training and gained the certificate for it.

When I am talking to my pharmacist colleagues in a teaching session I will bring up Fit to Care and explain they can use it as a check list to see how their knowledge and skills have been developing and improving. So I recommend that they refer to the document every now and again to reflect on where they have got to, what have they achieved and learned and what they need to do to progress to the next level.

I have also used the document to plan a programme of training over three years and demonstrate to the funders where money needs to be spent.

Healthcare professionals have a wide range

Employee

As an employee I have used the document to explain to my employer what training I would like to do. My role is to advise and support GPs and practice nurses so the document sets out what level of expertise I need to be able to deliver that service.

The different levels of skills and knowledge are tiered so we can all identify whether we are working at the standard, expert or advanced level and the descriptors are generic across different workforces and different settings. It gives us a framework for setting expectations for ourselves. For example I am not accredited to deliver spirometry but I can make sure when I am doing workforce

modelling for my team that another healthcare professional with the required qualification can deliver spirometry in the patient pathway.

Education provider

As an education provider I have used Fit to Care to write the competencies for the assessment component of a module. This was a very straightforward process.

I can really trust the document because it has been written by a multidisciplinary by a group of peers from a holistic perspective which means it can be used by a wide range of healthcare professionals from different backgrounds.



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Hard work, tenacity, commitment, determination, drive, support, challenge, dedication

Some have drawn comparisons between the Queen and her prime ministers when describing the role that a chief executive has within a clinician-led organisation. However, the Queen does not sit down with the Cabinet, nor take part in cross party parliamentary committees nor sit in the House of Commons. She has to remain remote from debates and decisions at state and political level.

A better analogy then may be that of a permanent secretary in a government department, a civil servant who has a series of MPs arriving as Secretary of State, doing their time, and moving on. The civil servant is responsible for continuity, knowledge of how the organisation runs, but must also be responsive to the ideas and passions of the Secretary of State of the moment, who, for a short time, is the leader and influencer of the direction of travel. In contrast to the Queen, the civil servant rolls their sleeves up and sits at the table alongside the Secretary of State, working closely in partnership with them.



Anne Smith has fulfilled a role not unlike that of permanent secretary in PCRS, for 16 years as a non-clinical chief executive (CE) in a clinician-led organisation. The organisation she joined was very different from the one it is today. In 2004, the organisation was called the General Practice Airways Group (GPIAG), and only GPs could join as full members. Although associate membership was introduced for nurses in 2000, and full membership in 2006, the organisation did not change its name to the Primary Care Respiratory Society until 2009. Today the society is truly multidisciplinary – with representation from all clinicians with a respiratory interest, including increasing numbers of integrated respiratory physicians, as members and on committees. In 2006, a membership fee was introduced to supplement the financial support from corporate supporters, and to increase the independence and financial stability of the group. So PCRS became a subscriber-driven organisation, characterised by a sense of commitment and belonging on the part of its members.

For many years Anne has actively supported the integration of other healthcare professionals into the organisation, starting with nurses but also respiratory physiotherapists, pharmacists, physicians' assistants, and many of the committees are now well established with multidisciplinary membership.

The affiliated groups programme has been a strong initiative, resulting in a network of around 50 groups across the country, mostly nurse-led. As Anne leaves the society, it is fitting that the current Executive chair is the first nurse to hold

this position and is emblematic of the development of PCRS into a truly multidisciplinary society.

In the time that Anne has been CE, PCRS has moved significantly from being a society focused on clinical matters, research and education, to one which supports its members to understand and influence the local healthcare system. There is now a multidisciplinary service development committee which supports members in planning and designing respiratory services at a local level. The annual conference also has a service development workstream alongside those focused on clinical issues, research and practical skills. From being an organisation with an annual scientific meeting for 60-70 research-oriented clinicians, it has become a society with an annual conference attracting 350 delegates from a wide range of clinical and non-clinical roles, with an increasing presence from the patient reference group.

It is not that educating healthcare practitioners about respiratory disease is not still important. Far from it: respiratory education has always been a core activity of GPIAG/PCRS. But there was a growing concern that the society's educational activities were focused on the respiratory-interested and the respiratory-skilled. If all patients were to receive optimal respiratory care, then PCRS needed to reach a much wider audience of generalists, and Anne tackled this challenge with her usual commitment and energy. A major innovation in 2012/13 was to partner with Cogora, as an organisation with a very wide reach into primary care – and particularly those with no respiratory interest – to seek to broaden



Of all the jobs I've done over my career the one I have most enjoyed was being chairman of trustees of PCRS-UK. This was in no small measure to the confidence of knowing Anne was overseeing what Iain (Small) and I did - or sometimes forgot to do - and keeping us on the right track. It felt at times like being supervised by a benign headmistress. I'm full of admiration and gratitude for the way she fulfilled her role as Chief Executive over so many years. She has done a fantastic job and been a more than steady-hand through sometimes turbulent times. Anne, all my thanks for your unflagging guidance of the PCRS and in particular for making my involvement such an pleasurable experience. Enjoy your retirement. Neil Kendle

As someone who has worked for you and with you over many years can I just thank you for your professionalism and consideration in every role you have occupied. You have helped me and the whole field of respiratory medicine enormously and contributed to the improvement of the care of patients with these distressing conditions. I hope you enjoy your retirement hugely. Best wishes, Geoff Higgs

Congratulations on all your hard work making PCRS the excellent society it is! I wish you well and hope you enjoy your free time. Best wishes
Ann Hutchinson

Dear Anne,
All the very best in your future endeavours – I wish you every success.
Love Hetal Dhruve xx

Anne, You have been a friend, colleague, mentor, supporter and inspiration since we first met when you took on the Chief Exec role. It has been a real pleasure to work with you - your clarity, detail and drive over the years. Thanks for all your support for me - for all my colleagues and I believe the patients we care for too. Hoping you enjoy your time in the future and any new positive challenges that come your way! Take care – and always feel free to call me (or drop in if you are down in the South West). Good luck :-)
Steve Holmes

It has been a pleasure to work with you. Your hard work and attention to detail will be a loss for PCRS – you have certainly kept me on my toes over these last few years! All the very best for the future. Best wishes,
Fran Robinson

Dear Anne. It's really, really hard to imagine PCRS without Anne Smith. You have, and will continue to be, such an integral part of the society. What you have achieved as CEO is phenomenal and I am so privileged to be part of this journey. I appreciate there have been some difficult times both as an organisation but also personally but without those you can never fully appreciate the good times. I hope there will be many great times ahead for you and more chance to spend time doing things that you enjoy and spending time with the family. I will genuinely miss your unwavering support and 'kicks up the arse'! Please keep in touch especially if you are ever up in Yorkshire. The very best of luck and love for the future. Sending a virtual hug. Katherine Hickman xxx

It has been an absolute pleasure to work with Anne over the years, having worked with her in my previous and current role. Anne has always been very proactive in keeping us up to date with what is going on within PCRS and the broader respiratory community which has proven to be invaluable. She has always been easy to contact and addresses any issues in a timely and professional manner. She has supported me on many occasions by giving me all of the necessary information and materials so that we can make educated decisions around which PCRS projects and activities we should be involved in. I know that through her activities over the years Anne has helped many HCPs to have the opportunity to improve their respiratory knowledge and skills which has led to an improvement in the overall care of respiratory patients. She will leave a very positive footprint in the world of respiratory medicine because of all of her hard work. I would like to thank Anne for all of her support over the years and wish her every happiness in future endeavours, she will be missed.
Donna Caslin

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respiratory knowledge and skills of all primary care clinicians. And so the Primary Care Respiratory Academy was born – which provides expert-guided learning and peer-to-peer exchange through live meetings and online resources, initially for generalist clinicians. It has gone on to offer similar programmes for commissioners of respiratory services and community pharmacy. It is an example of how PCRS's vision was achieved through an innovative partnership in order to further its aim of providing optimal care for all respiratory patients.

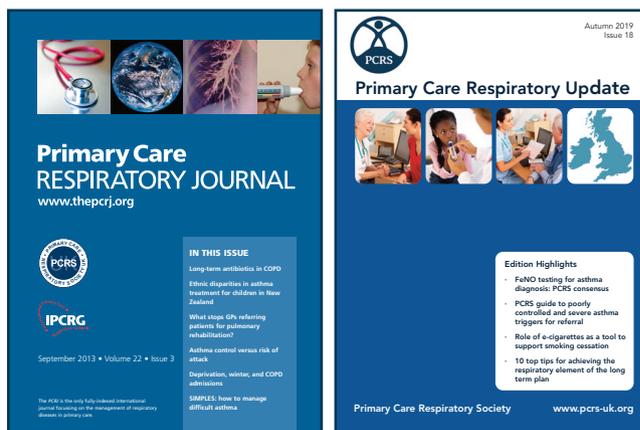
Over Anne's time with PCRS, other partnerships with respiratory groups have also been forged to help support the society's goals. There are too many to mention them all, but they include – collaboration with Education for Health, Asthma UK and British Lung Foundation on developing and delivering the conference; working closely with Asthma UK and BLF on the Taskforce for Lung Health; joining with British Thoracic Society on the integrated care working group; contributing to the development of the national spirometry certification programme and register with Association for Respiratory Technology and Physiology; promoting training and career development for nurses with National Association of Respiratory Nurse Specialists; drawing on the work of ASH for our focus on tackling tobacco dependency.

The Respiratory leadership programme is a further example of how the society has sought to support clinicians in being influential at a local level to improve outcomes for patients – by developing their leadership skills, and raising their awareness of how to input to the local planning agenda and shape services for respiratory patients. It has also provided a forum to support the important task of succession planning, which Anne has led throughout her time as CE. This process goes on behind the scenes to ensure fresh faces are brought into the society and to provide tomorrow's committee members and leaders. When the Department of Health was appointing regional respiratory leaders across England, virtually all those primary care clinicians appointed were members of PCRS and were involved with the PCRS respiratory leaders programme.

Anne has always been committed to seeing PCRS recognised as a valued and influential contributor to the development of respiratory policy. During her time with PCRS, the society has increasingly been seen as a credible and important organisation to have a seat at the table when national respiratory policy is in development. PCRS has been a significant contributor to a very wide range of initiatives – NICE and BTS/SIGN respiratory guidelines, the National Review of Asthma Deaths, National audit programmes for asthma and COPD, respiratory QOF, UK inhaler group, accreditation for spirometry, and many others. Anne saw the value of developing the skills of clinicians to operate at this level and input an important primary care perspective to national policy. She also championed the formulation of pragmatic guidance for primary care clinicians – so that the key points from large policy documents were presented in a relevant and concise format with generalist clinicians in mind.

The way that PCRS communicates with its members has

changed enormously over Anne's years as CE, and is under continual review. The Primary Care Respiratory Journal was the GPIAG's peer-reviewed academic journal at the time Anne joined the organisation, and was available only in hard copy. Highly respected, and with a Medline listing and an improved impact factor, it was a key plank in securing the reputation of GPIAG as a credible and high quality primary care organisation. Now the



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journal has evolved into the npj Primary Care Respiratory Journal, managed by the Nature publishing group and is exclusively online. Alongside the journal, PCRS has developed the Primary Care Respiratory Update magazine – available online and as hard copy. This helps members keep in touch with the society's activities, updates them on topical respiratory issues – both clinical and policy related. A fortnightly newsletter, In Touch, arrives in members' email inboxes to provide a vehicle to market the society's activities and present the latest news to respiratory-interested generalists. And most recently, PCRS has become active in using social media as a major means of communication with members. Anne has led this evolution in communication, always challenging the status quo, and wanting to ensure that members get the best information in a timely and appropriate medium.

Anne's CE years in numbers

- Number of Executive chairs – 6
- Number of Chairs of board of trustees – 5
- Secretaries of State for health – 7
- Number of iterations of BTS/SIGN asthma guidelines – 9
- Number of tweets sent in 2019 – 385
- Current number of Twitter followers – 5341
- Years of healthy reserves – 16!

I am sure once you step aside and view PCRS from afar you will finally see what an incredibly amazing and superhuman influence you had and I hope continue to bask in that knowledge for some time to come. Thanks for making me look better than I was for the 3 years I held the chair. I learned so much from you, enjoyed our time together and I believe I am better as a result. Enjoy the next step :) x. Noel Baxter

Dear Anne
Wishing you a very happy new chapter of different adventures and quality time in the garden.
Thank you for your support and guidance over the past few years.
Best Wishes
Clare Cook

Dear Anne
I hope you enjoy this new phase in your life.
Trust that you have lots of exciting things planned.
Kindest regards
Heather Matthews

Anne, there are no words to describe the contribution you have made, not only to the society, but also to its members. We would undoubtedly have disappeared without you. You are and have been a rock upon which we have been rooted. Not only that, you have, oh so many times, been my own personal rock, you know when, I don't need to write them down. If you are looking for something to do, we could use you right now! stay healthy, stay safe, much love, all Smalls.

Anne - you have been a superb and inspirational Chief Executive for PCRS and we are incredibly lucky to have had you working with us. Your dedication, patience and thorough attention to detail have been enormous assets for the society. You have played a central role in growing the reach and scope of our work, and in helping us prepare for the challenges ahead. It has been a great pleasure to work with you. All good wishes for the next things you do.
Duncan Keeley

Anne, I wish you all the very best for the next chapter in your life. I know that whether it involves work or retirement, you will give it the same dedication, hard work and tenacity you showed at PCRS. I've known you as chief exec since my early involvement a long time ago. Without you the various roles within committees, culminating in my time as chair, would have been so different, and so much harder. I loved working with you as chair, although we are very different characters with different styles, we both care deeply about PCRS and achieved some important and exciting changes in our organisation. PCRS will miss you, and I will too. Love, Stephen Gaduzo x

Hi Anne, it has been such a pleasure to work with you on the PCRS Trustee Board particularly. We went through challenging and exciting times. Hard to imagine the PCRS without you, and I suspect it will be difficult for you to imagine your life without it except that it will be less stressful. Hope the next stage is as interesting and fulfilling as it has seemed to me this one was. With best wishes and good luck
Patrick White

Dear Anne
It has been such a pleasure to work with you and I have really appreciated all the support you have given me over the years. PCRS will not be the same without you and we will all really miss you. Good luck in everything you do and enjoy the time you will have away from the commitments you have had.
Much love Vikki Knowles xxx

Anne, Enjoy the time going forward. I will miss your drive, passion and enthusiasm, and our weekly calls. Thank you for your belief in my ability and for pushing me into uncharted territory. You have left very big shoes to fill! If you're in Stroud visiting let me know, we can catch up for coffee!
With love, Carol Stonham

Your drive and commitment to detail is both exhausting (Lo!) and inspirational I've no idea how you do it! It has been an education, honour and privilege working with you. I do hope our paths continue to cross. Have a very well earned long and happy retirement.
Much love Oonagh Potts x

So what are the qualities that have characterised Anne's leadership of PCRS over the years?

- **Seeing things from a range of perspectives**

As a non-clinician in a clinician-led organisation, Anne has had to do a lot of listening to understand the perspective of generalist clinicians. Her skill lies in bringing other perspectives to debate and decisions. Having held senior roles in the pharmaceutical industry and Asthma UK (then known as the National Asthma Campaign), Anne has been able to turn ideas and concepts into initiatives that can engage corporate supporters – while still ensuring that the society's activities will ultimately benefit patients, and the society's independence is retained. In coming to decisions about the PCRS position on a topic, she has sometimes had to juggle input from a variety of professional perspectives, with the patient perspective. Anne is fundamentally committed to equity for all patients – be it access to services, quality of care, or opportunity to live well with good disease control. Setting up the patient reference group has demonstrated her commitment to ensuring that the society remained focused on what would ultimately benefit patients. A further example of how PCRS has benefited from Anne's ability to see the wider picture was the creation of IMPRESS. At a time when clinicians were encouraged to become more involved in designing pathways of care in the NHS and shaping the way that services were delivered, PCRS collaborated with the British Thoracic Society to develop an initiative whose mission was providing the clinical leadership required to drive improvements in care across the traditional boundaries of primary care and secondary care. IMPRESS was important in bringing together the two organisations to work on common issues and ultimately to provide seamless care for patients. Anne's ability to consider all these varied angles has been a real asset to PCRS over 16 years.

- **A focus on process and detail**

There is a lot that goes on behind the scenes in a CE role which is very unglamorous: dealing with charity finance and process, compliance and GDPR, preparing budgets and forecasts and tracking expenditure, monitoring the turnover of committee members. Anne's focus on process and attention to detail is enormous, and the society owes her a huge debt for all the behind-the-scenes work that many of us know little about. Aply – and indispensably – supported by Red Hot Irons (who are equally strong on process and detail) Anne has kept the ship afloat, in an environment which is increasingly tough financially. Organising the annual conference is a process that takes most of the year, and Anne has developed a process led by the conference organising committee which delivers a high quality conference each year – often described by attendees as the best and most friendly conference in the respiratory calendar.

- **Strong personal relationships**

Many of those who have worked closely with Anne will testify to the loyalty, sensitivity and empathy that she brings to working with individuals. While always keeping an eye on what is best for PCRS, she still finds time and space to support colleagues with health issues, family challenges, and the problems that life throws up from time to time. Without sentimentality, but always with respect for confidentiality, she listens and offers support in a way that many have remarked upon. She has nurtured and maintained some longstanding relationships with representatives from the corporate supporters, and they have appreciated the knowledge she has of their organisations and flexibility in addressing the varied needs and processes of their companies.

- **Commitment and energy**

Anne does not understand the concept of doing any less than a 120% job – her commitment to deliver high value is unparalleled, and PCRS has gained immeasurably from the energy and sheer hard slog that Anne has put into her role as CE. Many of her colleagues have tales of how she has gone above and beyond what could be expected – and how she has sought creative solutions to tricky issues with integrity and wisdom on many occasions. She has forged close working relationships with a succession of Executive chairs, and Chairs of the board of Trustees, often fitting her working hours around their availability. There is no doubt that the role has cost her sleepless nights and stress at times, as well as rewards, and occasionally we have had glimpses of the way that her family has adapted to, supported and contributed to her working life. PCRS is deeply in their debt too.

- **Turning ideas into action**

As one former chair commented – a ten minute conversation with Anne can lead to a 20 page document in no time at all! Anne listens, digests and analyses, and can turn a concept into something actionable with visible outputs – a skill that leaves many in awe. At committee meetings, she is often the one taking comprehensive minutes, so will regularly be heard asking – 'So what is the action? Who is going to do it? What is the output going to be? When will this be done by?' She will chase and follow through so that ideas are turned into action, and decisions follow discussion. Woe betide anyone who lets an action slip! And Anne always has an eye on 'How can I sell this idea to the corporate supporters, in order that they see the benefit and value it will bring?'

- **Fearless in challenging**

Anne has never been afraid of challenging the thinking or actions of others. While this can be disconcerting when one is at the receiving end of such challenge, her motivation is always to seek to understand better and to test an idea or concept for the good of the society. Ultimately, once Anne is

Hi Anne,
Thank you for all your hard work with the PCRS, you will leave big shoes to fill! All the best for the future.
Nicola Wood

Dear Anne, it's been a real pleasure working with you and sad to see you're leaving us at PCRS. You've been really supportive to me since I've joined the organisation and you've seen the potential pharmacists play in supporting patients with respiratory conditions. I hope to see you in the future (possibly at the conference) and wish all the best in your future endeavours.
Darush Attar-Zadeh

Good luck Anne, I haven't known you for long but you are inspirational in your knowledge and commitment. All the very best.
Joanne King

Anne, it has been a real pleasure working with you and learning from you over the past 7 years. You have been such a dedicated and supremely well organised person keeping us all on track, it is hard to imagine PCRS without your guiding hand. I wish you so much luck and success with whatever you do next!
Anne Rodman

Thank you Anne for everything. Best wishes for a happy, healthy and enjoyable future...
Mukesh Singh

Dear Anne,
As per my e-mail in December, I'm so sorry you're leaving us, but fully understand your reasons why. Of course, you leave enormous shoes for the next CEO to fill!... Your fantastic hard work and talent, your organisational skills, your influence and cajoling (when it was needed!), your document writing ability, your attention to detail, and your championing of the organisation, have quite simply been outstanding. You've guided PCRS through many changes and challenges over the years, and I firmly believe that PCRS would not have evolved into the fantastically successful multidisciplinary specialist primary care organisation that it is now, without your guidance, hard work, and skills. You should be extremely proud!
It's been an absolute privilege to work with you over the years, Anne – on the Executive, on the Conference Organising Committee, and of course on the journal. Heartfelt thanks for your support over the years, and in particular Petra and I will always remember the kindness you showed us when I was in hospital back in 2010 and when I was recuperating. Thank you so much! Petra and I send our very best wishes for the future. And remember: don't hesitate to get in touch if you're ever in Cornwall – we'd love to see you!
All best wishes, Paul Stephenson

Anne,
You have brought the PCRS so far during your time as CEO. The influence that PCRS has in the policy world, the heightened focus on respiratory conditions and the mention of respiratory in the NHS Long Term Plan are all major achievements for a small Society, not to mention a prestigious conference, training and education programmes and the Journal.
Your attention to detail, challenge and ability to work with both health care professionals and the pharmaceutical industry are great strengths and have helped you drive the successes. As ever this is a team effort and you have always provided strategic and tactical input at the right level to enable us Trustees to do our job.
Personally, it has been great working with you again. I have enjoyed our exchanges and our complementary skills when we have worked together, particularly on the strategic reviews. I hope you can now find the better balance in life which you seek and I wish you contentment and fulfilment in the next phase of your life.
With my very best wishes.
Alison Clough

Dear Anne
I have learnt so much from you about running an organisation and being a Chief Executive. I know I'll never be in the same boat myself but at least I have seen a really good example and hope some ideas and best practice will rub off! I will miss you, but you are a young thing so the next career starts here!
Much love, Steph Taylor

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onside, she is the best advocate and supporter you can have. She is determined and will see things through to a conclusion. She has also been fearless in leading strategic reviews for PCRS – and in confronting questions about the future direction of the society.

So Anne – as you look back on your time as CE, we trust that you feel it is a role you have fulfilled beyond what anyone could possibly have expected. Thanks to the qualities you have brought to your role as PCRS Chief Executive – we are now able to punch well above our weight as a society. We at PCRS are in no doubt of how we have gained from your commitment to making a difference, the volume of work you manage to do in the time available, the enormity of the changes you have overseen, your

dedication to developing the society for its members, your skill in ensuring the financial stability of the organisation, your support for colleagues regardless of their status, and your focus on ensuring that everything the society does will ultimately benefit the lives of respiratory patients.

We wish you well in your retirement and have no doubt that whatever you turn your hand to in future, others will benefit from the same energy, commitment and drive that PCRS knows so well.

Bronwen Thompson



Having kind of alerted you to the vacancy of CEO for GPIAG – as it was then - i can only say that I take a particular satisfaction in seeing how PCRS has grown and developed in capacity and reach since you have been leading it. You have set the most amazing example of how remote working can work, what commitment to the cause looks like, and how to put challenge into the system – but also to provide support to individuals. You have provided the most amazing support to me in my policy role for so many years – and stepped in on the regular occasions when the %&*\$ hit the fan on several occasions when I took holiday! I am sure that PCRS will go from strength to strength under new leadership, but I am in no doubt about the contribution you have made to get it to be the organisation it is today – thank you! Bronwen Thompson

Dear Anne
I wish you every happiness (and peace!) in your retirement from PCRS. You have been an enormous help in my role as SDC Chair and I am so grateful for your support – and patience.
Daryl Freeman

Dear Anne
It has been such a pleasure working with you on the Executive during the past years, you have been a strong and influential role model for me. I will miss you and wish you all the very best.
Val Gerrard x

Dear Anne,
wishing you many best wishes on your retirement, I hope you are able to relax and enjoy :-)
Jane Watson xx

Dear Anne
Wanted to wish you all the very best of luck for the future.
Kind Regards
Prad Savania xxx

Thank you for all you have done for PCRS and patient inclusion in particular.
Amanda Roberts

I'd like to thank you personally Anne, and on behalf of the rest of the PRG, for all your support. We are only too aware of the complexities of your job and how hard you have worked. Our varied needs must have been an additional burden but you worked well with us to sort them out and, in general, to keep us informed. Thank you so much for your dedication to PCRS and congratulations on your many achievements. I wish you a very happy retirement.
Barbara Preston

Call for Papers



npj Primary Care Respiratory Medicine is an open access, online-only, multidisciplinary journal dedicated to publishing high-quality research in all areas of the primary care management of respiratory and respiratory-related allergic diseases. Papers published by the journal represent important advances of significance to specialists within the fields of primary care and respiratory medicine. We are particularly interested in receiving papers in relation to the following aspects of respiratory medicine, respiratory-related allergic diseases and tobacco control:

- Epidemiology
- Prevention
- Clinical care
- Service delivery and organisation of healthcare (including implementation science)
- Global health

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Policy Round-Up

A summary of the latest developments in the UK health services, including any major new reports, guidelines and other documents relevant to primary care respiratory medicine



Tracey Lonergan, PCRS Policy Coordinator and Noel Baxter, Executive Policy Lead for PCRS

2019 was the year where new systems for improving respiratory care at national level became established in order to deliver the respiratory aspirations of the NHS Long Term Plan. PCRS has been instrumental over decades in getting us to this point and is now very much at the table at decision-making and at working-group level.

The start of 2020 has seen the emergence of a respiratory issue that of course has changed the way we work and live and will do so for some time to come. Over the coming weeks and months, the Policy Forum, other committees and PCRS Executive will need to recalibrate and adapt to continue to be a support for our members and wider audience. Normally in this update we would let you know about our progress and that of the country programmes. There is obviously a lot of work on hold but we will keep in touch and keep you up to date on policy issues of interest to you.

mentation and clinical work has now had to scale back to focus on more pressing matters.

The draft Respiratory Care Action Plan for Scotland consultation deadline has been postponed due to the pandemic. We will continue to work with our members in Scotland when this resumes. You can access the consultation document here.

NHSE/I funding for spirometry training was launched at the start of the year but has coincided with the need now to refocus efforts to COVID-19. In addition, respiratory tests such as spirometry and FeNO are aerosol generating and increase the risk of viral spread and are no longer a current clinical priority. Over the next weeks and months, we will inevitably need to get back on track with long term condition diagnosis and management as we see already that there may be collateral effects from COVID-19 beyond direct infection.

What is happening with the big national programmes?



The Taskforce for Lung Health continues to meet online but as the prime audience are policymakers who are now redeployed and focused on COVID-19 there is a reduced programme of work. The data tracker is now up and running and you can read more about what has been achieved in the 2019 annual report which you can find at www.blf.org.uk/taskforce/plan/one-year-on.

Similarly, the NHSE/I respiratory delivery board and its work programmes with a membership responsible for policy, imple-



PCRS Opinion

Policy briefings, consensus documents, pragmatic guides and more

Translating policy into practice to improve respiratory care

PCRS Opinion: Our new website page and helping you to influence and use policy for change

In the last few months, we have updated our presence on the PCRS website so you can now go to one place to find out about PCRS Opinion (www.pcrs-uk.org/pcrs-opinion).

Here you can find links to pragmatic guides, consensus and position statements. We are also keen for you to feedback on how you think our PCRS Opinion is standing up, does it need an update, is there something else we should be looking at?

Keeping up to speed with COVID-19 to try and give the pragmatic advice that we know readers value

We have responded to the Rapid NICE guideline consultations on Severe asthma, COPD and Pneumonia so that the voices of the COVID-19 primary and community care community are being heard and that the guidance is realistic and practical. You can find the latest COVID-19 rapid guidance from NICE on a variety of topics at www.nice.org.uk/guidance/conditions-and-diseases/infections/covid19/products?Status=Published

We have developed a COVID-19 web page where we have tried to place all the materials we think people might find useful which you can access at www.pcrs-uk.org/coronavirus. Not surprisingly, evidence for everything we want answers to is not always available and we have had to adjust sometimes on a day by day basis as we learn more on what we think can be shared and used. If there are materials or resources you are finding useful, let us know so we can include them on our COVID-19 for everyone to access.

Our pragmatic guides we know are helpful to our clinicians so we also developed early on a consensus informed by evidence



about how to support people with COPD and asthma during the crisis which you can access at www.pcrs-uk.org/coronavirus. We keep an eye on this and update as further evidence emerges.

Our Policy Forum membership has grown and diversified

At the beginning of 2020 we recruited new members to our Policy Forum. We now have a member from Northern Ireland, Leon O'Hagan who joins Darush Attar Zadeh as one of our two pharmacists now on the forum for the first time. We also welcome Beverley Bostock, nurse practitioner and renowned respiratory writer and teacher who strengthens our nursing voice on this committee.

The PCRS position

Despite the current pandemic, some of our policy influencing work has continued in the background and since the beginning of 2020 we have issued position statements on CRP testing in COPD, the use of eCigarettes and environmental issues in respiratory care. These can all be accessed through our dedicated PCRS Opinion web page. Upcoming position statements include the respiratory management of frail elderly patients and digital GP services.



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- Primary Care Respiratory Update (PCRU) magazine three times a year, packed with practical guidance, clinical updates and much more.
- In Touch, our fortnightly newsletter, making it easy to stay informed and up-to-date with the latest news and advice.
- Extended access to post conference materials, webinars and learning.
- Professional development support, including access to our clinical leadership programme and scientific mentorship programme.
- You will be supported by a friendly and accessible community of like-minded peers who are passionate about all areas of respiratory care.

PCRS-UK News Round-Up

WELCOME TO LYNN LADBROOK



This is the first issue under new chief executive, Lynn Ladbrook. Lynn came on board to PCRS as the world faced lockdown with COVID-19. In her first two months, she has helped to navigate the organisation through COVID-19 lockdown, conduct committee meetings virtually, seek sponsorship and funding to support organisation

activities and convert the PCRS annual flagship conference to a virtual conference event, all of which she has done with a smile and without meeting a single member of PCRS or the support team in the flesh. Well done Lynn, you've had one hell of an introduction but we look forward to working with you to sustain and grow PCRS in the future.

RESPIRATORY LEADERS PROGRAMME

With the COVID pandemic continuing to impact on PCRS programmes this year's respiratory leadership rolling programme is going to look a little different. We'll be running a series of webinars over the summer. These bite-size events will take place on 17, 19 and 26 August 2020 and run from 19.30 – 21.00hrs. The webinars are focused around the benefits and purpose of providing psychological safety. Then, in November, we'll be running a virtual half-day interactive online meeting combining presentations and interactive breakout sessions focusing on improving personal communication and planning to be more effective in your role.

Check out our respiratory leaders webpage for more information (<https://www.pcrs-uk.org/pcrs-respiratory-leadership-programme>)

PCRS MENTORSHIP PROGRAMME

Have you ever wanted to attend a major respiratory conference but you're nervous about attending or worried about how to maximise the learning relevant to your work? Fear no more, the PCRS mentorship programme provides an introduction to major respiratory conferences supported by personal mentor guides. We're offering funded places for selected members to attend the virtual ERS congress, PCRS virtual conference and BTS Winter meeting

Find out more at <https://www.pcrs-uk.org/pcrs-scientific-mentorship-programme>

ASTHMA RIGHTCARE



Earlier in the Spring we ran a series of webinars focusing on practical approaches for managing asthma and dealing with issues such as tackling SABA over-reliance, keeping people with asthma safe, medico-legal implications of asthma prescribing and the role of the post-attack asthma review. Speakers included Beverley Bostock, Mark Levy, Frances Barratt and more.

All the webinars are available on-demand for watching at your leisure at <https://www.pcrs-uk.org/arc-webinar-series>. Watch out for more webinars coming to you over the summer

KEEP UP TO DATE - COVID-19

As soon as COVID-19 hit, PCRS developed a hub to share information, guidance and research relevant to those of us working in primary care respiratory health. Our hub – <https://www.pcrs-uk.org/coronavirus> – has been widely shared and is an excellent tool to help you keep up to date. As we begin restoring respiratory services it is great to know that there is a platform which provides us with the latest links and information to help us.

Head over to our Community Platform too to share your experiences and learn from your colleagues <https://pcrscommunity.forumbee.com/category/covid-19>



PCRS Scientific Mentorship Programme

Have you ever wanted to attend a major respiratory conference but you're nervous about attending on your own and worried about how to maximise the learning relevant to your work?

Fear no more, the PCRS mentorship programme provides an introduction to major respiratory conferences supported by personal mentor guides. Funded through the provision of an educational grant from GSK we're offering complimentary places for selected members to attend the virtual ERS congress, PCRS virtual conference and BTS Winter meeting



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Successful participants will

- Participate in two major respiratory conferences (ERS (virtual) and BTS)
- Participate in PCRS conference and PCRS respiratory leaders programme
- Have an opportunity to discuss current career aspirations and goals with mentors and develop a plan to achieve these goals
- Develop contacts and network within the conference environment across boundaries and professions
- Learn how to plan for and get the most from a major respiratory congresses
- Learn about the latest in respiratory research and how the learning can be translated in primary care
- Share learning locally



Find out more at

<https://www.pcrs-uk.org/pcrs-scientific-mentorship-programme>

Apply online before 31 July 2020 Terms and Conditions apply

Delivering Excellence Locally

Featuring initiatives led by PCRS members around the UK, supported by PCRS programmes and tools

How enhanced competencies and templates are being used to improve respiratory care in Wales



Louise Walby *Clinical Respiratory Nurse Specialist*

Clinical respiratory nurse specialist Louise Walby has upskilled primary care nurses in her Health Board by devising new competencies and computer templates to help them conduct high quality annual reviews of patients with adult asthma and COPD.

She is keen that lessons learned from the National Primary Care COPD Audit (RCP 2017) and the National Review of Asthma Deaths (NRAD) (RCP 2014) are incorporated into practice – in particular the recommendation that annual reviews of patients should be enhanced to standardise and improve care.^{1,2}

Louise, who works for Cwm Taf Morgannwg University Health Board as a Respiratory Nurse Facilitator and clinical lead for a community respiratory team, is also responsible for the training and education of practice based and community staff.

Louise runs a three day 'Introduction to Respiratory' course for new to general practice and community nurses followed by mentorship for up to 12 weeks. After being asked to 'sign off' nurses as proficient in undertaking annual reviews, Louise decided to develop competencies when she could not find any that currently had sufficient detail.

Following consultation with respiratory clinicians in neighbouring health boards including the Welsh Asthma and COPD work stream leads, the final competencies have now been agreed and cover the skills needed to undertake a thorough annual review in primary care of both asthma and COPD. The competencies are based on the Benner Stages of Clinical Competence (2001) and allow nurses to progress through levels of proficiency from novice to expert.³ They ensure that nurses have the skills and knowledge to revisit the diagnosis, establish control and

identify co-morbidities and those at risk who need to be referred for specialist advice. The competencies also include pharmacological and non pharmacological approaches including self-management, inhaler technique and compliance.

Louise explains: "We are trying to ensure that nurses are competent in the first place and from there they can build on and develop their proficiency. Feedback has been really positive. The competencies give nurses a different perspective to just fulfilling the requirements of the Quality and Outcome Frameworks because they learn how to manage the patient in a holistic way, to optimise treatment and improve symptoms and ultimately quality of life."

To further support primary care nurses to deliver high quality care, Louise, with the help of the Practice Manager at a local surgery has developed enhanced respiratory templates for conducting annual reviews. The templates complement the competencies and are read coded to encourage accurate data recording and documentation and support the National Asthma and COPD Audit programme.

The templates have been successfully trialled using the Vision GP software in six GP practices within Cwm Taf Morgannwg. A user evaluation survey indicates that the templates help nurses to focus and structure the patient review while promoting best practice. In addition, the data collected pre and post template use from the 6 practices showed a significant improvement in the quality of annual reviews conducted. Improvements were seen in the checking of smoking status, exacerbations, inhaler technique, and compliance of treatment plus the recording and discussion of rescue medication.

The next steps are to incorporate the templates



into the remaining GP interface systems and together with the competencies roll out across Wales with the support of the Respiratory Health Implementation Group.

Louise stated she hopes that every patient will experience the same high standard of care regardless of where in Wales they are seen. "The National Asthma and COPD Audit and NRAD have given the data which shows where we can improve. I have used that data to enable nurses to provide better care. By using the new competencies and the templates we can work together to make a difference."

References

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Date of Preparation: September 2019 Version 1

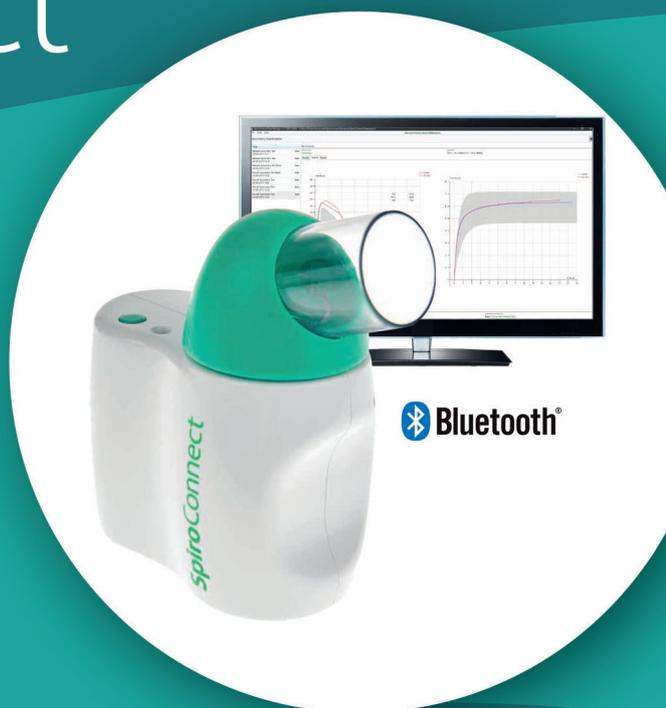
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Affiliated Groups



How technology can take the stress out of running your local group

When **Emma Thompson** stepped into the role of chair of the South Yorkshire Respiratory Interest Group, a PCRS affiliated local group, she felt overwhelmed by the task ahead of her.

A Primary Care Development Nurse at NHS Sheffield CCG, Emma had served on the committee of the group since it was launched in 2016.

The group's creator was Jackie Dale Jackie, a university lecturer, whose job involved supporting practice nurses. Through her contacts she had built up a thriving and popular group with a database of 190 healthcare professionals.

Emma took over as chair at the end of 2018. Being time poor like most healthcare professionals she decided she needed to streamline the organisation of the group.

She decided her first port of call was to make better use of technology. However she was not an IT expert, so she enlisted the help of her husband who set up two free online platforms for her – mailchimp and eventbrite. These have now made it much faster and easier to organise meetings and keep in contact with members.

The spreadsheet of the group's contacts, which previously had to be updated manually, has been imported into mailchimp, an online marketing platform. This now automatically updates the database when new members are added or others removed and is used to email all contacts to notify them of meetings. Importantly, it ensures that the group is compliant with data protection rules.

The platform Eventbrite now organises the bookings for the quarterly meetings. Emma explains: "It's really easy to do – you add in the date and time of your event, how many people you expect to attend and then it creates a link which is emailed to all members of the group. The recipients can then book online via the email link and I can print off the list of delegates who are coming to the meeting. The list can then be used as the sign-in sheet. If for any reason you have to cancel the event at the last minute you just click on one button to email everybody."

There are 15 sponsors who support the group. To keep things simple, the venue and time is always the same and the sponsors organise and divide up payment for the hire of the room between themselves. They pay the venue directly on the night. This saves Emma having to take on the responsibility of a bank account.

Emma has also set up a Facebook page to improve communication with members. Every month she spends a small

amount of time pre-scheduling in posts about respiratory news and other topics of interest to the respiratory community, which are published a couple of times a week.

"These few changes have made all the difference to what was a previously labour intensive operation. It has really paid dividends and the group is now really lightweight to run. We have a database of about 300 people who we can now quickly and easily email regularly. Running the group feels very low maintenance and do-able now," says Emma.

In addition Emma ensures that she delegates tasks to a small committee which supports the group and has between them a range of different skills and contacts. This will help to future proof the group as it will ensure that there are others who know how the group operates and will be able to step up when Emma decides that it is time for her to move on.

Emma's top tips for running a streamlined group:

- If you are thinking of setting up a group from scratch, adopt the technology from the very beginning.
- If you aren't a techie then ask someone who is to help you
- Use a platform like mailchimp to manage your marketing emails: <https://mailchimp.com>
- Use a platform like eventbrite to manage your events: <https://www.eventbrite.co.uk>
- Talk to your local sponsors to find out how they can support your group
- Recruit an enthusiastic committee who are prepared to shoulder some of the work and who will be prepared to run the group after you have left
- Keep in regular touch with members on your database through social media – Twitter, Facebook etc to ensure the group stays on everybody's radar and potentially recruit new members.



Date of Preparation: April 2020 Version 1



Affiliated Groups

Working together to make a real difference
in respiratory care

PCRS Affiliated Groups connect colleagues who are passionate about developing respiratory care together in your local area. If there isn't a group near you, why not create your own?



PCRS is here to help you with

- **Support and resources** to help you get started and develop a new group.
- **An affiliation scheme** offering enhanced credibility and support for your group from a national network.
- **A regular newsletter**, packed with ideas to help support your group.
- **An annual meeting** for Group Leaders to support personal and collective respiratory development in your area.
- **Free PCRS membership** for leaders of an affiliated local group.

Be part of a thriving respiratory care network

We're here to help you with improving respiratory care for patients. We know it can be daunting and frustrating – especially when facing budget cuts, juggling workloads and trying to keep up with the latest developments.

PCRS has around 50 affiliated local groups in the UK, including nursing groups, primary care groups sharing knowledge about clinical developments and multi-disciplinary communities of practice driving service improvement in a local area.

Find out about our affiliated groups by visiting
<https://pcrs-uk.org/affiliated-groups>





The right level of support at the right time



Drawing on our years of education and training **Education for Health** have now launched several new services to support NHS frontline staff at this challenging time. These are all designed to enable you to **access the right level of support at the right time for you.**

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Visit:

www.educationforhealth.org/news/education-for-health-actions-on-covid-19-coronavirus/

or Email: contact@educationforhealth for more information.



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- Embedded in clinical practice, with real-world case studies and solutions
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Visit www.pcrs-uk.org/clinical-leadership for more details.**

Upcoming Programme Events - SAVE THE DATE

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- Used correctly by 93% of people after reading the PIL*¹
- Consistent dose delivery:**
 - At flow rates of 30–90 L/min^{2,3}
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DuoResp Spiromax is indicated in adults 18 years of age and older for: 1) the regular treatment of **asthma**, where use of a combination (inhaled corticosteroid and long-acting β_2 adrenoceptor agonist) is appropriate in patients not adequately controlled with inhaled corticosteroids and “as needed” inhaled short-acting β_2 adrenoceptor agonists or in patients already adequately controlled on both inhaled corticosteroids and long-acting β_2 adrenoceptor agonists;⁴ AND 2) the symptomatic treatment of patients with **COPD** with forced expiratory volume in 1 second (FEV₁) <70% predicted normal (post bronchodilator) and a history of repeated exacerbations, who have significant symptoms despite regular therapy with long-acting bronchodilators.⁴

COPD, chronic obstructive pulmonary disease; PIL, patient information leaflet
 *Correct usage data after reading PIL for Turbohaler® and Easyhaler® were 76.7% and 58.3% respectively (p<0.001, for both comparisons) n=120 for all groups.¹ Patients are advised to read the PIL carefully and follow the instructions for use as detailed in the leaflet.
 **Dose delivery study using low, middle and high strength DuoResp Spiromax. Dose consistency was measured over inhaler life. Low dose was included in the study but is not licensed in the UK.³

Please refer to the Summary of Product Characteristics (SmPC) for full details of the Prescribing Information. DuoResp® Spiromax® (budesonide/formoterol) 160mcg/4.5mcg inhalation powder and DuoResp® Spiromax® (budesonide/formoterol) 320mcg/9mcg inhalation powder. **Abbreviated Prescribing Information. Presentation:** DuoResp® Spiromax® 160/4.5: Each delivered dose contains 160mcg of budesonide and 4.5mcg of formoterol fumarate dihydrate. This is equivalent to a metered dose of 200mcg budesonide and 6mcg of formoterol fumarate dihydrate. DuoResp® Spiromax® 320/9: Each delivered dose contains 320mcg of budesonide and 9mcg of formoterol fumarate dihydrate. This is equivalent to a metered dose of 400mcg budesonide and 12mcg of formoterol fumarate dihydrate. Inhalation powder. **Indications:** Asthma: Treatment of asthma, where use of a combination (inhaled corticosteroid and long-acting β_2 -adrenoceptor agonist) is appropriate. COPD: Symptomatic treatment of patients with COPD with forced expiratory volume in 1 second (FEV₁) < 70% predicted normal (post bronchodilator) and a history of repeated exacerbations, who have significant symptoms despite regular therapy with long-acting bronchodilators. **Dosage and administration:** For use in adults \geq 18 years. Not for use in children < 18 years of age. **Asthma:** Not intended for the initial management. If an individual patient should require a combination of doses other than those available in the combination inhaler, appropriate doses of β_2 -adrenoceptor agonists and/or corticosteroids by individual inhalers should be prescribed. The dose should be titrated to the lowest dose at which effective control of symptoms is maintained. When control of symptoms is achieved titrate to the lowest effective dose, which could include once daily dosing. DuoResp® Spiromax® 160/4.5: maintenance therapy – regular maintenance treatment with a separate reliever inhaler. Adults: 1-2 inhalations twice daily (maximum of 4 inhalations twice daily). DuoResp® Spiromax® maintenance and reliever therapy: For patients taking DuoResp as reliever, preventative use of DuoResp Spiromax for allergen or exercise-induced bronchoconstriction should take into consideration the frequency of need. In case of frequent need of bronchodilation without corresponding need for an increased dose of inhaled corticosteroids, an alternative reliever should be used. Regular maintenance treatment and as needed in response to symptoms: should be considered for patients with: (i) inadequate asthma control and in frequent need of reliever medication (ii) previous asthma exacerbations requiring medical intervention. Adults: The recommended maintenance dose is 2 inhalations per day, given either as one inhalation morning and evening or as 2 inhalations in either the morning or evening. For some patients a maintenance dose of 2 inhalations twice daily may be appropriate. Patients should take 1 additional inhalation as needed in response to symptoms. If symptoms persist after a few minutes, an additional inhalation should be taken. Not more than 6 inhalations should be taken on any single occasion. A total daily dose of up to 12 inhalations could be used for a limited period. Patients using more than 8 inhalations daily should be strongly recommended to seek medical advice. DuoResp® Spiromax® 320/9: Only to be used as maintenance therapy. Adults: 1

inhalation twice daily (maximum of 2 inhalations twice daily). **COPD:** Adults: 1 inhalation twice daily. Elderly patients (\geq 65 years old): No special requirements. Patients with renal or hepatic impairment: No data available. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. **Precautions and warnings:** If treatment is ineffective, or exceeds the highest recommended dose, medical attention must be sought. Patients with sudden and progressive deterioration in control of asthma or COPD should undergo urgent medical assessment. Patients should have their rescue inhaler available at all times. The reliever inhalations should be taken in response to symptoms and are not intended for regular prophylactic use e.g. before exercise. For such, a separate rapid-acting bronchodilator should be considered. Patients should not be initiated during an exacerbation. Serious asthma-related adverse events and exacerbations may occur. If asthma symptoms remain uncontrolled or worsen, patients should continue treatment and seek medical advice. If paradoxical bronchospasm occurs, treatment should be discontinued immediately. Paradoxical bronchospasm responds to a rapid-acting inhaled bronchodilator and should be treated straightaway. Visual disturbance may be reported with systemic and topical corticosteroid use. Such patients should be considered for referral to an ophthalmologist for evaluation of possible causes. Systemic effects may occur, particularly at high doses prescribed for long periods. Potential effects on bone density should be considered, particularly in patients on high doses for prolonged periods that have co-existing risk factors for osteoporosis. Prolonged treatment with high doses of inhaled corticosteroids may result in clinically significant adrenal suppression. Additional systemic corticosteroid cover should be considered during periods of stress. Treatment should not be stopped abruptly – tapering of dose is recommended. Transfer from oral steroid therapy to a budesonide/formoterol fumarate fixed-dose combination may result in the appearance of allergic or arthritic symptoms which will require treatment. In rare cases, tiredness, headache, nausea and vomiting can occur due to insufficient glucocorticosteroid effect and temporary increase in the dose of oral glucocorticosteroids may be necessary. To minimise risk of oropharyngeal Candida infection patients should rinse mouth with water. Administer with caution in patients with thyrotoxicosis, phaeochromocytoma, diabetes mellitus, untreated hypokalaemia, or severe cardiovascular disorders. The need for, and dose of, inhaled corticosteroids should be re-evaluated in patients with active or quiescent pulmonary tuberculosis, fungal and viral infections in the airways. Additional blood glucose controls should be considered in diabetic patients. Hypokalaemia may occur at high doses. Particular caution is recommended in unstable or acute severe asthma. Serum potassium levels should be monitored in these patients. As with other lactose containing products the small amounts of milk proteins present may cause allergic reactions. There is some evidence of an increased risk of pneumonia with increasing steroid dose but this has not been demonstrated conclusively across all studies. Physicians should remain vigilant for the possible development of pneumonia in patients with COPD as the clinical features of such

infections overlap with the symptoms of COPD exacerbations. **Interactions:** Concomitant treatment with potent CYP3A4 inhibitors should be avoided. If this is not possible the time interval between administration should be as long as possible. Co-treatment with CYP3A inhibitors, including cyclosporin-containing products is expected to increase risk of systemic side effects and the use in combination should be avoided. Not recommended with β -adrenergic blockers (including eye drops) unless compelling reasons. Concomitant treatment with quinidine, disopyramide, procainamide, phenothiazines, antihistamines (terfenadine), and Tricyclic Antidepressants (TCAs) can prolong the QTc-interval and increase the risk of ventricular arrhythmias. L-Dopa, L-thyroxine, oxytocin and alcohol can impair cardiac tolerance. Concomitant treatment with MAOIs, including agents with similar properties, may precipitate hypertensive reactions. Patients receiving anaesthesia with halogenated hydrocarbons have an elevated risk of arrhythmias. Hypokalaemia may increase the disposition towards arrhythmias in patients taking digitalis glycosides. **Pregnancy and lactation:** Use only when benefits outweigh potential risks. Budesonide is excreted in breast milk; at therapeutic doses no effects on infants are anticipated. **Effects on ability to drive and use machines:** No or negligible influence. **Adverse reactions:** Since DuoResp® Spiromax® contains both budesonide and formoterol, the same pattern of adverse reactions as reported for these substances may occur. No increased incidence of adverse reactions has been seen following concurrent administration of the two compounds. **Serious:** Immediate and delayed hypersensitivity reactions, e.g. exanthema, urticaria, pruritus, dermatitis, angioedema and anaphylactic reaction, Cushing's syndrome, adrenal suppression, growth retardation, decrease in bone mineral density, hypokalaemia, hyperglycaemia, aggression, psychomotor hyperactivity, anxiety, sleep disorders, depression, behavioural changes, cataract and glaucoma, tachycardia, cardiac arrhythmias, e.g. atrial fibrillation, supraventricular tachycardia and extrasystoles, angina pectoris, prolongation of QTc-interval, variations in blood pressure, bronchospasm, pneumonia in COPD patients and paradoxical bronchospasm. **Common:** Candida infections in the oropharynx, headache, tremor, palpitations, mild irritation in the throat, coughing, pneumonia in COPD patients and hoarseness. Consult the Summary of Product Characteristics in relation to other side effects. **Overdose:** An overdose of formoterol may lead to: tremor, headache, palpitations. Symptoms reported from isolated cases are tachycardia, hyperglycaemia, hypokalaemia, prolonged QTc-interval, arrhythmia, nausea and vomiting. Supportive and symptomatic treatment may be indicated. **Price per pack:** DuoResp® Spiromax® 160/4.5 and DuoResp® Spiromax® 320/9: £27.97. **Legal Category:** POM. **Marketing Authorisation Numbers:** DuoResp® Spiromax® 160/4.5: EU/1/14/920/001. DuoResp® Spiromax® 320/9: EU/1/14/920/004. **Marketing Authorisation Holder:** Teva Pharma B.V. Swensweg 5, 2031GA Haarlem, The Netherlands. **Date of Preparation:** April 2020. **Job Code:** UK/MED/20/0115.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Teva UK Limited on 0207 540 7117 or medinfo@teva.uk.com

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