

# Primary Care Respiratory **UPDATE**



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## HIGHLIGHTS ...

Meet the new PCRS-UK  
Chair of the Executive

Treating tobacco dependency  
as a long term relapsing  
condition

Carbon monoxide testing

Increasing quit rates in  
general practice





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# Primary Care Respiratory UPDATE

The *Primary Care Respiratory Update* is published quarterly and distributed to members of the Primary Care Respiratory Society UK.

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## Editorial Office and Publishers

Primary Care Respiratory Society UK  
Unit 2, Warwick House  
Kingsbury Road  
Curdworth, Warwicks B76 9EE  
Tel: +44 (0)1675 477600  
Fax: +44 (0)1361 331811  
Email: [sales@pcrs-uk.org](mailto:sales@pcrs-uk.org)

## Advertising and sales

Primary Care Respiratory Society UK  
Unit 2, Warwick House  
Kingsbury Road  
Curdworth, Warwicks B76 9EE  
Tel: +44 (0)1675 477600  
Fax: +44 (0)1361 331811  
Email: [sales@pcrs-uk.org](mailto:sales@pcrs-uk.org)

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For further information, contact:  
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Unit 2, Warwick House  
Kingsbury Road  
Curdworth, Warwicks B76 9EE  
Tel: +44 (0)1675 477600  
Fax: +44 (0)1361 331811  
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Professor Hilary Pinnock, *Reader, Asthma UK Centre for Applied Research, Allergy and Respiratory Research Group, Centre for Population Health Sciences, University of Edinburgh General Practitioner, Whitstable Medical Practice, Whitstable, Kent*

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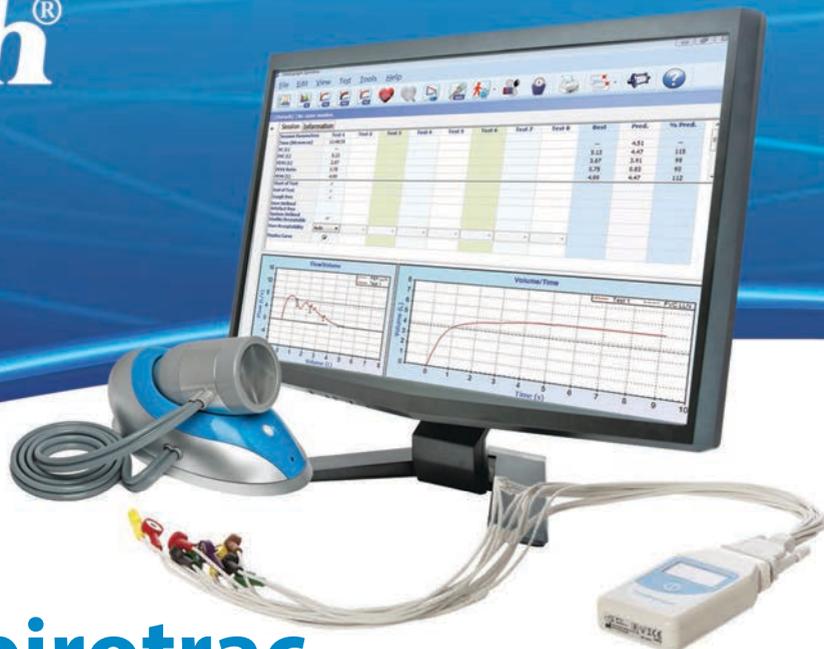
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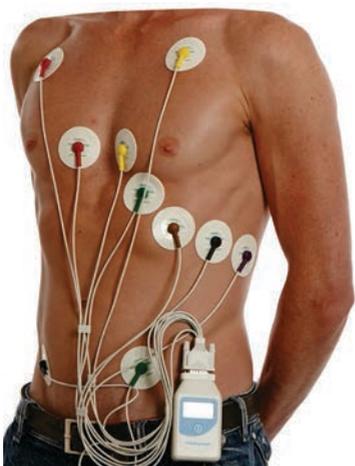
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# Primary Care Respiratory **UPDATE**



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### Update your clinical practice:

#### IPCRG Desktop Helper

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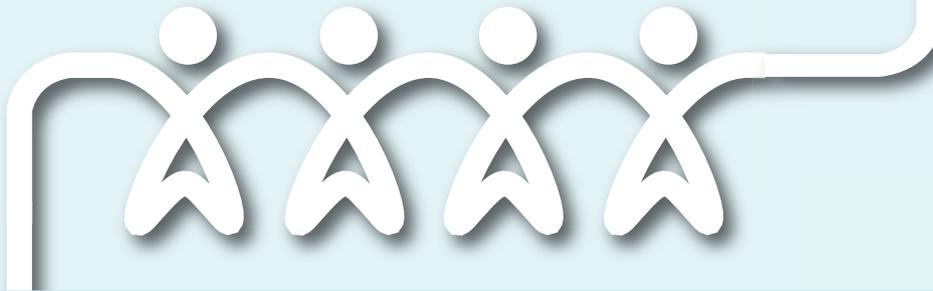
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## SPECIAL PULL-OUT FEATURE

**Tobacco dependency is a long-term relapsing condition that usually starts in childhood**



# Make a real difference in respiratory care in your area



A **local respiratory group** is the ideal way to bring colleagues together in your area. Providing a forum to keep up to date, share best practice with peers and benefit from a network of support.

Visit [www.pcrs-uk.org](http://www.pcrs-uk.org) to find a PCRS-UK group near to you.

### If there is not one local to you, why not set up?

- ✓ Share best practice with, and learn from, your peers
- ✓ Develop your personal and professional skills
- ✓ Support improved care in your area
- ✓ Develop and maintain links with other health professionals involved in respiratory care in your area

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Reference: 1. Hubbard GP et al. Clin Nutr, 2012;31:293-312.

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FOR ADULT ASTHMA

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obstructive cardiomyopathy, ischemic heart disease, severe heart failure, congestive heart failure, occlusive vascular diseases, arterial hypertension, severe arterial hypertension, aneurysm, thyrotoxicosis, diabetes mellitus, phaeochromocytoma and untreated hypokalaemia. Caution should also be used when treating patients with known or suspected prolongation of the QTc interval (QTc > 0.44 seconds). Formoterol itself may induce QTc prolongation. Potentially serious hypokalaemia may result from beta<sub>2</sub>-agonist therapy and may also be potentiated by concomitant treatments (e.g. xanthine derivatives, steroids and diuretics) and increase the risk of arrhythmias. Formoterol may cause a rise in blood glucose levels. Fostair should not be administered for at least 12 hours before the start of anaesthesia, if halogenated anaesthetics are planned. Use with caution in patients with pulmonary tuberculosis or fungal/viral airway infections. Fostair treatment should not be stopped abruptly. Treatment should not be initiated during exacerbations or acutely deteriorating asthma. Fostair treatment should be discontinued immediately if the patient experiences a paradoxical bronchospasm. Systemic effects: Systemic effects of ICS may occur, particularly at high doses for long periods, but are less likely than with oral steroids. These include Cushing's syndrome, Cushingoid features, adrenal suppression, 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 and aggression. Prolonged treatment with high doses of ICS may result in adrenal suppression and acute adrenal crisis. Lactose contains small amounts of milk proteins, which may cause allergic reactions. **Interactions:** Beta-blockers should be avoided in asthmatic patients. Concomitant administration of other beta-adrenergic drugs may have potentially additive effects. Concomitant treatment with quinidine, disopyramide, procainamide, phenothiazines, antihistamines, monoamine oxidase inhibitors (MAOIs) and tricyclic antidepressants can prolong the QTc interval and increase the risk of ventricular arrhythmias. L-dopa, L-thyroxine, oxytocin and alcohol can impair cardiac tolerance towards beta<sub>2</sub>-sympathomimetics. Hypertensive reactions may occur following co-administration with MAOIs including agents with similar properties (e.g. furazolidone, procarbazine). Concomitant treatment with xanthine derivatives, steroids or diuretics may potentiate a possible hypokalaemic effect of beta<sub>2</sub>-agonists. Hypokalaemia may increase the likelihood of arrhythmias in patients receiving digitalis glycosides. **Fertility, pregnancy and lactation:** Fostair should only be used during pregnancy or lactation if the expected benefits outweigh the potential risks. **Effects on driving and operating machinery:** Fostair is unlikely to have any effect on the ability to drive and use machines. **Side effects:** *Common:* pharyngitis, oral candidiasis, headache, dysphonia, tremor. *Uncommon:* influenza, oral fungal infection,

oropharyngeal candidiasis, nasopharyngitis, oesophageal candidiasis, vulvovaginal candidiasis, gastroenteritis, sinusitis, rhinitis, pneumonia, granulocytopenia, allergic dermatitis, hypokalaemia, hyperglycaemia, hypertriglyceridaemia, restlessness, dizziness, otosalginitis, palpitations, prolongation of QTc interval, ECG change, tachycardia, tachyarrhythmia, atrial fibrillation, sinus bradycardia, angina pectoris, myocardial ischaemia, blood pressure increased, hyperaemia, flushing, cough, productive cough, throat irritation, asthmatic crisis, exacerbation of asthma, dyspnoea, pharyngeal erythema, diarrhoea, dry mouth, dyspepsia, dysphagia, burning sensation of the lips, nausea, dysgeusia, pruritus, rash, hyperhidrosis, urticaria, muscle spasms, myalgia, C-reactive protein increased, platelet count increased, free fatty acids increased, blood insulin increased, blood ketone body increased, blood cortisol decrease, oropharyngeal pain, fatigue, irritability, cortisol free urine decreased, blood potassium increased, blood glucose increased, ECG poor r-wave progression. *Rare:* ventricular extrasystoles, paradoxical bronchospasm, angioedema, nephritis, blood pressure decreased. *Very rare:* thrombocytopenia, hypersensitivity reactions, including erythema, lips, face, eyes and pharyngeal oedema, adrenal suppression, glaucoma, cataract, peripheral oedema, bone density decreased. **Unknown frequency:** psychomotor hyperactivity, sleep disorders, anxiety, depression, aggression, behavioural changes (Refer to SPC for full list of side effects). **Legal category:** POM Packs and price: £29.32 1x120 actuations **Marketing authorisation (MA) Nos:** PL 08829/0156, PL 08829/0175, PL 08829/0173, PL 08829/0174 **MA holder:** Chiesi Ltd, 333 Styal Road, Manchester, M22 5LG. **Date of preparation:** Oct 2015. AeroChamber Plus<sup>®</sup> is a registered trademark of Trudell Medical International.

**References:** **1.** British Thoracic Society and Scottish Intercollegiate Guidelines Network. SIGN 141, British guideline on the management of asthma. October 2014. **2.** Corradi M, *et al.* Expert Opin Drug Deliv 2014; 11(9): 1497-1506. **3.** Fostair NEXThaler 100/6 Summary of Product Characteristics. Chiesi Limited. **4.** Kanness F, *et al.* Pulm Pharmacol Ther 2015; 30: 121-127.

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# Guest Editor's Round-Up

**Carol Stonham**



As we move forward in a health care system that is adapting to face the future we welcome our new chair Dr Noel Baxter. Noel explains how he sees change as a period of opportunity and how PCRS-UK can help members make sense of this period of transition.

The theme for the autumn issue is tobacco dependency and it is a time to see this with fresh eyes. PCRS-UK is launching an active campaign to challenge traditional views around smoking so that we move from smoking cessation advice as, on occasions, a tick box activity, and see it as a long term relapsing condition that starts in childhood, and offer the appropriate care and advice that would be offered to a person with any other long term condition.

To support tobacco dependency treatment Noel suggests routine carbon monoxide monitoring is helpful – a quick test that can be incorporate into the consultation and can be a conversation starter for smoking cessation. Other tool kit pieces to have to hand including a practical knowledge of relevant pharmacology and the Every Contact Counts prompt.

Smoking has a fascinating history – often started in childhood as a bet and seen as glamorous and the norm. Jane Scullion paints a colourful picture of how it all began after talking to members of the PCRS-UK Lay Reference Group regarding their experiences and recommendations for care.

The editor's choice of paper from *npj Primary Care Respiratory Medicine* is by Vajane N *et al.* which identifies that, despite better access to

affordable equipment, family doctors in India still rarely use spirometry. They are the first port of call for patients but cite difficulty with interpretation of results and time as the reason. This is interesting at a time when we are trying to clarify standards for spirometry in the UK.

Continuing the tobacco dependency theme, Anthenelli R *et al* have published The Evaluating Adverse Events in a Global Smoking Cessation Study (EAGLES) in *The Lancet*. This study compared Varenicline, placebo, nicotine patch and bupropion in smokers with and without psychiatric disorder – an area of safety concern – with reassuring results.

Fran Robinson talks to 2 members who have made a difference and are "Delivering Excellence Locally". Sonia Simpson describes the changes to a smoking cessation service and the fantastic results this project has had.

Jackie Dale explains her accidental promise to set up a local group, and how by doing so she developed herself through PCRS-UK programmes and benefitted her colleagues in the process. This is a subject close to my heart as I have led the Affiliated Groups project for some years now and am proud of the difference it makes to those working in practice.

The NHS continues to evolve, with a regular policy update making it easier to keep abreast of what's new, I am sure this issue will challenge your thinking, prompt you to think differently, and offer you a succinct update – time well spent.

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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. 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. 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. Not recommended with  $\beta$ -adrenergic blockers (including eye drops) unless compelling reasons. Concomitant treatment with quinidine, disopyramide, procainamide, phenothiazines, antihistamines (terfenadine), Monoamine Oxidase Inhibitors (MAOIs) and Tricyclic Antidepressants (TCAs) can prolong the QTc-interval and increase the risk of ventricular arrhythmias. L-Dopa, L-tyrosine, 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: £29.97. **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, 2031 GA Hoofdam, The Netherlands. **Date of Preparation:** August 2016. **Job Code:** UK/MED/16/0112.

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**References:** 1. DuoResp Spiromax® Summary of Product Characteristics. 2. Medical Design Excellence Awards 2015. Available at: <http://www.devicelink.com/expo/awards/awards/>. Last accessed: August 2016.

**Approval code:** UK/DUO/16/0033

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# Noel Baxter: leader, advocate and passionate campaigner for high quality respiratory care

## Meet PCRS-UK's new Chair

**Noel Baxter**, *PCRS-UK Executive Chair*



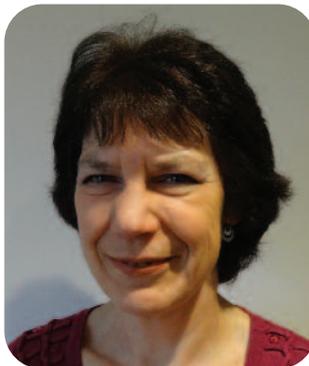
**Francesca Robinson talks to Dr Noel Baxter, the new Chair of PCRS-UK Executive, about the challenges and opportunities facing the society and what his hopes for the future are.**

### **Why do you value PCRS-UK?**

PCRS-UK is a dynamic society which moves with the times, with a vision that ensures it stays ahead of the pack when embracing innovation, new ways of working and collaborating with other professional colleagues.

### **What are the challenges facing PCRS-UK?**

The challenge for PCRS-UK is to thrive in a changing and challenging environment. Despite the pressures on primary care, we have managed to maintain our membership and there is no shortage of people keen to contribute by sitting on committees and working groups.



General practice is changing with the formation of super practices and federations and the introduction of new models of care, demonstrated by England's vanguards, and there is a need for clear standards of respiratory care for everyone to work towards. PCRS-UK is well placed to support primary care to make sense of and implement guidelines and standards, having established our commitment to quality through the development of our evidence-based respiratory care quality award and a suite of improvement tools and guidance. We also play a role in influencing the development of new guidance at a national level.

In England, the Five Year Forward View<sup>1</sup> calls for more prevention, earlier diagnosis and closer working with a wide range of colleagues such as health-care assistants, health trainers and physicians' assistants. We have already responded with our campaigns to make diagnosis the basic building block of care and establishing tobacco dependence as a long-term relapsing condition that starts in childhood. Respiratory nursing specialists have been embedded in PCRS-UK for years and primary care interested respiratory physicians and physiotherapists sit on our committees and provide insight and leadership for our organisation.

Our new Primary Care Respiratory Academy launched this year in partnership with Cogora is enabling us successfully to reach an audience beyond our membership and further raise standards of respiratory care.

The Five Year Forward View recommends we put patients at the heart of our decision making. We have already addressed this by setting up our lay patient and carer reference group whose members provide challenge, intelligence and support at executive level.

In addition, of course, the great strength of PCRS-UK is our loyal membership which remains connected through our affiliated local groups, respiratory leaders programme and network of first class researchers.

### **What are the opportunities for PCRS-UK?**

We are well positioned to influence both secondary and community care. We sit at the intersection of

'vertical' and 'horizontal' care. Embedded and connected to our populations, we can support our members and our specialist respiratory colleagues, educationalists and researchers to find a way through the new system. We are known for being the home of primary and community-based respiratory care and for defining quality and advising clinicians on how to interpret guidelines. We have a lot to offer the new NHS organisations. In addition, we connect people through our networks, affiliated groups, respiratory leaders programme and at conference where people meet like-minded colleagues and often become friends.

Our respiratory leaders programme gives our members all the support they need to take the lead, motivate and inspire best practice within their localities. The workshops are designed to enable primary care health professionals to take the next step and give them the confidence to take on leadership roles such as working as facilitators, organising and speaking at events and chairing meetings. Our affiliated groups help our members to keep themselves and their organisations up-to-date with high standards of care.

We support and promote high quality research into respiratory care through our journal *npj: Primary Care Respiratory Medicine*, published in partnership with Nature Partner Journals. We can boast a strong history of research leaders – such as Hilary Pinnock, recently promoted to a Professorship at the University of Edinburgh – who have been nurtured through PCRS-UK and the Journal. Younger researchers are coming on stream and taking up the baton.

### What is your vision for the future?

We can no longer work in isolation in primary care. In PCRS-UK, for example, we have an increasingly close working relationship with our specialist colleagues in the British Thoracic Society and already have members sitting on each other's committees. This results

in a cross-fertilisation of ideas and working together ultimately to achieve a seamless patient experience. We are also working to develop links with commissioners and other members of the wider primary care team such as physiotherapists, pharmacists and psychologists who will become increasingly important as we move towards a more closely integrated care system.

Innovation and promoting good practice are essential for continuously improving respiratory care. Our annual conference is a great opportunity to revise and practise basic respiratory knowledge and skills and also to hear about the latest developments in respiratory care. For example, this year we have a session dedicated to personalising care for the breathless patient. Our expert speakers will ask us to think differently about breathlessness, to change our language and approach and include non-pharmacological methods, helping us to understand the patient experience. We need to practise different skills to help us be more self-aware and mindful, so that we can work with and support patients with these techniques to help their breathlessness. There will also be sessions on the latest thinking on tobacco dependence – how to diagnose, treat and prevent it.

### What are PCRS-UK's immediate 'must dos'?

- A new assessment and certification process for performing and interpreting spirometry. We will need to ensure there is a clear message about how general practice can deliver respiratory diagnostics that includes spirometry.
- National and Health Board reports from the Welsh COPD Audit. We will support our membership with the quality improvement work they will be required to do and promote the lessons learned to our wider UK membership.
- Updated British Thoracic Society/Scottish Intercollegiate Guideline Network (BTS/SIGN) guidelines, and in due

course new National Institute for Health and Clinical Excellence (NICE) asthma diagnosis and management guidelines. We will help our members to make sense of and implement these guidelines when they are published.

- Updating of COPD guidelines. We need to ensure we have a voice in any updates of respiratory guidelines.
- A new Government tobacco strategy. We will be working to embed the new thinking that tobacco dependency is a long-term relapsing condition that starts in childhood. We will be calling on health professionals to take a lead on this at a time when local authority budgets are under pressure.

### Why have you taken on the role of PCRS-UK Chair?

I went on my first PCRS-UK clinical leadership course in 2007 and this made me realise that I could have a greater influence on improving COPD care. You start off thinking 'I can have an effect on the care provided by my practice'; you go on the respiratory leaders course and think 'Maybe I can do something at the next level', which for me was the primary care trust and then the CCG. Then your spheres begin to widen further as you gain even more experience and confidence to extend your role as a leader.

PCRS-UK is a society that encourages people to both develop and give something back. Like working in the NHS, people give over and beyond what is expected of them to do the right thing. Our events rejuvenate and support us when we return to work. Being involved with PCRS-UK is an antidote to burn-out. I feel honoured to be able to serve PCRS-UK as Chair for the next three years.

### Reference

1. Five Year Forward View. NHS England. October 2014. <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>

## Noel Baxter Professional Profile

Noel worked as a GP partner in Southwark, South London for 12 years before moving on from his practice last summer to spend more time on various strategic and leadership roles such as Lead for Quality, Safeguarding and Adult commissioning with Southwark CCG. He continues to work in Southwark practices and works in a new primary care service that delivers 'beyond primary care' core contracts. He co-leads the NHS England London Respiratory Network, is a member of the London Clinical Senate 'Helping Smokers Quit' delivery team and is the primary care lead for the National COPD Audit.

### Get to know your new Chair ...

#### What made you decide to specialise in respiratory medicine?

I realised shortly after qualifying as a GP that there was a gap in the care that respiratory patients were receiving. My main respiratory interest is COPD because it's a disease of inequity, affecting people predominantly of lower socio-economic status. I also have a keen interest in tobacco dependency for the same reasons. Better diagnosis and treatment of COPD and reducing smoked tobacco is key to reducing inequity in our population's health.

#### What is the best part of your job?

Connecting with patients, making them feel safe and knowing you have given effective treatment. Recently an eight-year-old boy came in while having a severe asthma attack – both he and his mum were scared. I was able to get his asthma under control while waiting for the ambulance both by giving him the appropriate drug treatment and by working with him and his mum to relax and get his breathing back to normal.

#### The one thing always on my mind at work is ...

Why am I always running behind?

#### If you were Secretary of State for Health what would you change?

In order to develop a more compassionate and seamless healthcare system I would work to dissolve cultural hierarchies and encourage people to respect and understand what it's like to be in someone else's shoes – both those of patients and the other health and social care professionals with whom we work.

#### If you could go back 10 years and meet your former self, what advice would you give them?

Don't be frightened of speaking your mind.

#### How do you relax?

By swimming, running, cycling, being mindful, of course, and boogying.

#### What keeps you awake at night?

Worrying about the people who are waiting for me to write up the things that I promised to do.

#### What makes you smile?

When everyone in the room is having the same positive experience.



## Supporting you and your patients

We provide a range of support and information for people living with COPD and other lung conditions.

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- The BLF Helpline: **03000 030 555**
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- Comprehensive COPD information online: **blf.org.uk/COPD**
- A range of leaflets and booklets for your patients: **blf.org.uk/publications**
- COPD patient passport available in print and online: **blf.org.uk/passport**

## Helping you develop your services

We also provide support and advice on service improvements and redesign across the respiratory pathway.

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# Why tobacco dependency should be treated as a long-term relapsing condition that starts in childhood



**Fran Robinson talks to the PCRS-UK Tobacco Dependency Campaign Group about the role of the healthcare professional in treating tobacco dependency as a long-term relapsing condition that starts in childhood**



PCRS-UK Tobacco Dependency Campaign group from left to right: Noel Baxter, Oonagh Potts, Bronwen Thomson, Andrew Whittamore

PCRS-UK has launched a campaign to establish tobacco dependency as a long-term relapsing condition starting in childhood and to convince every healthcare professional that treating tobacco dependency needs to be their responsibility. PCRS-UK Executive members Andy Whittamore (a GP in Portsmouth) and Oonagh Potts (Nurse Practitioner, Thornton-Cleveleys) say: "Smoking has too great an impact on health for us to continue to think of it simply as a public health or lifestyle issue that is the remit of someone else. Particularly at a time when local councils are de-prioritising smoking cessation services, we have to take responsibility for it in our practices and recognise that addressing it is one of the most cost-effective actions we can take."

The Government is also keen to reduce smoking prevalence. The Five Year Forward View, which has a strong focus on preventing ill health, has promised 'hard-hitting' national action on smoking, with plans to develop and support new workplace incentives to promote employee health and cut sickness-related unemployment.<sup>4</sup>

## **Tobacco dependency – a health condition**

The aim of the campaign is to change mindsets and beliefs by changing the language from 'smoking cessation' or 'nicotine addiction' to 'tobacco dependency' and reframing it for health professionals and commissioners as a long-term relapsing condition which starts in childhood.

Hilary Wareing, who leads the work of the Tobacco Control Collaborating Centre, part of the research and training organisation Improving Performance in Practice, explains why smoking should be seen as a health condition: "We promote this thinking mainly because you hear people talk about smoking as a lifestyle or personal choice. Smoking isn't a lifestyle choice – we say to people if you continue to smoke it will kill one in two of you and one in four of you will die prematurely before retirement."

- Treating tobacco dependency is a high value healthcare intervention that saves the NHS money and improves health outcomes.
- It is the single most cost-effective intervention for respiratory patients: smoking accounts for over one-third of respiratory deaths<sup>1</sup> (23,800 deaths<sup>2</sup> a year) and 28% of total hospital admissions.<sup>3</sup> About half of all regular smokers will eventually be killed by their addiction.<sup>1</sup>
- Although smoking rates are coming down, prevalence is still 18–19%<sup>3</sup> and there are currently 9.6 million adult smokers in the UK.<sup>1</sup> This makes tobacco dependency the most prevalent long-term condition.
- Smoking is also related to health inequalities. The Five Year Forward View points out that more than half of the inequality in life expectancy between social classes is now linked to higher smoking rates amongst poorer people.<sup>4</sup>
- Surveys consistently find that smokers want to quit<sup>5–7</sup> which means that healthcare professionals should, in many cases, find they are pushing at an open door.

Whilst public health measures have and will continue to prevent many from taking up smoking and encourage some to quit, many of those who are most tobacco-dependent will not be able to quit without treatment from a healthcare professional. The World Health Organization's Framework Convention on Tobacco Control includes a specific article on treating tobacco dependence, Article 14, which argues that cessation support is essential.<sup>8</sup>

### **Tobacco dependency – a long-term relapsing condition**

Smoking is a long-term chronic relapsing condition for which people need treatment including behavioural support and pharmacotherapy. Patients will vary in the level and length of treatment they need to remain abstinent and ex-smokers should be offered reassessment on an ongoing basis, especially if they are in a high relapse group. As with other long-term conditions such as diabetes and hypertension, adherence factors, side effects and motivation to take control need to be assessed at routine visits and when otherwise convenient. Using a CO monitor in smokers and ex-smokers is akin to checking a BP or HbA<sub>1c</sub>. Often we need to titrate and adjust medicines for long-term conditions, and the same goes for treating tobacco dependency. There are many products people can use to help them quit, but choice, strength and formulation all need to be considered so the health professional needs to be aware of the advantages and disadvantages of the available options. The National Centre for Smoking Cessation and Training (NCSCT) online training programmes can help you learn about these pharmacotherapies (see [http://www.ncsct.co.uk/pub\\_stop-smoking-medications.php](http://www.ncsct.co.uk/pub_stop-smoking-medications.php)).

"We also need to remind people that, if they attempt to stop smoking with expert support, they are four times more likely to make the change and be successful," says Hilary.

### **Tobacco dependency – a condition that starts in childhood**

Another key message of the campaign is that smoking starts in childhood with secondhand smoke. Babies and children exposed to their

families' smoking face an increased risk of respiratory infections, increased severity of asthma symptoms, more frequent chronic coughs, phlegm and wheezing, and increased risk of cot death and glue ear.<sup>9</sup>

This means healthcare professionals should be working with mothers to ensure that their babies have a smoke-free pregnancy and aren't exposed to tobacco smoke in utero. When their baby is born, parents should be encouraged to bring them up in a smoke-free environment.

Hilary says: "Smoking in the family not only impacts on children's physical health but, in addition, if you live in a smoking household you are more likely to smoke yourself."<sup>10</sup>

"If children are brought in to primary care or taken to hospital with an illness that may be related to smoking, then healthcare professionals should be asking the parents or carers whether they smoke and then remind them of the impact their behaviour has on their children, not only the immediate damage to their child's health but also the consequences of their child further endangering their health by smoking themselves. This is an opportunity to do a brief intervention to encourage any members of the household who smoke to make changes and receive treatment that will help them to quit."

### **Why smoking should be the responsibility for every healthcare professional**

Hilary says helping smokers to quit should be the responsibility of every healthcare professional and they should think in terms of "Every Contact Counts".

"If you have contact with somebody who smokes, you should take the opportunity to do an opportunistic brief intervention. Even if the patient does not have any symptoms of a smoking-related disease, we need to persuade them to stop smoking as soon as possible because we don't want to wait to see what the impact of smoking will be on their health."

She says ideally all general practices should have their own in-house smoking cessation specialists who can ensure that patients can get the treatment they need from someone

they already know rather than having to be referred elsewhere.

"A lot of practices do have one or more people, usually practice nurses or health care assistants, who are trained to support people both with behavioural changes and medication to help them to stop smoking, but many still don't. However, the most important thing is that everybody in the practice is trained to deliver brief interventions and, if they don't have an in-house specialist, knows how to arrange referral to local stop smoking services."

Hilary says the NHS stop smoking services do achieve slightly better quit rates because their experts are doing it every day. However, it is also important that those smokers who want to quit are given the option of being given the treatment in the location that they think will be most likely to help them to stop.

"Healthcare professionals should ensure they can offer patients timely support and treatment. If patients are left to drift for weeks they might decide their smoking is not a serious problem or they may try to quit on their own and then they are more likely to fail," she says.

The credibility of the person giving the smoking cessation message is also important. "It's about the right person giving the right message at the right time. The potential for giving conflicting messages can be damaging. For example, a midwife might lay it on the line to a pregnant woman that smoking will harm her baby and that cutting down isn't good enough. But if the GP subsequently fails to mention the mother's smoking or suggests that cutting down is acceptable, the message that gives is that smoking is not that serious. It's about making sure that everybody in the healthcare system says the same thing about smoking," says Hilary.

### **The gains from addressing tobacco dependency**

The main gain from helping smokers to quit is an immediate improvement in their health and quality of life.<sup>11</sup> Stopping smoking is always beneficial to health and is never too late.<sup>11</sup>

However, some practices may see spending time helping smokers to quit as a drain on

their resources. But Hilary says that instead of thinking what it might cost them, practices should consider that there is a good economic argument that, if smokers quit, it is very likely they will need fewer appointments and their prescribing budget will reduce along with hospital admissions – see page 38 for an example of how one practice has made significant savings.

“So if they can help their population be healthier by stopping smoking, then there is an opportunity there to release time to care,” says Hilary. “Practices tell us that this happens and we are currently trying to get some funding to evaluate some case studies.”

There are some specific groups of vulnerable patients for whom successful smoking cessation treatment will have the greatest beneficial impact. Groups that should be targeted include: patients with asthma and COPD, pregnant women, people with mental health issues, and routine and manual workers.

At the moment practices are incentivised to help smokers to quit through the Quality and Outcomes Framework (QOF), but Dr Andy Whittamore feels that QOF incentives encourage people to ask patients about their smoking in a very superficial way. “Something we’ve done in our practice and across the whole of Portsmouth City CCG is to incentivise all clinicians to do the NCSCT Very Brief Advice training.<sup>12</sup> This means that all clinicians in practices across Portsmouth are now trained to not only inquire about patients’ smoking but also to help them to take the next step towards cessation. Generally, because patients come in with their own agenda, talking about their smoking habit is probably the last thing on their list. A healthcare professional giving a patient that nudge to stop can be very powerful – it has a big impact but takes up very little time.”

**References**

1. Action on Smoking and Health (ASH). Smoking statistics. <http://www.ash.org.uk/information/facts-and-stats/fact-sheets>
2. Action on Smoking and Health (ASH) infographic. <http://www.ash.org.uk/local-toolkit/images/annual-mortality-infogrfx.png>
3. Health and Social Care Information Centre. Statistics on smoking, England 2016. <http://www.hscic.gov.uk/catalogue/PUB20781/stat-smok-eng-2016-rep.pdf>
4. NHS England. Five Year Forward View. October 2014. <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>
5. Lader D, Goddard E. Smoking-related behaviour and attitudes. Office for National Statistics, 2004.
6. Smoking-related behaviour and attitudes, 2007. Office for National Statistics, 2008.
7. Lader D. Opinions Survey Report No 40. Smoking-related behaviour and attitudes, 2008/09. Office for National Statistics.
8. WHO Framework Convention on Tobacco Control. World Health Organisation 2003. [http://www.who.int/tobacco/framework/WHO\\_FCTC\\_english.pdf](http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf)
9. Smoking and disease. ASH. <http://www.ash.org.uk/information/facts-and-stats/fact-sheets>
10. Hofhuis W, de Jonste JC, Merkus PJFM. Adverse health effects of prenatal and postnatal tobacco smoke exposure on children. *Arch Dis Child* 2003;**88**:1086-90.
11. Action on Smoking and Health (ASH). Stopping smoking. The benefits and aids to quitting. [http://ash.org.uk/files/documents/ASH\\_116.pdf](http://ash.org.uk/files/documents/ASH_116.pdf)
12. National Centre for Smoking Cessation and Training (NCSCT). <http://www.ncsct.co.uk>

**Useful Resources**

There are a number of online tools available which bring together data on smoking and its impact on the wider population. Designed mainly for use by public health officials, they can also be used by primary care clinicians who are interested to see how their local population data about smoking relate to their practices.

**Local Toolkit**

The Local Toolkit created by Action on Smoking and Health (ASH), the Faculty of Public Health, the Local Government Association and a number of other organisations is a set of materials for local public health professionals to use with councillors and other stakeholders to help ensure that tackling tobacco use is high on the local public health agenda. The resources demonstrate the scale of the harm locally caused by tobacco use and the contribution this makes to health inequalities, the cost to local communities, local economies and service providers and the evidence of effectiveness of local action on tobacco and health, including tobacco control work and local stop smoking services.

<http://www.ash.org.uk/information/ash-local-toolkit>

**Local Tobacco Control Profiles**

The Local Tobacco Control Profiles for England, published by Public Health England, provide a snapshot of the extent of tobacco use, tobacco-related harm and measures being taken to reduce this harm at a local level. These profiles have been designed to help local government and health services to assess the effect of tobacco use on their local populations. They will inform commissioning and planning decisions to tackle tobacco use and improve the health of local communities. In June this year four new indicators were added to the profiles: hospital admissions for COPD; GP Patient Survey smoking prevalence – current smokers; GP Patient Survey smoking prevalence – ex-smokers; and GP Patient Survey smoking prevalence – never smoked.

<http://www.tobaccoprofiles.info>

**Local Poverty Calculator**

A Local Poverty Calculator, published by ASH, shows how many people in an area are in poverty because of smoking. The data show that, of the 5 million households in England that include an adult smoker, 1.4 million (27%) are below the poverty line. An estimated 418,000 households could be lifted out of poverty if they quit smoking. These households comprise roughly 1.1 million people including 325,000 children and 156,000 pensioners. On average, households that include a smoker spend £2,158 a year on tobacco. [https://view.officeapps.live.com/op/view.aspx?src=http://www.ash.org.uk/files/documents/ASH\\_988.xls](https://view.officeapps.live.com/op/view.aspx?src=http://www.ash.org.uk/files/documents/ASH_988.xls)

**Ready Reckoner**

The ASH Ready Reckoner is an Excel spreadsheet that provides estimates of the cost of smoking to smokers, the NHS and society at large based on national data. It covers data such as the cost of lost productivity due to early smoking-related deaths, smoking breaks and smoking-related sick days.

<http://www.ash.org.uk/localtoolkit/docs/Reckoner.xls>

# Help your patients self-manage their asthma better

Asthma UK has launched a new range of printed booklets packed with simple, practical strategies to help with medicine adherence, using asthma action plans and more.



Download for free and find out how to order bulk copies:  
[www.asthma.org.uk/advice/resources](http://www.asthma.org.uk/advice/resources)



## Looking for more asthma advice?



Call Asthma UK's nurses on **0300 222 5800**  
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Join the community of healthcare professionals  
via [www.asthma.org.uk/professionals/sign-up](http://www.asthma.org.uk/professionals/sign-up)



# PCRS-UK Lay Reference Group – There's no smoke without a fire

**Jane Scullion, PCRS-UK Trustee and a Respiratory Nurse Consultant, discusses some of the issues around smoking with the PCRS-UK Lay Patient and Carer Reference Group. In this article they look at why people start smoking and what keeps them smoking, providing an interesting insight into the societal and other influences affecting the generation of people who make up many of today's patients with respiratory conditions. In a later article they will look at why people stop and their views on the healthcare professional role in smoking cessation.**



**Jane Scullion, Respiratory Nurse Consultant, PCRS-UK Trustee and Chair of the Lay Reference Group**

Sir Walter Raleigh is credited with bringing tobacco to Europe in the 1570s and, for many early advocates, tobacco was seen as a healthy pastime, believed to cure many ills, based on its healing and drying properties, although not everybody agreed. King James I, writing a famous polemic entitled 'A Counterblaste to Tobacco' in 1604, denounced tobacco use as:

*"[a] custome lothsome to the eye, hatefull to the Nose, harmefull to the braine, dangerous to the Lungs, and in the blacke stinking fume thereof, neerer resembling the horrible Stigian smoke of the pit that is bottomelesse."*

“ Perfection is such a nuisance that I often regret having cured myself of using tobacco ”

Emile Zola

Prior to the arrival of tobacco, people smoked many substances. The most common from the Middle East was cannabis, often smoked through a water pipe also known as a hookah. Opium became widespread in the 19th century when England began to trade with China, and was common amongst the romantic poets such as Coleridge and De Quincey. It was believed that the experience of opium provided raw material for the poetry that was produced.

Looking back with hindsight it's often hard to realise that, for many people, smoking is and was a way of life, fashionable and widely advertised, especially by doctors; my own GP when I was a child had an ashtray on his desk. Indeed, it wasn't until the pub-

lication of Richard Doll's British Doctors' Study which ran from 1951 to 2001 that people really began to realise that the scare stories around the harm of smoking actually had some substance,<sup>1</sup> although even this study was widely criticised from the tobacco lobby.

We often hear stories of why people started to smoke which is often involved with not wanting to be different; and then, of course, there's love:

*"This is very Mills and Boon. I was 10 days short of my 16th birthday, 14th June 1960. A boy at the Young People's Fellowship at my local church invited me out and swore undying love. This was my first boyfriend. He was already a committed smoker and wanted me to smoke too. So, of course, I did. Remember, this was 1960. Although my parents had never smoked, almost everyone else did. Everywhere. Teachers, doctors, film stars, the hoi polloi, etc."*

A very common theme was that everyone did it. It was almost a rite of passage to adulthood, although the age at which people tried their first cigarette varied:

*"Yes, I had my first cigarette in the woods with some playmates at around the age of seven-and-a-half. Shock horror. Probably didn't*

*inhale though, and probably didn't have more than half of it in reality. A stupid kid whose parents smoked got us to try as a dare. His dad smoked (Guards, as I recall) – and, amazingly, the newsagent back then (1970s) would quite happily sell the boy cigarettes along with a newspaper and a bottle of milk, believing that it was for his dad. One time it wasn't, of course, and that's when he bought them for us to try. 26-and-a-half pence for 10; I remember it so well, even now. Luckily it didn't become a regular thing, or even a 'thing' at all, really – but the die was cast, I think. We were no longer tobacco virgins."*

However, some people are never smokers and have no desire to start or curiosity to try it. So, some of starting to smoke is experimental and then there are a lot of issues around peer pressure and not wanting to be different:

*"Wind the clock forward to my last year at secondary school, age 16, and a similar peer pressure situation ensued. I was out with a couple of school mates watching trains, and one of them pulled out a packet of cigarettes and offered them round. I think that's when I first properly 'learned' how to smoke (i.e. inhale) and did so only in order to prove I wasn't chicken. Stupid, stupid, stupid, I know, but hey! That's the way it works when you're 16 and it's post-punk 1980! I became a casual smoker (maybe a packet every week or so), but ramped up over the course of the next couple of years when I was introduced to cannabis by a different friend."*

It is interesting that a common theme when we talk about smoking is that it is a learnt response – "once I'd learnt to smoke properly" – and the sheer joy experienced by those who could blow a good smoke ring!!!!

The inhalation and the issue of whether people could and did inhale comes up quite often. Even now some of our very committed smokers will tell us that it is ok as they don't actually inhale.

Whilst we think about the issues of smoking as health professionals, we often consider just tobacco but, clearly, there is also cannabis smoking and we often fail to ask about this in our current smokers and also in our non-smokers who may consider cannabis smoking to be not smoking. However, tobacco and cannabis usage are intertwined and interdependent, with tobacco being the most convenient transport and dispensing mechanism for cannabis, although it is possible to smoke it without or ingest it.

For some people the age of starting and that first cigarette are not a significant event; it just becomes part of life.

*"I can't remember my first cigarette, although I am told an aunty used to let us have a puff of a cigarette as it amused her. I do remember being down the 'recky' (the local playground) smoking woodbines from around the age of 12."*

Despite the societal acceptance of smoking, there has always been the undercurrent that, in the 'under age' (whatever that may be considered to be), smoking was and remains somewhat 'naughty' and had to be hidden. Often, the further we go back in time the younger were people who smoked. Certainly, as we have introduced minimum ages for smoking, so we become more shocked by under-age smoking. Even those with parents who smoked in the 1960s and 1970s talked about parental displeasure at their offspring smoking until a certain age or until marriage or a home of one's own was attained. Children, teenagers and indeed adults still to this day may keep secret from parents that they smoke.

Smoking is not always started in childhood; many people we spoke to started at university and many nurses said it was almost compulsory as part of training. And, of course, there is Debbie Harry of Blondie who reputedly started at the age of 47.

Why people continue smoking is also important to think about both in terms of the psychological and the physiological dependence:

*"I continued smoking because I enjoyed it. It was also a comfort that I could control and which never let me down. This was in the context of being a very self-conscious teenager with a very difficult home life. The boyfriend and I parted company when he went to university, but nicotine and I were definitely in a long-term relationship."*

One of the reasons for not stopping smoking or of starting again is because of the fear of weight gain. Nicotine suppresses the appetite and increases the metabolism, and the average weight gain of around 11 kg is often an unwanted consequence of stopping smoking. In addition, appetite and taste improve after stopping smoking, so people are more likely to eat better and enjoy their food. There is also the habitual nature of smoking to get over and people may compensate by eating to fill that:

*"But ... I put on an enormous amount of weight – 1.5 stone. For 50 years I weighed 8 stone or under and was a size 8. I loved being slim and lightfooted, it was part of who I am and integral to my identity. I simply could not reconcile myself to carrying all that extra weight and rising ... I asked the programme nurse for support with losing weight whilst maintaining the no smoking. She simply wasn't interested. Nobody was."*

We know that many young girls start smoking in order to stay thin, regardless of the health consequences. So weight is an issue and, if people stop smoking and put on weight then restart smoking, because of this they don't always lose the weight. Staying thin often crops up as a reason in consultations for continuing to smoke.

Replacement of nicotine with an alternative appears important, something to do with keeping the hands occupied:

*"Eventually I gave up nicotine four years ago – it was a straight choice. Breathing and smoking were no longer viable bedfellows. I went cold turkey and took up Bargello embroidery."*

This discussion centred on some of the reasons for starting smoking and why people continue to smoke. It is not meant to be definitive or a referenced piece of work, but it is a small reflection of open and hon-

est discussion amongst the group, friends and colleagues. For our next article we focus on what encourages us to stop smoking and an honest view on what healthcare professionals can do to help or hinder.

**References**

1. Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. *BMJ* 2004;**328**:1519. doi: <http://dx.doi.org/10.1136/bmj.38142.554479.AE>

**Lay Reference Group Member Profile**

**Name:** Mary Lettington  
Mary, aged 72 lives in Stroud, Gloucestershire.

**What respiratory condition do you suffer from?**  
COPD and emphysema.

**When were you diagnosed?**  
The whole diagnosis thing was haphazard. Nobody ever actually sat me down and told me I had got COPD – I had probably had it for years. Eventually one of the GPs decided to refer me to the hospital for a lung function test. Gradually people started talking about living well with COPD – they just assumed that I knew and started incorporating COPD into conversations.

**What has made most difference to you in terms of your care?**  
Pulmonary rehabilitation. The information, education and support I have been given has exponentially enhanced my ability to self-manage my condition.

**Why were you interested in joining the lay reference group?**  
I joined because I am a communicator and have been involved in training social workers for many years. For me it was an opportunity to contribute to a community of professionals and lay patients interested in providing high quality respiratory care and in return gain access to education and knowledge relevant to me personally and to all health and care professionals.

**What messages would you like primary care health professionals to hear?**

- People need to be diagnosed as early as possible. If I had received my diagnosis earlier it would probably have been my wake-up call to stop smoking.
- GPs need to be more proactive. They do not seem to know that there have been huge recent advances in respiratory medicine. I should have been having the treatment I am having now three years ago. The medical model of care is rigid and inflexible and the holistic approach has to be more effective.
- Please could somebody design a comprehensive checklist to ensure that patients are given all the information they need to manage their condition. The checklist could include information about the importance of exercise, the side effects of steroids, weight gain, cataracts, thinning skin and bruising, leaking kidneys, bone decay and the need for alendronic acid, etc.

**Lay Reference Group Member Profile**

**Name:** Neil Jackson  
Neil, aged 52 is an IT consultant and lives in Bath.

**What respiratory condition do you suffer from?**  
Alpha-1 antitrypsin deficiency (AATD). This is a rare inherited condition that causes misshapen AAT protein which is unable to leave the liver and protect the lungs. A lack of AAT can result in healthy lung tissue being damaged, leading to COPD.

**When were you diagnosed?**  
In 2009 – I had been a bit breathless and thought it was probably due to being unfit and an ex-smoker; I had given up two years before when my wife fell pregnant. My GP is gold dust; he and the consultant he referred me to put me on the path to diagnosis within six months. For many patients it takes an average of seven years because most are misdiagnosed as having asthma.

**What has made most difference to you in terms of your care?**  
Knowledge and self-management. Once I was diagnosed my wife and I hit the internet and collectively found out what I needed to know. My condition is currently incurable but joining the Alpha-1 Awareness UK charity and meeting various scientists and researchers through them has also been a great help.

**Why were you interested in joining the lay reference group?**  
I feel I have something to contribute because I am a geek – a real information sponge; I understand my condition and I am able to explain it to other people in layman's terms. I also have an agenda about raising awareness of the importance of stopping smoking and also to encourage healthcare professionals to be non-judgemental about people who smoke.

**What messages would you like primary care health professionals to hear?**

- Anybody presenting with COPD under the age of 50 and who isn't on 100 cigarettes a day should be tested for AATD.
- We should screen for AATD at birth as part of the Guthrie heel prick test because this disease is a killer – people need to know if they carry the AATD gene ideally before they are affected, start smoking or having children.



**Prescribing information:**

**CHAMPIX® Film-Coated Tablets (varenicline tartrate)**

**ABBREVIATED PRESCRIBING INFORMATION - UK**

(See Champix Summary of Product Characteristics for full Prescribing Information). Please refer to the SmpC before prescribing CHAMPIX 0.5 mg and 1 mg. **Presentation:** White, capsular-shaped, biconvex tablets debossed with "Pfizer" on one side and "CHX 0.5" on the other side and light blue, capsular-shaped, biconvex tablets debossed with "Pfizer" on one side and "CHX 1.0" on the other side. **Indications:** Champix is indicated for smoking cessation in adults. **Dosage:** The recommended dose is 1 mg varenicline twice daily following a 1-week titration as follows: Days 1-3: 0.5 mg once daily, Days 4-7: 0.5 mg twice daily and Day 8 - End of treatment: 1 mg twice daily. The patient should set a date to stop smoking. Dosing should usually start 1-2 weeks before this date. Patients who are not willing or able to set the target quit date within 1-2 weeks, could be offered to start treatment and then choose their own quit date within 5 weeks. Patients should be treated with Champix for 12 weeks. For patients who have successfully stopped smoking at the end of 12 weeks, an additional course of 12 weeks treatment at 1 mg twice daily may be considered for the maintenance of abstinence. A gradual approach to quitting smoking with Champix should be considered for patients who are not able or willing to quit abruptly. Patients should reduce smoking during the first 12 weeks of treatment and quit by the end of that treatment period. Patients should then continue taking Champix for an additional 12 weeks for a total of 24 weeks of treatment. Patients who are motivated to quit and who did not succeed in stopping smoking during prior Champix therapy, or who relapsed after treatment, may benefit from another quit attempt with Champix. Patients who cannot tolerate adverse effects may have the dose lowered temporarily or permanently to 0.5 mg twice daily. Following the end of treatment, dose tapering may be considered in patients with a high risk of relapse. **Renal impairment; Mild to moderate renal impairment:** No dosage adjustment is necessary. **Patients with moderate renal impairment who experience intolerable adverse events:** Dosing may be reduced to 1 mg once daily. **Severe renal impairment:** 1 mg once daily is recommended. Dosing

should begin at 0.5 mg once daily for the first 3 days then increased to 1 mg once daily. **End stage renal disease:** Treatment is not recommended. **Hepatic impairment and elderly patients:** No dosage adjustment is necessary. **Paediatric patients:** Not recommended in patients below the age of 18 years. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. **Warnings and precautions:** **Effect of smoking cessation:** Stopping smoking may alter the pharmacokinetics or pharmacodynamics of some medicinal products, for which dosage adjustment may be necessary (examples include theophylline, warfarin and insulin). Changes in behaviour or thinking, anxiety, psychosis, mood swings, aggressive behaviour, depression, suicidal ideation and behaviour and suicide attempts have been reported in patients attempting to quit smoking with Champix in the post-marketing experience. A large randomised, double-blind, active and placebo-controlled study was conducted to compare the risk of serious neuropsychiatric events in patients with and without a history of psychiatric disorder treated for smoking cessation with varenicline, bupropion, nicotine replacement therapy patch (NRT) or placebo. The primary safety endpoint was a composite of neuropsychiatric adverse events that have been reported in post-marketing experience. The use of varenicline in patients with or without a history of psychiatric disorder was not associated with an increased risk of serious neuropsychiatric adverse events in the composite primary endpoint compared with placebo. Depressed mood, rarely including suicidal ideation and suicide attempt, may be a symptom of nicotine withdrawal. Clinicians should be aware of the possible emergence of serious neuropsychiatric symptoms in patients attempting to quit smoking with or without treatment. If serious neuropsychiatric symptoms occur whilst on varenicline treatment, patients should discontinue varenicline immediately and contact a healthcare professional for re-evaluation of treatment. Smoking cessation, with or without pharmacotherapy, has been associated with exacerbation of underlying psychiatric illness (e.g. depression). Champix smoking cessation studies have provided data in patients with a history of psychiatric disorders. In a smoking cessation clinical trial, neuropsychiatric adverse events were reported more frequently in patients with a history of psychiatric disorders compared to those without a history of psychiatric disorders, regardless of treatment. Care should be taken with patients with a history of



To find out more about this new study, use this link to access your free copy:

# New study. New data. New perspective.

## Block nicotine to help smokers quit successfully

**EAGLES:** The largest comparative randomised controlled trial of approved smoking cessation medications is now published.<sup>1</sup>

- No increased risk of neuropsychiatric adverse events with **CHAMPIX®** (varenicline tartrate) vs. placebo in smokers with or without a history of psychiatric disorder.<sup>1</sup>
- Superior abstinence rates with **CHAMPIX®** vs bupropion, NRT patches\* and placebo.<sup>1</sup>

## STOP AND THINK AGAIN

Changing perspectives with **CHAMPIX** in smoking cessation.

\* NiQuitin patch 21mg per 24 hour with taper

psychiatric illness and patients should be advised accordingly. Patients taking Champix should be instructed to notify their doctor of new or worsening cardiovascular symptoms and to seek immediate medical attention if they experience signs and symptoms of myocardial infarction or stroke. In clinical trials and post-marketing experience there have been reports of seizures in patients with or without a history of seizures, treated with Champix. Champix should be used cautiously in patients with a history of seizures or other conditions that potentially lower the seizure threshold. At the end of treatment, discontinuation of Champix was associated with an increase in irritability, urge to smoke, depression, and/or insomnia in up to 3% of patients, therefore dose tapering may be considered. There have been post-marketing reports of hypersensitivity reactions including angioedema and reports of rare but severe cutaneous reactions, including Stevens-Johnson Syndrome and Erythema Multiforme in patients using varenicline. Patients experiencing these symptoms should discontinue treatment with varenicline and contact a health care provider immediately. **Fertility, pregnancy and lactation:** Champix should not be used during pregnancy. Women of child bearing potential should avoid becoming pregnant during treatment with Champix. It is unknown whether varenicline is excreted in human breast milk. Champix should only be prescribed to breast feeding mothers when the benefit outweighs the risk. There are no clinical data on the effects of varenicline on fertility. Non-clinical data revealed no hazard for humans based on standard male and female fertility studies in the rat. **Driving and operating machinery:** Champix may have minor or moderate influence on the ability to drive and use machines. Champix may cause dizziness and somnolence and therefore may influence the ability to drive and use machines. Patients are advised not to drive, operate complex machinery or engage in other potentially hazardous activities until it is known whether this medicinal product affects their ability to perform these activities. **Side-Effects:** Very commonly reported side effects were nasopharyngitis, abnormal dreams, insomnia, headache and nausea. Commonly reported side-effects were bronchitis, sinusitis, weight increased, decreased appetite, increased appetite, somnolence, dizziness, dysgeusia, dyspnoea, cough, gastroesophageal reflux disease, vomiting, constipation, diarrhoea, abdominal distension, abdominal pain, toothache, dyspepsia, flatulence, dry mouth, rash, pruritis, arthralgia, myalgia,

back pain, chest pain, fatigue and abnormal liver function tests. Other side effects were, diabetes mellitus, suicidal ideation, seizures, cerebrovascular accident, angina pectoris, atrial fibrillation, electrocardiogram ST segment depression, myocardial infarction, haematemesis, haematochezia, Stevens Johnson Syndrome, angioedema and decreased platelet count. For full list of side effects see SmPC. **Overdose:** Standard supportive measures to be adopted as required. Varenicline has been shown to be dialyzed in patients with end stage renal disease, however, there is no experience in dialysis following overdose. **Legal category:** POM. **Basic NHS cost:** Pack of 25 11 x 0.5 mg and 14 x 1mg tablets Card (EU/1/06/360/014) £27.30 Pack of 28 1mg tablets Card (EU/1/06/360/015) £27.30 Pack of 56 0.5 mg tablets HDPE Bottle (EU/1/06/360/001) £54.60 Pack of 56 1mg tablets Card (EU/1/06/360/016) £54.60 Pack of 53 11 x 0.5 mg and 42 x 1mg tablets Card (EU/1/06/360/023) £54.60 Not all pack sizes may be marketed / marketed at launch Marketing Authorisation Holder: Pfizer Limited, Ramsgate Road, Sandwich, Kent, CT13 9NJ, United Kingdom. Further information on request: Pfizer Limited, Walton Oaks, Dorking Road, Tadworth, Surrey KT20 7NS. Last revised: 06/2016.

**Adverse events should be reported. Reporting forms and information can be found at [www.mhra.gov.uk/yellowcard](http://www.mhra.gov.uk/yellowcard). Adverse events should also be reported to Pfizer Medical Information on 01304 616161**

Ref: CI 20\_0.

References:

1. Anthenelli RM, et al. Lancet 2016. Vol 387, no. 10037, p2507-2520.

Date of preparation: August 2016 PP-CHM-GBR-0358 ©Pfizer 2016

# Equip yourself to take the lead in respiratory primary care



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## Next event: Influencing and negotiating made easy

25th-26th November 2016, Kents Hill Park, Milton Keynes



The Primary Care Respiratory Society UK wishes to acknowledge the support of Boehringer Ingelheim Limited, Napp Pharmaceuticals and Pfizer Limited in the provision of an educational grant towards this meeting. Sponsors have no input into the content of this programme.



## Policy Round-Up

**Bronwen Thompson**, PCRS-UK Policy Advisor

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

### Want a good resource for data on lung disease? You need **Battle for Breath**

*The Battle for Breath: the Impact of Lung Disease in the UK* and its accompanying website are the result of a three-year epidemiological study by the British Lung Foundation and provide the most comprehensive overview of lung disease in a decade. This report also takes a closer look at the impact of 15 major lung conditions. It is a comprehensive resource which pulls together data from a range of different sources into one place.



The report reveals that lung disease is one of the UK's 'big three' killers. It places a burden on UK health and health services similar to – and in some areas greater than – cardiovascular disease and non-lung cancer. However, efforts by the NHS and other public health bodies to tackle lung disease lag well behind efforts to tackle these other disease areas. There is a stark contrast between the fall in deaths from cardiovascular disease and certain cancers and the static picture for deaths from lung disease since a similar report was published 10 years ago.

The report goes on to make six recommendations for what needs to be done to give lung disease the importance and funding it deserves in order that deaths can be avoided and morbidity reduced. These include setting up a national respiratory intelligence network for data collection and collation; raising research funding to the levels for cancer and heart disease; further attention to prevention; creating five-year strategies in England and Scotland to tackle lung disease.

Accompanying the report is a website which breaks the data down to give a regional picture by specific lung condition on, for example, prevalence, incidence, hospital admissions and deaths for asthma, COPD, bronchiectasis, pneumonia and idiopathic pulmonary fibrosis.

This report had expert input from several senior PCRS-UK members, and we plan to work with the British Lung Foundation to promote its messages and to push for a greater priority on lung health by policy makers and research funders.

### And how about local level respiratory data?

The Right Care programme has updated its Commissioning for Value packs – a set of data for every CCG so that a CCG can make comparisons about its strengths and weaknesses with other similar CCGs and the national picture. This time it has gone one step further and produced some 'Focus packs' in certain disease areas. Respiratory is one of those – so there is a set of around 90 charts for every CCG in England, highlighting key respiratory data on morbidity, mortality, spend on medicines, spend in primary care and comparing each CCG with 10 CCGs of a similar profile. This will be a really useful resource for you if you are looking for local evidence to make a case for improving respiratory care – for example, if you want practice nurses to be trained in paediatric respiratory care or to set up an early assisted discharge scheme or to argue for more capacity in a pulmonary rehabilitation service. There are also summaries for each CCG identifying the main opportunities for reducing expenditure or improve outcomes for a disease area. Search for 'Commissioning for value' and find the Focus packs – then select region and CCG to access and download the data for your CCG.



### UK set to be the second country in the world to introduce standardised packaging for tobacco

Australia led the way in banning all branded packaging for tobacco products, but the UK is one of a number of countries now following its lead – and may still be the first in Europe to do so, followed closely by France and Ireland. A legal challenge from the tobacco industry in both the European Court of Justice and UK courts attempted to deem the measure unlawful but both



were unsuccessful. While both EU and UK law are involved here, specific legislation in the UK on standardised packaging means that it is likely to go ahead in spite of Britain leaving the EU as a result of the referendum. A one-year transitional period to allow the sell-through of old stock means that branded packaging will be phased out gradually, but by May 2017 only standardised packaging will be on sale. At the same time, pictures on the packaging showing the harm tobacco causes will become more graphic and hard hitting, and will cover 65% of the surface area.

This and other measures are all helpful in making smoking less attractive, but the core role of the healthcare professional continues to provide information to smokers about the best way to give up smoking using 'very brief advice'. Many smokers are unsuccessful at quitting despite saying that they want to stop. Evidence shows that the most successful way for smokers to quit is with intensive support and pharmacological treatment, usually with the help of a trained advisor. See the comprehensive tobacco dependency materials on the PCRS-UK website under 'Resources' for more detail on how you can support smokers in quitting. This issue of *Primary Care Respiratory Update* includes feature articles with further information about how you can help smokers to reduce harm – for example, by switching them to nicotine replacement therapy or support them in quitting altogether. In addition, a briefing from ASH for healthcare professionals ([http://www.ash.org.uk/files/documents/ASH\\_1027.pdf](http://www.ash.org.uk/files/documents/ASH_1027.pdf)) emphasises that the role of healthcare professionals continues to be to encourage smokers to quit by giving them 'very brief advice' and referring them to smoking cessation services.

**National Institute for Health and Clinical Excellence issues guidance on bronchial thermoplasty for adults with severe asthma [MIB71] July 2016**

NICE has developed a medtech innovation briefing (MIB) on the Alair bronchial thermoplasty system for adults with severe, difficult to control asthma. MIBs provide a description of the medical technology, including its likely place in therapy, the costs of using the technology and a critical review of the strengths and weaknesses of the relevant published evidence. They are designed to accelerate access to innovative treatments, but do not classify as NICE guidance.

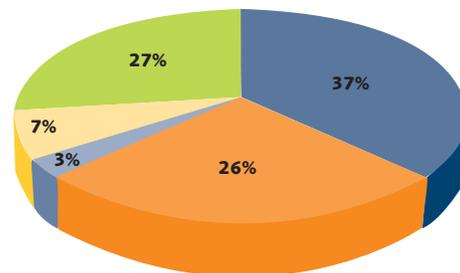
The Alair bronchial thermoplasty system is designed to reduce the amount of smooth muscle in the airway walls, with the aim of improving symptoms in people with severe, difficult to control asthma. Evidence from three systematic reviews suggests some patient benefits (such as improved quality of life and morning peak expiratory flow), but there is mixed evidence on benefits to NHS usage.

This is not an inexpensive treatment. The procedure must be done three times, once every three weeks. The device cost for three procedures is up to £6,930 (for three single-use catheters), with a capital cost of up to £31,500 for the radiofrequency controller. It is anticipated that this will be used in specialist centres as an add-on treatment at step 4/5 of the BTS/SIGN guidelines.

Interested to know more? At the PCRS-UK annual conference in October, Dr Rob Niven from the University Hospital of South Manchester will speak on the management of severe and uncontrolled asthma, and he is a recognised expert in the use of bronchial thermoplasty.

**Developments in primary care: collaboration between practices**

The Royal College of General Practitioners (RCGP) undertook a survey between July and November 2015 of GP practices and CCGs to explore the extent to which practices are joining others in formal or informal collaborations. The majority of GP respondents (73%)



- Yes, we have formal arrangements with other practices (e.g. formed a company/federation)
- Yes we work informally with other practices (e.g. part of wider network but no legal/contractual arrangements)
- Both
- Yes we work with other practices but I don't know if this is formal/informal
- No we do not work formally or informally with other practices

report being part of a formal (37%) or an informal (26%) collaboration – and 44% report that these were set up in the previous 12 months. Most collaborations are run as federated models (64%), and over two-thirds cover populations of over 50,000, so are larger than the 30,000 population required to become a multi-speciality community provider or to opt in to the new GMS contract in 2017. The early focus of collaborations is on the development of extended services alongside investment in staff and training. PCRS-UK is watching the way that general practice is developing with interest

in order to ensure that we continue to provide appropriate support. Clearly, collaborations between practices could present opportunities for more specialism in primary care and for respiratory trained staff to be available to a wider group of patients. It may also change the way that spirometry, routine reviews and follow-ups after hospital-treated exacerbations are provided. PCRS-UK will seek to provide information about the most effective way to provide respiratory care in light of this trend for practices to operate as federations.

## National Audit Office raises concerns about the process for discharging older people

Spending watchdog National Audit Office (NAO) has raised concerns about the large number of older people who are still in hospital after the clinical rationale for the admission is resolved. Although there is awareness of the need to discharge older people as soon as possible once they are stable, there are still significant delays in providing the support they need to return home, residential care or to a community hospital. Data show that delayed discharges account for 30% more bed days over the last two years. This is estimated to cost £820 million a year. In contrast, around £180 million would need to be spent to provide the care needed in the community. This not only represents a significant overall saving – but is also better for older people to be back in a familiar environment and not losing mobility through inactivity or risking hospital acquired infection.

Since respiratory conditions account for a large number of acute admissions, this growth in delayed discharges is highly relevant for those managing respiratory conditions, as respiratory patients may well be affected. The PCRS-UK practice improvement worksheet provides information on care bundles for both asthma (<https://pcrs-uk.org/post-acute-asthma-care-bundle-improvement-worksheet>) and COPD (<https://pcrs-uk.org/post-acute-copd-care-bundle-improvement-worksheet>).

NAO has recommended that the Department of Health, NHS England and NHS Improvement 'should set out how they will break the trend of rising delays against the demographic challenge of growing numbers of older people' (<https://www.nao.org.uk/report/discharging-older-patients-from-hospital/>).

## In brief

### Spirometry assessment and certification

We have been working closely with other respiratory organisations and NHS England to progress a document outlining a scheme to ensure that all health-care professionals are competent in performing and interpreting spirometry and expected this to be published in July. Unfortunately, a wider review of how guidance is issued to CCGs by NHS England has resulted in this publication being delayed. We will keep our members informed when we hear more.

### Uptake of quality standards

NICE is now providing information on the uptake of their quality standards (QS). For each statement in a QS, they present any evidence from audit, QOF or other sources that show the extent to which elements of the quality standard are being adopted. On the title page of the quality standard for asthma or COPD, for example, click on 'Uptake of this guidance' to see how well the quality statements are being achieved. The National Review of Asthma Deaths, annual BTS acute asthma audit, QOF and National COPD audit are all sources of evidence for this purpose. For example, NICE draws on the National COPD audit to find out how many post-exacerbation patients start pulmonary rehabilitation within four weeks of discharge – 38%. To assess whether asthma patients are receiving personalised action plans, NICE used data from the National Review of Asthma Deaths which recorded only 23% of patients having asthma plans. It is useful to refer to these data on adoption of the QS to see how your practice compares with national figures on adoption.

**NICE guidance** that may be of interest though not respiratory specific:

- Suspected cancer – Quality standard (QS124) June 2016
  - GPs should have direct access to diagnostic tests including x-ray and CT scans
  - A poster from Cancer Research UK and RCGP summarises in graphic form the signs that should lead to investigation for possible lung cancer [http://www.cancerresearchuk.org/sites/default/files/nice\\_infographic\\_poster\\_march2016.pdf](http://www.cancerresearchuk.org/sites/default/files/nice_infographic_poster_march2016.pdf)
- Home care for older people- Quality standard (QS123) June 2016
  - Older people to have a home care plan and a consistent team of health workers
- Transition between inpatient hospital settings and community or care home settings for adults with social care needs - Guideline (NG27) December 2015
  - Comprehensive guidance about planning for admission, admission itself, multidisciplinary teams (MDTs) within hospitals, discharge planning, discharge itself and communication throughout
  - Discharge planning should start at admission and the discharge coordinator should be bridge the gap between hospital and community teams
  - Detailed description of the handover to a community care team on discharge and recommendation that discharge summary should be sent to GP within 24 hours of discharge



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- New answers to old questions: advancements in COPD
- Malignant pleural disease: genetic advances and the results of RCTs in pleural fluid management
- Joint BTS/BPRS symposium: building bridges and networks – the powers of communication and remote monitoring
- BTS/BALR/BLF Early Career Investigator Awards symposium
- What's new in mycobacterial disease?
- Joint BTS/BTOG symposium: tissue is the issue but will it always be?
- Joint BTS/BPRS symposium: precision medicine in clinical practice
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- Plenary scientific symposium
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To see the full programme and to book your place, visit our website at: [www.brit-thoracic.org.uk](http://www.brit-thoracic.org.uk)

**Early bird discounts for bookings received before 10 October 2016**

## GETTING THE BASICS RIGHT



### Why a carbon monoxide test is an essential part of a GP and practice nurse's kit

Noel Baxter

Carbon monoxide (CO) monitoring is a valuable motivational tool for smokers. It provides them with visible proof of the harm caused by smoking and it gives them a measure with which to chart their progress after they stop smoking.

Research shows that smokers are more likely to make a successful quit attempt if a CO breath monitor is used as part of a supported and structured quit plan.<sup>1</sup>

The monitor will be used to best effect when introduced by a health professional trained to support people to make a quit attempt through very brief advice. Having the right conversation with every patient who smokes opens up the opportunity to introduce this motivational change tool. The finding of a raised reading emphasises the measurable harm of smoking. Any subsequent reduction following treatment and behaviour change provides motivation, reward and immediate feedback on health gains. As part of the treatment protocol, praise can then be provided and a reinforcement of the 'not-a-puff' rule.

#### How to use the monitor

Exhaled breath CO monitors measure levels of CO in the blood. CO is a toxic gas found in tobacco smoke which binds to the haemoglobin in red blood cells almost 200 times more readily than oxygen.

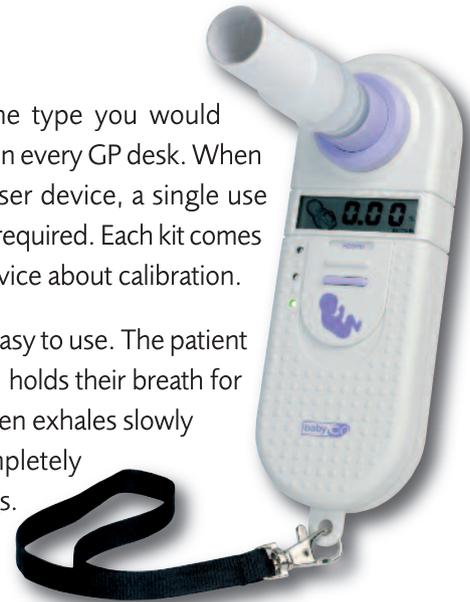
CO has a short half-life, with elimination slowing as the concentration decreases and is usually undetectable around 24 hours after the last cigarette. This makes it a useful marker of regular smoking. Smokers can be unreliable when self-reporting their smoking so, if a smoker claims they have not smoked in the preceding 24 hours, an exhaled air test can confirm this.

CO monitors are handheld, easily portable and no more expensive than high quality electronic blood pressure

monitors of the type you would expect to see on every GP desk. When using a multiuser device, a single use mouthpiece is required. Each kit comes with simple advice about calibration.

The device is easy to use. The patient inhales deeply, holds their breath for 15 seconds, then exhales slowly aiming to completely empty the lungs.

The results are instantly available on the monitor's screen and can be interpreted with the charts supplied.



#### How to interpret the reading

All devices give a CO reading in parts per million (ppm). 9 ppm is generally considered to be the highest acceptable level of CO in the exhaled breath of an individual who reports not smoking, though CO arising from airways inflammation in chronic obstructive pulmonary disease (COPD) can result in levels up to 11 ppm.<sup>2</sup> In practice, colleagues who have considerable experience of using CO monitors would say that any value above 5 ppm usually suggests exposure to tobacco smoking.

NICE recommends that success in stopping smoking should be validated by a CO monitor reading of less than 10 ppm at the four-week point after the quit date. This does not imply that treatment should stop at four weeks.<sup>3</sup> Heavier tobacco smoking or smoking with a waterpipe or use of other smoking products such as cannabis can result in higher CO levels. Correctly interpreting the reading can positively impact on the conversation with the smoker and the subsequent choice of intervention.

The CO test result can also be used to measure success in a harm reduction approach where the patient wishes to cut down rather than quit.

It is also useful to read code the intervention as with other biometric measures such as blood pressure or HbA<sub>1c</sub> readings so that change over time at individual level can be seen. Understanding your population of people with tobacco dependency whether at practice or higher organisational level can be enhanced by having this objective measure as well as any self reported statement about tobacco use.

### Use in pregnancy

NICE guidelines for pregnant smokers stipulate a level of 7 ppm as the identification of a non-smoker.<sup>4</sup> The guidance says: "Some suggest a CO level as low as 3 ppm, others use a cut-off point of 6–10 ppm. It is important to note that CO quickly disappears from expired breath. As a result, low levels of smoking may go undetected and may be indistinguishable from passive smoking. When trying to identify pregnant women who smoke, it is best to use a low cut-off point to avoid missing someone who may need help to quit."

### What else can cause a raised CO?

For people who haven't been smoking, a high reading can be caused by:

- Exposure to CO fumes from a faulty gas boiler, car exhaust or paint stripper
- Lactose intolerance where the high reading is a consequence of consuming dairy products which can produce gases in the breath.
- Passive smoking, although readings above 10 ppm are not normally caused by being in the company of smokers.
- Unusually high ambient CO concentrations due to weather conditions or air pollution.

### Conversation tips

The following lines might be useful for healthcare professionals who haven't had much experience of testing for

CO to use with patients. It is useful to have a colour coded CO level chart when explaining the result.

- "Carbon monoxide is a gas inhaled by smokers when they smoke a cigarette and it is a harmful substance that we can measure with this machine. Our bodies produce small amounts of carbon monoxide and so the reading will probably not be zero; it will also fluctuate slightly depending upon what air you have been exposed to in the last few hours."
- "The monitor is showing a reading of over x parts per million which is a level consistent with light/moderate/heavy or possibly joint (cannabis and tobacco) or Shisha smoking ..."

### Approximate costs

- Purchase of each machine – approximately £129 plus VAT (negotiation possible when ordering higher volume)
- Disposable mouth tubes – £15 for 250
- D pieces (filter device) – change monthly per machine: £20 for 12
- Calibration – buy a new model that doesn't need calibration. Historically, calibration costs £400 per year

### Key learning points

- Measurement of CO in exhaled air is a valuable motivational tool in showing smokers the level of CO in their bodies.
- Keep a CO monitor on your desk – make CO testing routine. Ask all patients who smoke: "Would you like to know your level?"
- Make sure you are Very Brief Advice trained. This will enable you to have a conversation with every patient who smokes to potentially open up an opportunity to quit.

### References

1. Shahab L, West R, McNeill A. A randomized, controlled trial of adding expired carbon monoxide feedback to brief stop smoking advice: evaluation of cognitive and behavioral effects. *Health Psychol* 2011; **30**:49–57.
2. Sato S. Optimal cutoff level of breath carbon monoxide for assessing smoking status in patients with asthma and COPD. *Chest* 2003; **124**:1749–54.
3. Stop smoking services. Public health guideline. NICE 2008. <https://www.nice.org.uk/guidance/ph10/resources/stop-smoking-services-1996169822917>
4. Smoking: stopping in pregnancy and after childbirth. NICE, June 2010. <https://www.nice.org.uk/guidance/PH26>

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Correct at date of preparation: September 2015

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Inspiring best practice in respiratory care

# Journal Round-Up

## npj Primary Care Respiratory Medicine Key Summaries

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A selection of short summaries of original research articles published in *npj Primary Care Respiratory Medicine*. The articles featured have been selected by the Primary Care Respiratory Update editorial board as being the most relevant and useful to primary care respiratory clinical practice in the UK. You can download freely any articles of interest from the website <http://www.nature.com/npjpcrm/>

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### \*\* EDITOR'S CHOICE \*\*

#### Use of spirometry among chest physicians and primary care physicians in India

Nitin Vanjare, Sushmeeta Chhowala, Sapna Madas, Rahul Kodgule, Jaideep Gogtay & Sundeep Salvi  
*npj Primary Care Respiratory Medicine* 26, Article number: 16036 (2016)  
doi: 10.1038/npjpcrm.2016.36

Doctors in India require better access to affordable equipment in diagnosing chronic lung diseases, say researchers. Spirometry is a simple machine-based test that measures lung function, and is highly regarded for diagnosing and determining the severity of lung diseases. Nitin Vanjare at the Chest Research Foundation in Pune, India, and co-workers conducted two nationwide surveys in 2005 and 2013 to determine the use of spirometry by

physicians in different care settings in the country. The researchers found that spirometry use increased in all sectors, with chest physicians making the most use of the test. However, family doctors and paediatricians, usually the first port of call for patients, rarely used spirometry. Physicians cited expensive equipment, uncertainty in interpreting results and not having time to conduct tests as key reasons for spirometry underuse.

#### GP utilisation by education level among adults with COPD or asthma: a cross-sectional register-based study

Øystein Hetlevik, Hasse Melbye & Sturla Gjesdal  
*npj Primary Care Respiratory Medicine* 26,  
Article number: 16027 (2016), doi: 10.1038/npjpcrm.2016.27

The contribution made by family doctors to chronic lung disease diagnosis and treatment helps provide fair healthcare for all. Øystein Hetlevik at the University of Bergen, Norway and co-workers analysed data collected from patients who visited general practitioner (GP) surgeries in the country from 2009 to 2011. The team investigated chronic obstructive pulmonary disease (COPD) and asthma diagnosis rates in patients with different educational backgrounds. COPD was four times more prevalent in patients with a basic education, with asthma following a similar but less pronounced trend. There was a high GP consultation rate for patients from lower education backgrounds, indicating that GPs help facilitate equal medical care for patients regardless of their socio-economic status. Further improvements to GP care could bridge the

known gap between lung disease prevalence in the overall population and reported cases in healthcare systems.

#### UK prescribing practices as proxy markers of unmet need in allergic rhinitis: a retrospective observational study

David B Price, Glenis Scadding, Claus Bachert, Hesham Saleh, Shuaib Nasser, Victoria Carter, Julie von Ziegenweidt, Alice M S Durieux & Dermot Ryan  
*npj Primary Care Respiratory Medicine* 26,  
Article number: 16033 (2016), doi: 10.1038/npjpcrm.2016.33

Current guidelines for treating hay fever may be insufficient for patients' needs. David Price from the University of Aberdeen and colleagues from the UK and Belgium assessed the data from more than 47,000 patients with hay fever, or allergic rhinitis, in the UK over two consecutive pollen seasons (2009 and 2010). Current guidelines recommend the prescription of intranasal steroids as first-line treatment for moderate-to-severe cases of allergic rhinitis. The

study found that this therapy alone proved insufficient for many patients, necessitating additional consultations with their general practitioner to adjust the treatment. More than 15% of patients who were initially prescribed with multiple therapies also needed additional consultations. The results suggest there is a need for novel treatments that provide faster and more complete symptom control.

**The effect of umeclidinium added to inhaled corticosteroid/long-acting  $\beta$ 2-agonist in patients with symptomatic COPD: a randomised, double-blind, parallel-group study**

Ana R Sousa, John H Riley, Alison Church, Chang-Qing Zhu, Yogesh S Punekar & William A Fahy

*npj Primary Care Respiratory Medicine* 26,

Article number: 16031 (2016), doi: 10.1038/npjpcrm.2016.31

Adding a bronchodilator to inhaled dual combination therapy can make breathing easier for patients with chronic lung disease. Fixed-dose combinations of an inhaled corticosteroid (ICS) and a long-acting  $\beta$ 2-agonist (LABA) are commonly used to treat chronic obstructive pulmonary disease (COPD), which is predicted to become the third leading cause of death globally by 2030. Ana Sousa and colleagues from GlaxoSmithKline, UK, added the long-acting muscarinic antagonist umeclidinium to various fixed-dose combinations of approved ICS and LABA. The triple therapy was given to 119 people with moderate-to-very-severe COPD who were symptomatic despite taking the ICS/LABA dual therapy. The triple therapy, regardless of the type of ICS/LABA combination, resulted in significant clinical improvements in lung function. The study shows that umeclidinium can be added to a range of ICS/LABA therapies to improve breathing in patients with COPD.

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These reviews were prepared by Dr Basil Penney and published by Doctors.net.uk Journal Watch. They have been selected and edited for inclusion into *Primary Care Respiratory Update* by editor Professor Hilary Pinnock.

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<b>Abbreviations used in these reviews are:</b>		mg	Milligrams	<b>Respiratory treatments</b>	
<b>Respiratory conditions</b>		NPV	Negative predictive value	ICS	Inhaled corticosteroids
CAP	Community acquired pneumonia	PPV	Positive predictive value	LABA	Long acting beta-agonist
COPD	Chronic obstructive pulmonary disease	QoL	Quality of life	LAMA	Long acting muscarinic agent
PE	Pulmonary embolism	SaO <sub>2</sub>	Oxygen saturation in arterial blood	SABA	Short acting beta-agonist
<b>Measures and investigations</b>		SpO <sub>2</sub>	Peripheral capillary oxygen saturation	<b>Statistical terms</b>	
CAT	COPD assessment test	TMT	Trail Making Test	n	Number(s)
CT	Computed tomography	µg	Micrograms	NNT	Numbers needed to treat
FEV <sub>1</sub>	Forced expiratory volume in 1 second	VBG	Venous blood gas	OR	Odds ratio
FVC	Forced vital capacity	<b>Organisations and people</b>		RCT	Randomised controlled trial
HRCT	High resolution computed tomography	GOLD	Global Initiative for Chronic Obstructive Lung Disease	RR	Relative risk
LDCT	Low dose computed tomography	GINA	Global Initiative for Asthma	SD	Standard deviation
mmHg	Millimetres of mercury	HCP	Healthcare professional	95% CI	95% Confidence interval

### \*\* EDITOR'S CHOICE \*\*

#### Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial

THE LANCET

Robert M Anthenelli, Neal L Benowitz, Robert West, Lisa St Aubin, Thomas McRae, David Lawrence, John Ascher, Cristina Russ, Alok Krishen, A Eden Evins

*Lancet* 2016;**387**:2507–20. [http://dx.doi.org/10.1016/S0140-6736\(16\)30272-0](http://dx.doi.org/10.1016/S0140-6736(16)30272-0)

Concerns have been raised about the safety of varenicline and bupropion with regard to neuropsychiatric adverse events. Additionally, the efficacy of these medications relative to each other and to nicotine replacement therapy, especially in smokers with psychiatric disorders, remains uncertain.

The Evaluating Adverse Events in a Global Smoking Cessation Study (EAGLES) was a multinational, multicentre, randomised, double-blind, placebo-controlled and active-controlled trial with the objective of comparing the relative safety and efficacy of these medications in smokers with and without psychiatric disorders.

8,144 motivated-to-quit smokers with (n=4,116) and without (n=4,028) psychiatric disorders were randomised to nicotine patch (21 mg per day with taper), varenicline (1 mg twice a day), bupropion (150 mg twice a day) and placebo for 12 weeks with

12 weeks of non-treatment. All received brief cessation counselling at each visit.

The results did not show a significant increase in rates of moderate-to-severe neuropsychiatric adverse events with either varenicline or bupropion relative to nicotine patch or placebo in those with or without psychiatric disorders. The observed incidence of neuropsychiatric adverse events was close to the postulated values—about 2% in the nonpsychiatric cohort and 6% in the psychiatric cohort.

Varenicline was more effective than placebo, nicotine patch and bupropion in helping smokers achieve abstinence whereas bupropion and nicotine patch were more effective than placebo.

This study provides further evidence that smokers with stable psychiatric conditions can use varenicline and bupropion safely.

**Diagnostic delay of pulmonary embolism in primary and secondary care: a retrospective cohort study**

Stefan Walen, Roger A M J Damoiseaux, Steven M Uil, Jan W K van den Berg

*Br J Gen Pract* Jun 2016;**66**(647): e444–e450<http://dx.doi.org/10.3399/bjgp16X685201>

Timely recognition of acute pulmonary embolism (PE) is a challenge as signs and symptoms are non-specific and delayed diagnosis is common. Indeed, PE appears to be one of the most missed diagnoses in primary care. This retrospective cohort study from the Netherlands aimed to document and quantify the various stages of diagnostic delay of PE in patients referred to hospital from primary care. All patients were referred from primary care and diagnosis was confirmed radiologically.

Primary and secondary care records of 261 patients diagnosed with PE were reviewed for dates of symptom onset, presentation and diagnosis, and for clinical findings. Relationships between delay and clinical parameters were tested using multivariate regression analysis.

On average, patients were diagnosed 8.6 days after symptom onset. Patient delay (4.2 days average) and delay in primary care (3.9 days) were the major contributors to this delay. Calf pain and chest pain were associated with earlier diagnosis. Patient delay was shorter in those with chest pain and longer in patients with dyspnoea. Chest pain and rales were associated with an early referral whereas co-morbidity led to a delayed referral. In secondary care, the diagnostic delay was relatively small (<1 day).

More research is needed to identify factors in primary care that raise suspicion of PE and guide decision-making.

**Emergency hospital admissions for asthma and access to primary care: cross-sectional analysis**

Robert Fleetcroft, Michael Noble, Aidan Martin, Emma Coombes, John Ford, Nicholas Steel

*Br J Gen Pract* Jun 2016;**66**(650)<http://dx.doi.org/10.3399/bjgp16X686089>

The National Review of Asthma Deaths (NRAD) has shown that poor access to care and poor adherence with medication are contributory factors in asthma mortality.

It is hypothesised that better access to primary care is associated with reduced emergency admission rates for asthma. This paper describes a cross-sectional analysis performed on data from general practices in England for the year 2010–2011 to explore the associations between emergency admissions for asthma and seven measures of patient reported access to general practice services taken from the GP Patient Survey, controlled for the characteristics of practice populations.

In 7,806 general practices there were 3,134,106 patients with asthma and there were 55,570 emergency admissions. Emergency admissions for asthma were higher in practices with lower (poorer) composite access scores ( $p < 0.001$ ), higher proportions of the practice population who were white ( $p = 0.008$ ) and in practices with lower performance in the QOF quality indicator 'asthma review in past 15 months' ( $p < 0.001$ ).

An increase (improved) in composite access scores of 10% was associated with a decrease in 17,837 emergency admissions for asthma, which is approximately two fewer emergency admissions for every practice in the year.

This large observational study adds to the weight of evidence that good access to primary care is associated with fewer hospital admissions. Policymakers should consider improving access to primary care as one potential way to help prevent emergency hospital admissions for asthma.

**Height growth in children with asthma treated with guideline-recommended dosages of fluticasone and electronically assessed adherence**

Daniella Meeke, Jeffrey A Linder, Craig R Fox, Mark W Friedberg, Stephen D Persell, Noah J Goldstein, Tara K Knight, Joel W Hay, Jason N Doctor

*JAMA* 2016;**315**(6):562–570<http://dx.doi.org/doi:10.1001/jama.2016.0275>

The negative effects of ICS on height growth in children are most pronounced during the first 3 months of ICS therapy. Based on these observations, it has been proposed that the disappearance of cumulative growth retardation during ongoing ICS therapy is due to decreasing adherence. This prospective cohort study from the Netherlands examined the relationship between cumulative ICS exposure, assessed objectively, and height growth in children with asthma.

99 children with asthma (2–13 years old) who had been using guideline-recommended doses of ICS for  $\geq 3$  months were recruited and followed up for 1 year. Electronic monitoring devices were used to assess ICS adherence. Fluticasone dosage was adjusted based on asthma control to reflect current asthma management practice. Adjustment was made for concomitant use of nasal corticosteroids and oral prednisolone courses.

The results showed normal growth during the 1 year of ICS treatment with high adherence (median 84%). There was a weak negative correlation between cumulative ICS dose and height growth velocity, which became non-significant after adjustment for age and sex.

This argues against the hypothesis that decreasing adherence to ICS over time causes the lack of cumulative growth suppression during long-term ICS use.

**Indacaterol–glycopyrronium versus salmeterol–fluticasone for COPD**

Jadwiga A Wedzicha, Donald Banerji,

Kenneth R Chapman, Jørgen Vestbo, Nicolas Roche, R Timothy Ayers, Chau Thach, Robert Fogel, Francesco Patalano, Claus F Vogelmeier, for the FLAME Investigators

*N Engl J Med* 2016;**374**:2222–34<http://dx.doi.org/10.1056/NEJMoa1516385>

COPD treatment guidelines recommend either a LABA/ICS combination or a LAMA can be used to prevent COPD exacerbations in high-risk patients. An alternative to the combination of a LABA/ICS in this patient group is a LABA/LAMA combination.

This multicentre, double-blind, double-dummy, parallel-group trial (FLAME study) investigated whether the LABA indacaterol (110  $\mu\text{g}$ ) plus the LAMA glycopyrronium (50  $\mu\text{g}$ ) once daily would be at least as effective as the LABA salmeterol (50  $\mu\text{g}$ ) plus the inhaled glucocorticoid fluticasone (500  $\mu\text{g}$ ) twice daily in preventing COPD exacerbations over a 52-week period. The primary outcome was the annual rate of all COPD exacerbations.

3,362 COPD patients with a history of at least one exacerbation during the previous year were randomly assigned to the indacaterol–glycopyrronium group (n=1,680) or to the salmeterol–fluticasone group (n=1,682).

The exacerbation rate was 11% lower in the LABA/LAMA group compared with the LABA/ICS group (3.59 vs. 4.03; p=0.003). The LABA/LAMA group had a longer time to the first exacerbation (71 days, 95% CI 60 to 82 vs. 51 days, 95% CI 46 to 57; p<0.001). Superiority persisted when only moderate and severe exacerbations were studied. The effect was independent of the blood eosinophil count. The incidence of adverse events and deaths was similar in the two groups. The incidence of pneumonia was 3.2% in the LABA/LAMA group and 4.8% in the LABA/ICS group (p=0.02).

Indacaterol–glycopyrronium was more effective than salmeterol–fluticasone in preventing COPD exacerbations in patients with a history of exacerbation during the previous year.

### Smokers are less likely than non-smokers to seek help for a lung cancer 'alarm' symptom

C Friedemann Smith, K L Whitaker, K Winstanley

*Thorax* 2016;**71**:659–61

[10.1136/thoraxjnl-2015-208063](http://dx.doi.org/10.1136/thoraxjnl-2015-208063)

Thorax

A possible contributor to the poor prognosis of lung cancer is the time taken for patients to be diagnosed, which is reportedly longer than other common cancers. Retrospective studies suggest that smokers fail to seek help when they experience 'alarm' symptoms for lung cancer.

This report describes a 'health survey' study of 4,913 adults aged ≥50 years in four English general practices to establish whether smokers reporting cough or hoarseness in the past 3 months were more or less likely to have sought help than non-smokers. Responders were asked whether they had experienced any of 14 cancer alarm symptoms in the past 3 months (including persistent cough or hoarseness), whether they smoked and whether they had sought help from their general practitioner for reported symptoms.

Among 2,042 participants (42% response rate), 280 (14%) reported 'cough or hoarseness' in the past 3 months, of whom 22% were current smokers. Being a smoker was associated with a reduced likelihood of help seeking (OR 0.44; 95% CI 0.23 to 0.83), even after adjusting for demographic factors (OR 0.46; 95% CI 0.21 to 1.00).

Future research is required on strategies to improve the help-seeking behaviour among smokers.

### The independent role of prenatal and postnatal exposure to active and passive smoking on the development of early wheeze in children

C I Vardavas, C Hohmann, E Patelarou *et al*

*Eur Respir J* 2016;**48**:115–24

<http://dx.doi.org/10.1183/13993003.01016-2015>



Exposure to tobacco smoke during pregnancy and early childhood increases the risk of developing wheeze. However, there is limited evidence on the effects of maternal passive smoking during pregnancy on the development of early wheezing.

Vardavas and colleagues carried out a pooled analysis of 15 cohort studies that participated in the Environmental Health Risks in European Birth Cohorts to assess the independent effects of active and passive smoking exposure, both pre- and postnatal, on the development of wheeze in children before the age of 2 years.

37,459 mother–child pairs were available from the birth cohorts, of which 27,993 had complete data on second-hand smoke exposure and wheeze.

Children exposed both to passive and active smoking mothers during pregnancy had the highest risk of developing early wheeze (OR 1.73, 95% CI 1.59 to 1.88). Children with maternal exposure to passive smoking during pregnancy and no other smoking exposure were more likely to develop wheeze (OR 1.11, 95% CI 1.03 to 1.20) compared with unexposed children. Prenatal exposure to passive smoke was found to have a higher risk of wheeze in children than postnatal exposure; however, the combination of both resulted in an even higher risk. Risk of wheeze associated with tobacco smoke exposure was higher in children with an allergic versus non-allergic family history.

Maternal passive smoking exposure during pregnancy is an independent risk factor for wheeze in very young children. These findings indicate the need for protecting pregnant women and young children from exposure to passive smoking.

### A study of attitudes, beliefs and organisational barriers related to safe emergency oxygen therapy for patients with COPD in clinical practice and research

B Ronan O'Driscoll, Nawar Diar Bakerly, Ann-Louise Caress,

June Roberts, Miriam Gaston, Mark Newton, Janelle Yorke

*BMJ Open Res* 2016;**3**:e000102

<http://dx.doi.org/10.1136/bmjresp-2015-000102>

BMJ Open Respiratory Research

The potential harmful effects of high concentrations of oxygen in patients with COPD are well documented. Despite recommendations of the British Thoracic Society Guideline for Emergency Oxygen Therapy, healthcare professionals' and patients' attitudes and beliefs about oxygen present challenges to implementation of best practice and may be a barrier to future clinical trials. This mixed methods study (survey, telephone interviews and focus groups) aimed to explore knowledge, attitudes and beliefs of healthcare professionals (HCPs), patients with COPD and the general public concerning oxygen therapy (in clinical practice and trials) and also to identify perceived organisational barriers to optimal delivery of oxygen therapy.

62 patients with COPD, 65 members of the public, 68 ambulance crew, 22 doctors, 22 nurses and 10 hospital managers took part. Mean correct scores for five factual questions on oxygen were highest for HCPs (74–76%) and lowest for patients with COPD (33%). There was little difference between different HCP groups. HCPs had an average score of 66% for five technical questions and some expressed concerns about lack of training and equipment for the delivery of optimal oxygen therapy. Predictably, patients (79%) and members of the public (68%) were more likely than HCPs (36%) to believe that oxygen was beneficial in most medical emergencies and less likely to have concerns that it might harm some people.

All three groups had complex attitudes towards research into emergency oxygen use.

### Clinical significance of symptoms in smokers with preserved pulmonary function

Prescott G Woodruff, R Graham Barr, Eugene Bleecker s  
*N Engl J Med* 2016;**374**:1811–21  
<http://dx.doi.org/10.1056/NEJMoa1505971>

Some smokers, who do not have airflow obstruction (i.e. post-bronchodilator FEV<sub>1</sub>/FVC  $\geq 0.70$ ) report cough, sputum production and shortness of breath – symptoms suggestive of COPD. Furthermore, the FEV<sub>1</sub>/FVC ratio can be insensitive to early airway disease. This multicentre observational study investigated whether symptomatic current or former smokers with preserved pulmonary function had a higher risk of respiratory exacerbations or abnormalities on a high-resolution computed tomographic (HRCT) scan of the chest or shorter 6-minute walk distances than asymptomatic current or former smokers with preserved pulmonary function.

2,736 current or former smokers and controls who had never smoked were recruited from the population by means of physician referral, advertisement in clinical areas or self-referral at the study website.

50% of current or former smokers with preserved pulmonary function had symptoms (CAT score  $\geq 10$ ), a prevalence of symptoms that was less than that among participants with GOLD stage 1 or 2 COPD (65%,  $p < 0.001$ ) but far greater than the prevalence among controls who had never smoked (16%,  $p < 0.001$ ). Rate of respiratory exacerbations among symptomatic current or former smokers was significantly higher than the rates among asymptomatic current or former smokers and among controls. Symptomatic current or former smokers had greater limitation of activity, slightly lower FEV<sub>1</sub>, FVC and inspiratory capacity, and greater airway wall thickening without emphysema. Of this group, 42% used bronchodilators and 23% used inhaled glucocorticoids.

Current use of spirometry to define who should receive a diagnosis of COPD may not adequately cover the breadth of symptomatic smoking-related lung disease.

### Increasing burden of community-acquired pneumonia leading to hospitalisation, 1998–2014

T Phuong Quan, Nicola J Fawcett, John M Wrightson, John Finney, David Wyllie, Katie Jeffery, Nicola Jones, Brian Shine, Lorraine Clarke, Derrick Crook, A Sarah Walker, Timothy E A Peto, on behalf of the Infections in Oxfordshire Research Database (IORD)  
*Thorax* 2016;**71**:535–42  
<http://dx.doi.org/10.1136/thoraxjnl-2015-207688>

Community-acquired pneumonia (CAP) is a major cause of mortality and morbidity worldwide, particularly among people over 65 years of age. Increases reported in previous studies have many potential explanations including changes in case-mix, improvements in diagnostic coding or changing admission practices.

Quan and colleagues used the Infections in Oxfordshire Research Database to investigate the hypothesis that changes over the past 16 years in the incidence of hospitalisations in adults for CAP in Oxfordshire could be explained by changes in case-mix, coding practices, disease severity at admission or bacterial aetiology.

17,316 adult CAP hospital admissions were analysed between 1997 and 2014. Admissions increased by 4.2%/year (95% CI 3.6 to 4.8) through 2007/2008, but by 8.8%/year (95% CI 7.8 to 9.7) afterwards.

This rise persisted after controlling for population changes.

Pneumonia-related conditions also increased over this period. Length of stay and 30-day mortality decreased in later years, but the proportion with abnormal biomarkers did not change. Streptococcus pneumoniae was the most common causative organism found.

This study suggests that, rather than discounting increases in pneumonia admissions as simply indicative of a growing ageing population or an artefact of documentation or healthcare-seeking behaviour, we should be actively searching for the reasons behind the increase as well as planning our healthcare systems appropriately.

### Patterns of growth and decline in lung function in persistent childhood asthma

Michael J McGeachie, Katherine P Yates, Xiaobo Zhou, *et al* for the CAMP Research Group  
*N Engl J Med* 2016;**374**:1842–52  
<http://dx.doi.org/10.1056/NEJMoa1513737>

Determinants of abnormal patterns of FEV<sub>1</sub> growth and decline are complex, and identification of factors associated with the timing of a decline requires longitudinal data, particularly for persons with asthma. The Childhood Asthma Management Program (CAMP) cohort was followed from the age of 5 to 12 years, into the third decade of life, with at least annual spirometry and detailed concomitant assessments. McGeachie and co-workers examined the trajectory of lung growth and the decline from maximum growth in this cohort to determine the demographic and clinical factors associated with abnormal patterns of lung growth and the decline from maximum growth.

Of the 684 study participants, 170 (25%) had a normal pattern of lung function growth without early decline, 176 (26%) had reduced growth and an early decline, 160 (23%) had reduced growth only and 178 (26%) had normal growth and an early decline. Lower baseline values for FEV<sub>1</sub>, smaller bronchodilator response, airway hyper-responsiveness at baseline and male sex were associated with reduced growth ( $p < 0.001$  for all).

At their last spirometric session, 16% of the reduced growth group and 21% of the group with reduced growth and an early decline met GOLD staging criteria for COPD vs. 1% of the normal growth group and 5% of the group with normal growth and an early decline ( $p < 0.001$ ).

Childhood impairment of lung function and male sex are the most significant predictors of abnormal lung function growth and decline. Children with persistent asthma and reduced growth of lung function are at increased risk for fixed airflow obstruction and meeting spirometric criteria for COPD in early adulthood.

### Serious asthma events with fluticasone plus salmeterol versus fluticasone alone

David A Stempel, Ibrahim H Raphiou, Kenneth M Kral, Anne M Yeakey, Amanda H Emmett, Charlene M Prazma, Kathleen S Buaron, Steven J Pascoe for the AUSTRI Investigators  
*N Engl J Med* 2016;**374**:1822–30  
<http://dx.doi.org/10.1056/NEJMoa1511049>

The safe and appropriate use of short acting beta-agonists (SABAs) and long acting beta-agonists (LABAs) for the treatment of asthma has

Thorax

been widely debated. Two large clinical trials suggested a potential risk of serious asthma-related events associated with LABAs. This prospective, multicentre, randomised, double-blind trial (AUSTRI) investigated whether the risk of serious asthma-related events would be higher when salmeterol was used concomitantly with fluticasone as a fixed-dose combination fluticasone–salmeterol than if fluticasone was used alone. A secondary objective was to evaluate whether fluticasone–salmeterol was superior to fluticasone with respect to prespecified measures of efficacy.

11,679 patients (age  $\geq 12$  years) with moderate-to-severe asthma were assigned to receive either fluticasone with salmeterol (n=5,834) or fluticasone alone (n=5,845) for 26 weeks. All the patients had a history of a severe asthma exacerbation in the year before randomisation but not during the previous month.

The hazard ratio for a serious asthma-related event in the fluticasone–salmeterol group was 1.03 (95% CI 0.64 to 1.66). Fluticasone–salmeterol was shown to be non-inferior to fluticasone alone (p=0.003). There were no asthma-related deaths in either group. The risk of a severe asthma exacerbation was 21% lower among patients who were treated with fluticasone–salmeterol than among those treated with fluticasone alone.

Serious asthma-related events occurred with similar frequency among those receiving treatment with fluticasone–salmeterol and those receiving fluticasone alone. Patients receiving fluticasone–salmeterol had fewer severe asthma exacerbations.

### Associations of cognition with physical functioning and health-related quality of life among COPD patients

Mark B Schure, Soo Borson, Huong Q Nguyen, Emily H Trittschuh, Stephen M Thielke, Kenneth C Pike, Sandra G Adams, Vincent S Fan  
*Respir Med* 2016;**114**:46–52  
<http://dx.doi.org/10.1016/j.rmed.2016.03.005>



Patients with both COPD and diminished cognitive functioning have substantially higher hospitalisation and mortality rates than those with either condition alone. There is also evidence that cognitive impairment may adversely affect other COPD outcomes including quality of life.

Schure and colleagues examined the association of simple tests of cognitive functioning with standard measures of disease activity in COPD patients to understand the relationship between cognitive functioning (psychomotor speed, executive control functioning and memory) and physical functioning (physical activity, 6-minute walk test and grip strength) and Health-Related Quality of Life (HRQL) among COPD patients after adjustment for disease severity.

301 participants with moderate to very severe COPD completed the Trail Making Test (TMT-A: psychomotor speed and TMT-B: executive control standard neuropsychological measures that are sensitive to cognitive decline among patients). 198 patients completed the Memory Impairment Screen (a rapid screening test of memory encoding and retrieval).

Nearly 30% of participants were classified as having either borderline or impaired cognitive functioning on tests measuring psychomotor speed and executive control functioning. Those with either borderline

or impaired cognitive functioning had weaker grip strength and lower scores on the mental health component summary score measure. No significant associations were found for other physical functioning measures or the other HRQL measures.

This suggests that specific domains of cognitive impairment are associated with COPD patients' risk of frailty and poor overall mental functioning. Notably, memory was less likely to be impaired in COPD and less strongly associated with disease severity than was psychomotor speed and executive control functioning.

### Understanding the impact of second-hand smoke exposure on clinical outcomes in participants with COPD in the SPIROMICS cohort

Thorax

Nirupama Putcha, R Graham Barr, Meilan K Hanet *et al* for the SPIROMICS Investigators  
*Thorax* 2016;**71**:411–20  
<http://dx.doi.org/10.1136/thoraxjnl-2015-207487>

While there is increasing awareness of the role of passive smoking in contributing to adverse health outcomes, it has not been shown to be detrimental in active smokers with COPD.

Puncha and colleagues analysed a COPD cohort from the Subpopulations and Intermediate Outcomes in COPD Study (SPIROMICS) to investigate if COPD patients exposed to passive smoking have worse outcomes than individuals with COPD not having exposure, and if there are subgroups with COPD with higher susceptibility to such adverse outcomes.

Of 1,580 participants with COPD, about 20% reported living with a smoker and 36% of participants with COPD reported  $\geq 2$  hours of recent passive exposure in the past week. Living with a smoker was associated with worse St George's Respiratory Questionnaire (SGRQ) score, COPD Assessment Test score and increased risk for severe exacerbations. Passive exposure in the past week was associated with worse SGRQ, nocturnal symptoms, wheezing, chronic productive cough and difficulty with cough and sputum. Additionally, living with a smoker was associated with increased airway wall thickness assessed by CT scan, but not with emphysema or gas trapping. Active smokers, obese individuals and individuals with less severe airflow obstruction also had higher susceptibility to passive smoking for some outcomes.

These results suggest that passive smoking is associated with a higher risk of adverse outcomes in COPD patients (both former and current smokers) and also with a distinct pattern on the CT scan indicative of heightened airway inflammation. The mechanisms responsible for adverse outcomes in COPD associated with passive smoking require further investigation.

### Long-term prognosis of asthma, chronic obstructive pulmonary disease, and asthma-chronic obstructive pulmonary disease overlap in the Copenhagen City Heart study: a prospective population-based analysis

THE LANCET  
Respiratory Medicine

Peter Lange, Yunus Çolak, Truls Sylvan Ingebrigtsen, Jørgen Vestbo, Jacob Louis Marott  
*Lancet Respir Med* 2016;**4**:454–62  
[http://dx.doi.org/10.1016/S2213-2600\(16\)00098-9](http://dx.doi.org/10.1016/S2213-2600(16)00098-9)

Asthma-COPD overlap is present in approximately 20% of patients with

asthma or COPD and is associated with increased morbidity and a high risk of exacerbations. However, the long-term prognosis of asthma-COPD overlap is poorly described.

Lange and colleagues investigated the long-term prognosis of individuals with chronic airway disease using data from the Copenhagen City Heart Study, where participants have been followed up for FEV<sub>1</sub>, admissions to hospital and survival for many years.

8,382 participants were assigned into one of six subgroups: healthy never-smokers; ever-smokers without asthma and COPD; those with asthma with low smoking exposure and no airflow limitation; those with COPD; those with asthma-COPD overlap with asthma onset at <40 years of age; and those with asthma-COPD overlap with asthma onset at >40 years of age. Asthma-COPD overlap was defined as current self-reported asthma and a post-bronchodilator FEV<sub>1</sub>/FVC ratio <0.7 without any restrictions regarding smoking.

FEV<sub>1</sub> decline in individuals with asthma-COPD overlap with late-onset asthma was 49.6 mL per year, greater than the decline in asthma-COPD overlap with early-onset asthma (p=0.0001), the decline of 39.5 mL per year in COPD (p=0.003), and the decline in healthy never-smokers (p<0.0001). Asthma-COPD overlap carried a higher risk of exacerbations than COPD. Only participants with asthma-COPD overlap with late-onset asthma had a greater risk of pneumonias, respiratory mortality and all-cause mortality and had a significant decrease in survival.

Patients with asthma-COPD overlap associated with late-onset asthma should be followed up closely to minimise lung function decline and exacerbations.

**Proactive tobacco treatment offering free nicotine replacement therapy and telephone counseling for socioeconomically disadvantaged smokers: a randomised clinical trial**

**Thorax**

Steven S Fu, Michelle van Ryn, David Nelson, Diana J Burgess, Janet L Thomas, Jessie Saul, Barbara Clothier, John A Nyman, Patrick Hammett, Anne M Joseph  
*Thorax* 2016;**71**:446–53  
<http://dx.doi.org/doi:10.1136/thoraxjnl-2015-207904>

Socioeconomically disadvantaged populations smoke more than their more advantaged counterparts, are less likely to use evidence-based smoking cessation treatments and suffer disproportionately from smoking-related diseases.

This randomised controlled trial from Minnesota investigated whether a proactive tobacco treatment intervention, designed to overcome barriers to access and delivery of treatment, would improve smoking cessation outcomes among a population-based sample of smokers. Current smokers, regardless of interest in quitting, who were enrolled in the Minnesota Health Care Programs for low-income populations were randomly assigned to proactive outreach (n=1,200) or usual care (n=1,206).

The proactive outreach treatment included: (1) personalised mailings and telephone calls and (2) facilitated access to a free treatment for tobacco dependence (nicotine replacement therapy and intensive tele-

phone-based behavioural counselling). Usual care comprised access to a primary care physician, access to smoking cessation medications and a telephone quit line. The primary outcome was self-reported 6-month prolonged smoking abstinence at 1 year following randomisation.

The proactive intervention group had a higher abstinence rate at 1 year (16.5% vs. 12.1%, OR 1.47, 95% CI 1.12 to 1.93). The number needed to treat (NNT) was 23.

Abstinence outcome relied on self-reporting and there was a differential response with potential for non-response bias. However, selection model analyses suggest that the findings are robust. Secondary outcomes suggest that use of tobacco cessation treatments was significantly higher in the intervention group (17.4% vs. 3.6%, OR 5.69, 95% CI 3.85 to 8.40).

Proactive tobacco treatment approaches may reduce smoking prevalence and socioeconomic disparities in tobacco use.

**Screening for chronic obstructive pulmonary disease: evidence report and systematic review for the US Preventive Services Task Force**

**JAMA** The Journal of the American Medical Association

Janelle M Guirguis-Blake, Caitlyn A Senger, Elizabeth M Webber, Richard A Mularski, Evelyn P Whitlock  
*JAMA* 2016;**315**:1378–93.  
<http://dx.doi.org/10.1001/jama.2016.2654>

In 2008 the US Preventive Services Task Force (USPSTF) recommended against screening asymptomatic adults for COPD using spirometry. This systematic review updates the evidence on the benefits and harms of screening for COPD using questionnaires and spirometry, including the diagnostic accuracy of primary care-feasible screening instruments.

465 full-text articles were reviewed and 33 studies met the inclusion criteria.

The COPD Diagnostic Questionnaire was the most studied screening questionnaire (5 studies, n=3,048) with a moderate performance for COPD detection (sensitivity 80–93%, specificity 24–49%) at a threshold score of >6.5. Positive and negative predictive values (PPV and NPV) ranged from 17% to 45% and from 76% to 98%, respectively.

FEV<sub>1</sub>/FEV<sub>6</sub> was the best studied lung function based tool (3 studies, n=1,587). Sensitivity ranged from 51% to 80%. Specificity (range 90–95%) and PPV (range 63–75%) appeared better than questionnaires.

There was little evidence that screening and supplying smokers with spirometry results improved smoking cessation rates. There was no direct evidence available to determine the benefits and harms of screening asymptomatic adults for COPD using questionnaires or office-based screening pulmonary function testing or to determine the benefits of treatment in populations detected by screening. Among patients with mild to moderate COPD, the benefit of pharmacotherapy for reducing exacerbations was modest.

# PCRS-UK News Round-Up

## PCRS-UK NEW TRUSTEES

PCRS-UK is delighted to announce the appointment of three new trustees. The three new Trustees are currently co-opted to the PCRS-UK Trustee Board and will be put forward for election by the membership at the AGM in October.

### Professor Martyn Partridge



Professor Partridge is a past President of the British Thoracic Society (BTS), previous Chief Medical Adviser to the National Asthma Campaign (now Asthma UK), a previous member of the GINA (Global Initiative for Asthma) Executive and Chairman of their Dissemination Committee. He has received a Rotary International community and vocational service award for his previous work in establishing an NHS Palliative Medicine service and in 2011 he was named one of the UK's top five Chest Physicians in the Times/Sunday Times list of top doctors. In 2015 he was awarded the British Thoracic Society Medal in recognition of his contribution to respiratory medicine, education and patient involvement, and to the work of the Society over many years. Professor Partridge has a special interest in patient-centred care and translational research, from laboratory to bedside to the community, the integration of health-care and implementation of research findings into day-to-day practice.

### Andrew Malecki



Andrew is a mathematician by background and his early career was in theoretical physics in Canada followed by work on mathematical models of airports with the Canadian Government. Returning to the UK he worked as a management consultant on a range of economic and social projects in Europe and the Middle East, including the development of social services in Saudi Arabia. The greater part of his career was in banking and payment systems to director and Deputy CEO level. He has since worked as a consultant, advising companies on financial products and marketing strategies.

Andrew was trustee and then treasurer of Capital Carers, a charity working predominantly with Southwark Council providing support to elderly and other clients and also young carers. He is now looking forward very much to working with the staff and trustees of PCRS-UK and making a contribution to its work in an area which has always been close to his heart.

### Professor Stephanie Taylor



Steph is accredited in both public health and primary care and continues to work part time as a salaried general practitioner. She holds an Honorary Consultant position in Public Health at Barts NHS Trust and is Deputy Lead for the North Thames NIHR CLAHRC theme 'Optimising behaviour and engagement with care'. She is co-lead of the Supported Self-Management programme of work within the Asthma UK Centre for Applied Research. She has been an expert advisor to the World Health Organization on self-care in non-communicable diseases and has recently advised the Irish Health Executive on the development of a new national self-management support strategy. She is a recognised expert in the field of research on supporting self-management in long-term conditions. Her research programme focuses on complex interventions for people with long-term conditions, with a particular emphasis on people with psychological co-morbidities or those with advanced disease and significant disability.

## ASPIRING AND INSPIRING RESPIRATORY RESEARCHERS 13TH OCTOBER 2016, TELFORD INTERNATIONAL CENTRE, TELFORD

**Are you interested in respiratory research, or are you a clinician who would like to get involved with research? If so, this pre-conference workshop for you!**

With a programme featuring a presentation by the joint editors-in-chief of *npj Primary Care Respiratory Medicine* with tips on how to get your work published and a presenta-

tion on how to present scientific abstracts, this workshop offers an opportunity to learn more about these important skills. Structured networking will give the opportunity to meet with some of the leaders in primary care respiratory research in the UK including Professor Aziz Sheikh, Professor Hilary Pinnock, Professor Mike Thomas and Dr Paul Stephenson. There will also be plenty of time for meeting with your peers so that you can share information about your own research plans, hear about their projects and glean ideas and tips to help with the challenges of research in primary care.

The workshop is designed for:

- People starting out on a career in research (PhD students, academic clinical fellows, early career researchers) as well as those wondering if research would be a good career move for them.
- Clinicians involved in research or who would like to be involved in research.
- Anyone with innovative work they would like to publish or develop.

You do not need to be an expert researcher (yet!) – but enthusiasm is essential!

The workshop is FREE to anyone involved in primary care respiratory research. For more information visit our website at <https://pcrs-uk.org/early-researchers-meeting>. Conveniently for attendees, the workshop precedes the annual PCRS-UK national primary care conference and immediately precedes the AstraZeneca Satellite symposium (18.30–20.00). For more information visit the conference pages of the PCRS-UK website at <https://pcrs-uk.org/annual-conference>

## PCRS-UK AFFILIATED GROUP LEADERS MEETING SHARING AND NETWORKING SUPPORTING PROFESSIONAL DEVELOPMENT ENABLING AND COLLABORATING

**Affiliated Group Leaders Workshop – Fit for the future: Fit for practice  
13th October 2016, Telford International Centre, Telford**

## PCRS-UK News Round-Up continued

If you are an affiliated group leader, already run your own local professional group or are interested in setting up a group, do consider attending this workshop – it's a great chance to meet other group leaders and learn from them. Read Jackie Dale's account of how she started her group and how rewarding the experience has been – see page 39.

This year's workshop aims to provide practical information that you can take away and share with your local group/network. It features two key sessions: the first on consultation skills where a guest speaker will be sharing their experience and top tips for making the best use of your consultation time and we will also be featuring a session on appraisal and feedback, an important aspect of revalidation and management within a practice.

Of course, as usual we will provide plenty of opportunity for networking with your peers to allow you to share information about your own groups, their challenges and successes and explore ideas and tips that you can take back and share locally.

The workshop is free of charge to PCRS-UK affiliated group leaders or PCRS-UK members interested in setting up a new group.

For more information visit our website at <https://pcrs-uk.org/ag-leaders-events>

### TWO NEW PUBLIC HEALTH CAMPAIGNS ARE RAISING AWARENESS OF THE SYMPTOMS OF LUNG DISEASE

#### Public Health England campaign

Public Health England will be running a 'Be Clear on Cancer' campaign focusing on the respiratory symptoms of a persistent cough and inappropriate breathlessness to encourage people with these symptoms to see their doctor. The aim is to improve earlier diagnosis of heart and lung disease, including cancer and COPD.

The campaign will urge people to see their doctor if:

- They get out of breath doing things they used to be able to do

- They have had a cough for three weeks or more

The campaign, which will run until October, will target men and women aged 50 and over, people from lower socio-economic groups and influencers such as friends and family. Further information and resources related to the campaign can be found at <https://campaignresources.phe.gov.uk/resources/campaigns/46-respiratory-symptom-awareness/overview>

#### British Lung Foundation campaign

The British Lung Foundation (BLF) is running a year long 'Listen to your lungs' campaign which aims to:

- Increase awareness that breathlessness can be a symptom of COPD
- Encourage people to ask healthcare professionals about their breathlessness

The BLF, in conjunction with PCRS-UK Executive Chair Noel Baxter, has developed a quick online test that asks 10 easy questions based around the MRC breathlessness scale which will help people to decide whether they need to see a GP. The aim is to reassure people who don't have a problem and guide only those with significant breathlessness to make an appointment with their GP. The breath test is available at <https://breath.test.blf.org.uk>.

PCRS-UK fully supports public awareness campaigns, particularly if they raise awareness of lung disease and help to find the so-called 'missing millions' who are living with undiagnosed respiratory conditions.

Practices may be concerned that these campaigns will increase their workload. Public Health England says analysis of the first national lung campaign in 2012 showed that the number of patients aged over 50 presenting with a persistent cough went up 64% – the equivalent of just over three additional visits per practice per week. PCRS-UK suggests that practices can encourage patients to complete the BLF breath test before making an appointment.

### WORLD COPD DAY

World COPD Day will take place on Wednesday 16 November 2016. This annual event is organised by the Global Initia-

tive for Chronic Obstructive Lung Disease (GOLD) to raise awareness of COPD.

The first World COPD Day was held in 2002 and now each year more than 50 countries worldwide participate, making the day one of the world's most important COPD awareness and education events.

The British Lung Foundation is running a campaign around World COPD day – see <https://www.blf.org.uk/support-for-you/copd/world-copd-day>. As a respiratory interested health professional, why not take the opportunity of World COPD day to raise the profile of COPD in your own practice. For example, you could hold a practice meeting to review the recommendations from the Welsh primary care COPD audit report and which might be most relevant for your practice to consider further or perhaps you could run an open day for patients where you could raise awareness of COPD and screen your smokers with basic spirometry and CO breath testing.

### STOCTOBER 2016

Stoptober, the popular Public Health England annual campaign to encourage people to stop smoking for 28 days, takes place from 1 October 2016.



Patients who sign up are given access a range of free support including packs, emails, texts and an app providing information, advice and daily tips to help them through the month.

Stoptober is based on the insight that, if you can stop smoking for 28 days, you are five times more likely to be able to stay quit for good. The campaign chunks down the quitting process, presents it as a more manageable 28 days and rallies people around a specific date to get started.

By signing up, everyone quits together supported by employers, communities, charities and other partners, as well encouraging each other via our Facebook page. Over

## PCRS-UK News Round-Up continued

215,000 people took part in last year's Stoptober campaign.

For more information visit <http://www.nhs.uk/smokefree/stoptober>

### ERS INTERNATIONAL CONGRESS , LONDON, 3-7 SEPTEMBER



The European Respiratory Society (ERS) Congress for the first time has been held in London, bringing together respiratory experts from across the world. The PCRS-UK was delighted to work with the ERS and the International Primary Care Respiratory Group (IPCRG) to develop the *Primary Care Day: Challenging Times*.

International experts discussed common daily challenges facing primary care clinicians including: getting the diagnosis right; assessing the whole patient, especially in cases of multiple morbidities; changing patient behaviour (adherence, smoking); and dealing with changing systems and organisations.

Topics in a session looking at future challenges included developing tomorrow's leaders (featuring the PCRS-UK Clinical Leadership programme), using big data to change healthcare and an insight into personalised medicine.

To round off the day a Grand Round discussed challenges and solutions from primary care clinical practice through interactive case presentations followed by a panel discussion with experts from both primary and secondary care.

PCRS-UK members Andrew Whittamore, Hilary Pinnock, Noel Baxter, Jacqui Cooper and Iain Small were involved in chairing or speaking on the day.

### HEALTHY LUNGS FOR LIFE CAMPAIGN

PCRS-UK was involved in promoting the Healthy Lungs for Life public education campaign run alongside the European Respiratory Congress (ERS) in September.

The campaign, run by ERS and the European Lung Foundation (ELF), aimed at healthcare professionals and the public, is



one of the largest ever lung health campaigns, raising awareness of the importance of healthy lungs to healthcare professionals, scientists, primary care, patients, policy makers and the public through a range of events, projects and promotional activities.

Advertising posters and events offering free lung testing and educational materials were held at sites around London including Trafalgar Square, highlighting the importance of clean air for lung health.

In and around the Congress Centre the messages for healthcare professionals were:

- Do you discuss the impact of air pollution with your patients?
- Is taking an occupational history part of your usual clinical practice?
- Do you discuss with your patients the risks to their family of smoking at home?

## SECOND OPINION

### Your respiratory questions answered...

**Question:** I'm interested in getting a group of local practitioners together to discuss common respiratory issues and other long-term condition management. How can PCRS-UK support me in this? *Julie*

**Answer:** Thanks for contacting us Julie. As a member of PCRS-UK we can support you in a number of ways to get your group going and help you to maintain momentum once you have got it off the ground.

Firstly, we can introduce you to other group leaders who have been through the set-up process so that you can get some useful advice and tips on setting up a new group and act as a buddy for advice and information. Then we can contact other PCRS-UK members in your area (e.g. within a 50 mile radius of you) to invite them to contact you if they are interested in supporting/participating in your group. Additionally, you can contact (or we can on your behalf) your local respiratory lead and any other group leaders/members directly in your area via our members directory (<https://www.pcrs-uk.org/directory>) to discuss your group with them or invite them to act as speakers/supporters of your group.

Once you have gauged the interest and got enough people on board, you should consider affiliating your new group to PCRS-UK by the completion of a simple form available at [info@pcrs-uk.org](mailto:info@pcrs-uk.org).

PCRS-UK provides a simple resource pack to help you get started for your first meeting (see <https://www.pcrs-uk.org/resource-pack-help-you-get-started>). We can then promote your events/meetings by sending emails to members in your area and adding your meetings to our events listing on our website.

We will list your group on our website and promote it to our members, and we can point you in the direction of tools and resources that you can use as a basis for discussion and local update.

To help maintain the momentum we can help you network with other colleagues who are running groups and support your professional development through PCRS-UK programmes like our annual affiliated group leaders meeting and clinical leadership programme. See the inspiring article by Jackie Dale on page 39 on how she came to create her local group.

We'll also give you complimentary membership to the PCRS-UK, saving you an annual £59 fee\*, and we'll send you a regular newsletter especially for group leaders offering tips and advice for managing your group, maintaining the momentum and sharing information.

\*Subject to the completion of a short online annual report on the activities of your group.

#### Have you got a question for Second Opinion?

If you have a question for Second Opinion please submit your question to [info@pcrs-uk.org](mailto:info@pcrs-uk.org) quoting "Second Opinion" in the subject line



## Delivering Excellence Locally

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

### Increasing quitters in general practice frees up clinical time and reduces unplanned admissions



**Francesca Robinson** talks to **Sonia Simkins** Practice Manager in Rowley Regis, on her innovative in-house stop smoking clinic

Identifying and being responsive to people who smoke and are ready to quit in general practice with an in-house stop smoking clinic frees up appointment times and resources and can halve unplanned hospital admissions, a practice manager has shown.

Sonia Simkins, practice business manager of the Hawes Lane Surgery practice in Rowley Regis in the West Midlands, introduced an in-house stop smoking clinic run by an external provider in February 2013 in a drive to support people to quit, ultimately to improve their health and wellbeing.

At the time the practice had a list size of 4,481 patients, of whom 1,032 (23%) were identified as currently smoking; 884 of whom had long-term conditions. Many of these smokers, as a result of their multi-morbidity, had been needing higher levels of urgent care at accident and emergency.

An audit showed that smokers had two or three GP appointments per week more than non-smokers, and often more than five appointments every month because of smoking attributable illness. National figures<sup>1</sup> show that, when asked, more than a third of smokers say they want to quit and Sonia says she realised this was an opportunity for some patients that wasn't currently being met.

The practice began working to identify people who described themselves as smokers: mailshots were sent to people who had declared their last smoking status as current, informing them about the new weekly stop smoking service; the service was advertised on the practice website, on a display in the reception area, in the waiting area, on the bottom of every prescription, and referral forms were placed in every clinical room.

All practice staff were briefed on the need to advertise the service and to offer an appointment within five days of a request. "From talking to

other people it was clear that people wanting to quit need to be referred to a smoking cessation service quickly – if they have to wait three months for an appointment the likelihood is they will change their minds and not come back," explains Sonia.

The whole team was involved – doctors, nurses and, in particular, the receptionists played a key role in promoting the service and ensuring appointments were booked efficiently with the stop smoking service.

*“ The main thing is that patients' health and well-being have improved and they have a better quality of life as result of giving up smoking ”*

Sonia Simkins

The initiative has been very successful. Between February 2013 and April 2015:

- The number of registered smokers fell to 753 (17%)
- Unplanned admissions for smoking-related illnesses halved from 1,202 to 627 a year, saving £623,500
- Home visits to this group halved from 537 to 243 a year, saving £10,290
- GP appointments for smokers with long-term conditions fell from 1,933 to 1,075, saving £15,444
- The prescribing budget has reduced

The smoking cessation specialist now comes in for 2.5 days a week and mailshots continue to be sent every quarter to people who identify themselves as smokers. The practice now offers support for anyone who has

had a spell in hospital for a smoking-related condition, asking if they are interested in quitting, and this has resulted in a further significant increase in the uptake of the smoking cessation service.

"Initially it took me around five hours in total to get the process up and running and now I just spend 10 minutes a week having an update with the smoking cessation provider. Promoting the stop smoking clinic is now a natural part of everyone's job, and for me it is a matter of just keeping an eye on it and pushing it all the time. It's got to be a priority for the practice 24/7 rather than once a year like flu," says Sonia.

She adds that even she has been surprised at how phenomenal their success has been in reducing unplanned hospital admissions. "In addition, the GP's lives have been really changed because they have more time – previously they were doing a ridiculous number of home visits per day, some days as many as eight or nine. Also, 20 extra appointments a week have been created – these really are gold dust! The main thing

is that patients' health and well-being have improved and they have a better quality of life as result of giving up smoking," says Sonia.

The process of setting up this initiative is very straightforward and could be replicated in any practice. Sonia says the key to making it a success and achieving the required outcomes is that hard work and commitment is required by the whole practice team who must recognise that smoking cessation is important and should be prioritised.

Sonia will be speaking about this initiative in a session on tobacco dependency at the PCRS-UK conference *Fit for the Future: a holistic approach to respiratory care* on 14–15 October at the Telford International Centre.

**Reference**

1. Smoking in England. Latest statistics. Top line findings from the STS. May 2016 <http://www.smokinginengland.info/latest-statistics/>

## Making a difference locally – setting up a local group

### Mistaken attendance at a PCRS-UK meeting leads to successful formation of new affiliated group



**Jackie Dale** leader of the PCRS-UK affiliated South Yorkshire Respiratory Group

I attended my first PCRS-UK conference in October 2015. I have a real passion for respiratory care and had managed to gain sponsorship from a pharma company to attend.

I got a little confused with the other meetings taking place around the conference and inadvertently attended the PCRS-UK affiliated group leaders meeting taking place immediately prior to the conference start. In the meeting I became quite anxious that the nurses in the room were all very experienced and they were talking about 'their groups'. It quickly became clear that they already ran successful meetings across the country. I felt like an imposter and felt 'out of my depth'. I kept quiet until we were put into groups and expected to feed back about our experiences. I had to come clean and admit I didn't have a group, let alone run one! Well! Everyone was very enthusiastic and it didn't matter because they said I could start one. I was so buoyed up by the warm welcome and enthusiasm of everyone that I even agreed it was a good idea.

The conference was amazing – so well organised and exciting – I loved every minute of it.

Back home. Oh heck what had I done! I didn't have the first clue how to organise or start a group and was regretting my 'eager beaver' approach. Still I had said I would, and if I say I will then I have to at least try.

A pharma company had been trying to hold regular respiratory meetings but could not continue on a single sponsorship basis so I approached them and two other companies (GSK, Boehringer Ingelheim and Cheisi) to see if they would sponsor the meetings and help me set up a local group. They were very keen and have given me amazing support and commitment to running the group.

PCRS-UK sent a starter pack with all the necessary documentation templates to help plan the first meeting and they were always at the end of the phone to provide any extra information and help. I was put in touch with Mel Canavan who runs the successful Leeds Respiratory Network. She provided much moral support and a listening ear when I felt that I was not really the sort of person who could chair a group and wanted to talk myself out of the idea.

The hardest part was thinking of a name. I wanted to have something catchy like 'Breath' or 'Inspire' but couldn't make it mean anything, so I settled on the South Yorkshire Respiratory Interest Group which has interestingly become called SYRIG. I wanted the name to reflect that all were welcome to the meeting from any discipline.

I held the first meeting in March. I was disappointed that only 12 people turned up but our local paediatric respiratory consultant was one and the other was the head of a large national chain of pharmacies. I had also invited a CCG representative. They were very enthusiastic that someone had thought to start a respiratory group affiliated to the PCRS-UK and were excited at the prospect of future meetings. Apparently 12 is good for a first meeting. Rather than have a speaker we discussed the need for a local group and I devised some questions on asthma/COPD and spirometry in the community and we did small group work between us which was very successful. Since then my network of contacts and people has expanded and I have met members of the CCG, sat on asthma template restructuring meetings, been invited to attend a meeting to review local COPD patient booklets and feel my network of colleagues and contacts has grown.

I have managed to secure a passionate consultant to speak at our next meeting on 6 July – Dr Rodney Hughes – who will be discussing "Optimising COPD management and improving patient experience". I have had a huge interest from pharmacists who are keen to become more engaged with the wider audience of healthcare practitioners and I have been contacted by both hospital and community nurses, pharmacists and doctors interested in attending the meetings to help improve the experience of respiratory care in our community. I have secured the help of an oxygen therapy nurse (Wendy Bradford) whom I met through the initial respiratory meeting and together we are chairing the next meeting.

It has been challenging setting up a group as I do not consider myself a natural chair or host as I am quite shy and would not have even thought of setting up a group if I had not been inspired by the passion and enthusiasm of people whom I met at the PCRS-UK conference and affiliated group leaders meeting.

### GROUP INFORMATION

- **Name of Group:** South Yorkshire Respiratory Interest Group (SYRIG)
- **Group Leader:** Jackie Dale
- **How to contact group leader:** syrig123@gmail.com  
Tel 07957 856692
- **Group composition:** nurses, doctors, pharmacists and anyone with an interest in respiratory medicine (multidisciplinary)
- **Goals/aims:** To inspire a passion and interest in respiratory care and improve the patient experience; encourage healthcare professionals to attend conferences and study days. Provide a conference within the next 2 years; communicate interesting information and local/national training via regular emails
- **What the group does:** Has passionate speakers, round table discussions and provides a network of respiratory contacts
- **How often it meets:** Quarterly
- **Latest activity:** 6 July, Holiday Inn, West Bawtry Road, Rotherham S60 2XL. Speaker: Dr Rodney Hughes "Optimising COPD management and improving patient experience".

I have since attended the PCRS-UK Respiratory Leadership Workshop and have found so much support and encouragement to start developing my skills and to find out what I am capable of achieving. I would urge anyone who is passionate about respiratory care to join PCRS-UK, attend the conferences and enjoy expanding their knowledge, networking with like-minded individuals, and to believe in themselves to help raise awareness of respiratory care.

## Respiratory Leaders Programme

### Understanding yourself to make the best impact on your team and patient care in your locality

*“ The Respiratory Leaders programme has given me the confidence to be more vocal about respiratory care both in my own practice and within my PCRS-UK affiliated local respiratory group ”*

This is the verdict of Solihull practice nurse Sharon Sutton on the summer PCRS-UK Respiratory Leaders event which taught delegates how to learn more about themselves and their own behaviours and how to react and deal with difficult situations in the workplace.

A presentation on stress by Dr Terry Stuart, a GP and expert on stress management, struck a chord with Sharon. She says it helped her to understand how her own stress is triggered and manifests itself and gave her an insight into the stress-related behaviour of her colleagues. “The session talked about how we can ‘click’ our thinking by recognising stressful times, whether it is at work or at home, and ways in which we can find moments to de-stress or acknowledge what’s going on in order to manage situations better. But also we can relate that thinking back to the patient as well. As we only have a short time with each patient, we need to be able to recognise the signs of stress quickly and address them in the consultation.”

Another session looked at different work and leadership styles in relation to colours. Sharon says that made her appreciate how people come at things from different angles at work but can still have something valuable to contribute. “I think I’m a bit of everything but probably more blue (analytical), so I like to go away and think things through while other people in my group might be more driven with a very clear vision of where they want to go and how they should proceed. This can make meetings fraught, but I learned that we need to be more aware and have more understanding of the fact that we’ve all got different viewpoints, we all want the same results, but we just drive along different routes to get to the same goal. Working to understand where other people are coming from is a way of avoiding conflict and can help you to work better with other people.”

Sharon describes herself as a ‘jack of all trades’ practice nurse with a special interest in respiratory care. She runs nurse-led asthma and COPD clinics in her practice and recently set up a PCRS-UK affiliated respiratory group and an educational programme for practice nurses.

A policy update at the workshop alerted Sharon to the imminent publication of the new assessment and certification process for performing and interpreting spirometry. She and two colleagues from her respiratory group, who attended the workshop together, came away planning a meeting to discuss the implications of the new standards for their locality. “There aren’t many of us in the area that are accredited in spirometry, so one solution could be to pool our resources and create a hub. We knew that the spirometry standards were in the pipeline, so having the advance warning gave us some ammunition to push for our educational needs, both with the doctors in our surgeries and also ultimately at CCG level,” says Sharon. A nurse they met at the workshop, who has already set up a hub of spirometry accredited nurses, agreed to come and talk to their local group about the practicalities of doing this.

Another networking opportunity resulted in Sharon meeting two delegates who have set up social enterprises to provide respiratory care in different parts of the country. “That got our brains whirring and thinking this might be something we could explore in our area. It’s really interesting to hear what other people are up to,” says Sharon.

*“ I felt inspired after spending a couple of days with some really dedicated people. We can be a bit negative in healthcare and the sessions focused on recognising that we have some positive points. It is such a safe and friendly group – the atmosphere they create is very warm and inviting ”*

This was the second workshop that Sharon had attended. She says she went to the first event feeling out of her depth and wondering if she was in the right place. But at the end of it, and again after this workshop, she says she came away feeling more self-confident and empowered. Although naturally reticent, Sharon says she felt able to get up and talk in front of people, something which gave her a great sense of achievement.

The next PCRS-UK Respiratory Leaders workshop is on 25–26 November in Milton Keynes. For further information visit <http://www.pcrs-uk.org/respiratory-leaders-home>

# Call for Papers



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# DESKTOP HELPER

No. 4 November 2015 2nd edition

## Helping patients quit smoking: brief interventions for healthcare professionals

### How to help smokers quit: flowchart

Ask all patients about tobacco use (smoking or smokeless tobacco) and reassess at every clinic call/at least once a year. This alone increases quit rates. Use of e-cigarettes identifies ex-smokers at risk of relapse. Document smoking status/stage of motivation/tobacco burden for all.<sup>1</sup>

#### 1. ASK:

**Have you used tobacco in the last 12 months?**

**No:** Congratulate. Reinforce non-use. Patients should be asked about smoking for some years after quitting. People seldom relapse after 5 years' abstinence.

**Yes – quit in the last 12 months:** Congratulate. Ask if they need help remaining smoke free. Advise them to contact you or to seek other counselling if they have any difficulty (quitline, smoking cessation clinic or other).

**Yes – current smoker:** Take brief smoking history: number of cigarettes smoked a day; year started smoking; time to first cigarette; presence of smoking-related disease; previous quit attempts and what happened? Use a non-judgemental question such as "How do you feel about your smoking at this moment?" Express concern/interest not criticism.

#### 2. ASSESS: MOTIVATION TO QUIT

**On a scale from 1 – 10 how interested are you in trying to quit?**



#### ARE YOU INTERESTED IN QUITTING?<sup>2</sup>

NO, not ready:	YES, but not yet...unsure:	YES, ready to quit:
<p><b>ADVISE:</b></p> <ul style="list-style-type: none"> <li>Focus on motivation, remember motivation can be influenced- CO testing can be useful<sup>3</sup></li> <li>Advise the patient on the benefits of quitting without criticism/confrontation.</li> <li>Respect the patient's decision</li> <li>Ask if you may tell the patient about the dangers of smoking</li> <li>Ask: "Is there anything that might help you consider quitting?" or "Can you imagine any benefits of quitting?"</li> <li>Offer help if the patient should change his/her mind</li> </ul> <p><b>ARRANGE:</b></p> <ul style="list-style-type: none"> <li>Follow up: – ask patient if you should discuss smoking again at next consultation.</li> </ul>	<p><b>ADVISE:</b></p> <ul style="list-style-type: none"> <li>Focus on their ambivalence, help them motivate themselves</li> <li>Offer help by asking: "What are the things you like and don't like about your smoking?" "Have you tried to quit before?" "How did you get on when you last quit?" "What would have to happen for your motivation score to increase?" "How can I help you increase your confidence in quitting?"</li> </ul> <p><b>ASSIST:</b></p> <ul style="list-style-type: none"> <li>Explore barriers to cessation</li> <li>Offer help quitting</li> <li>Refer to quitline or other counselling, refer to smoking cessation unit if patient prefers</li> <li>Hand out written material/contact numbers</li> </ul> <p><b>ARRANGE:</b></p> <ul style="list-style-type: none"> <li>Follow-up consultation or telephone contact within 6 months or remember to ask when you next see the patient.</li> </ul>	<p><b>ASSIST:</b></p> <ul style="list-style-type: none"> <li>Provide assistance in developing a quit plan</li> <li>Help patient to set a quit date</li> <li>Advise on pharmacotherapy for smoking cessation: nicotine replacement therapy (NRT) or a prescription for varenicline or bupropion when indicated</li> <li>Include the following as needed:                             <ul style="list-style-type: none"> <li>Discuss abstinence and suggest coping strategies</li> <li>Encourage social support</li> <li>Assist in dealing with barriers such as fear of failure, stress coping, weight gain, social pressure</li> <li>Give nutritional advice: sleep well, avoid caffeine and alcohol</li> <li>Physical activity may help</li> <li>Withdrawal symptoms occur mostly during the first 2 weeks and are less troublesome after 4-7 weeks</li> </ul> </li> </ul> <p><b>ARRANGE:</b></p> <ul style="list-style-type: none"> <li>Follow-up consultations/phone calls - ideally weekly initially, then monthly.</li> </ul>
<p><b>5 A's of helping smokers quit: ASK ASSESS ADVISE ASSIST ARRANGE</b></p>		

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## BENEFITS OF QUITTING

- If you quit before the age of 30 your life expectancy returns to be similar to a non smoker's
- Pregnancy: the risk of a low birthweight baby, stillbirth and death of infants in their first 28 days drops to normal if you quit before pregnancy or during your first trimester
- Fertility increases
- Within 72 hours: blood pressure decreases, pulse rate drops, the risk of a heart attack decreases, and the ability to smell and taste increases
- Within two weeks: lung function increases, circulation improves and walking becomes easier
- Within a year: shortness of breath and fatigue improves, coughing decreases and your risk of coronary heart disease is halved
- Within 5 years: risk of ulcers decrease. The risk of cancer of the bladder, kidney, mouth, oesophagus, pancreas and throat decreases
- Within 5-15 years: the risk of having a stroke and the risk of coronary heart disease is reduced to that of a never smoker. The risk of lung cancer is half that of a continuing smoker
- Anxiety and depression decrease. The effect sizes are equal or larger than those of antidepressant treatment for mood and anxiety disorders<sup>4</sup>

## MEDICATION

Medication should be offered to every adult patient with nicotine dependence if:

- They smoke more than 10 cigarettes a day
  - And smoke within half an hour of waking
- They are particularly likely to suffer from withdrawal symptoms and should be offered pharmacological support once they set a quit date.

## Nicotine Replacement therapy (NRT)

Its main effect is to reduce withdrawal symptoms and help the patient through the first two months of craving. Most patients use too low a dose for too short a time. They should use a dose that takes away withdrawal symptoms. Most people need a full dose for 2-3 months, and then they can gradually reduce the use over some months. Added success has been shown if they start NRT 14 days prior to their quit date.

**Dosage:** It is often wise to combine two different NRTs – a patch to last most of a 24 hour period and gum or other oral forms of NRT for craving situations during daytime.

**Patch:** The most common dosage forms are 14 mg/24 hours or 10 mg/16 hours for light smokers or 21 mg/24 hours – 15 mg/16 hours

for heavier smokers. Some patients need more than one patch a day to control symptoms.

**Possible side effects:** skin rash, allergy, insomnia, wild dreams

**Oral forms such as gum, inhalers, lozenges, sublingual tablets:** To be administered every 1-2 hours for relief of symptoms while awake. Since nicotine is absorbed through the mucosa in the mouth it is important to instruct the patient in the use of gum carefully. Chew a few times on the gum then “park” it in the mouth.

**Possible side effects:** sore dry mouth, dyspepsia, nausea, headache, jaw ache. Often dose dependent.

**Contraindication:** Pregnancy (some guidelines allow use of some forms if quitting without pharmacotherapy is not possible). Use in children and teenagers under 18 years is unlicensed in many countries.

## Varenicline

Varenicline is a nicotinic receptor partial agonist. In addition to blocking the receptor it also stimulates it, thus reducing withdrawal symptoms. In clinical trials varenicline has increased quit rates two to three fold over placebo.

**Dosage:** Start one week before quit date: 0.5 mg for 3 days, 0.5 mg bid for 4 days, then 1mg bid from quit date for 12 weeks.

**Possible side effects:** nausea and headache. There is no danger of seizures. Risk of psychiatric side effects is the same, while the risk of cardiovascular side effects is lower compared to other smoking cessation medications.

**Contraindication:** Pregnancy.<sup>5</sup>

## Bupropion

Bupropion was originally developed as an antidepressant. It reduces the urge to smoke as well as symptoms from nicotine withdrawal.

**Dosage:** Twice daily starting with one tablet a day for a week or two prior to quit date, then regularly 150 mg bid from quit date for 7-12 weeks.

**Possible side effects:** Insomnia, headache, dry mouth, dizziness, anxiety, elevated blood pressure if combined with NRT.

**Contraindications:** Seizures, pregnancy, eating disorders and those taking monoamine oxidase inhibitors. Risk of psychiatric side effects is the same compared to other smoking cessation medications.

## OTHER MEDICATION

Other drugs have been shown to be effective in smoking cessation but are not licensed for this indication. The cost of these drugs is often low and should be considered if cost is a limiting factor:

**Nortriptyline** has been shown to be effective, but possible side effects that include sedation, dry mouth, light-headedness and risks of cardiac arrhythmia in patients with CHD limit its application. It should thus be a second line agent.<sup>6</sup>

**Cytisine** has a mechanism of action like varenicline, binding to the nicotinic receptor. It has been used for smoking cessation in eastern European countries and has received increasing interest due to its low cost. Possible side effects include stomach ache, dry mouth, dyspepsia and nausea.<sup>7</sup>

## HARM REDUCTION

Other nicotine products have been suggested as useful to reduce the harm of cigarette smoking. Chewable nicotine, snuff and e-cigarettes are all methods that are less harmful than smoking. However, remember that they still carry a risk for the user. The newest product, e-cigarettes, are heavily marketed with claims that they aid smoking cessation. Their effects – positive and negative – are still not fully known. Their use should, therefore, be restricted to smokers who have tried other methods without success. ●

## References

1. Supporting smoking cessation. <http://www.racgp.org.au>
2. Treating Tobacco Use and Dependence: 2008 Update. <http://www.ncbi.nlm.nih.gov>
3. Helping Smokers Quit 2014. <http://www.london.senate.nhs.uk>
4. Taylor G et al. *BMJ* 2014;**348**:g1151.
5. Koltz D et al. *Lancet Respir Med* 2015;**3**:761-8.
6. Hughes JR et al. *Nicotine Tob Res* 2005;**7**:491-9.
7. West R et al. *N Engl J Med* 2011;**365**:1193-200.

## Further reading

Available from [www.theipcr.org](http://www.theipcr.org) desktop helpers

## PRACTICAL HINTS FOR PATIENTS

These are suggestions for coping with cravings to smoke and ways to reduce the risk of relapse. Abstinence symptoms are most frequent in the first few days after quitting; they are a sign your body is getting used to living without nicotine. If you use medication to help you quit you will reduce your symptoms of nicotine withdrawal so

### Remember to take your medicine and also try the 4 Ds:

- Delay acting on the urge to smoke
- Deep breathe
- Drink water slowly holding it in your mouth a little longer to savour the taste
- Do something else to take your mind off smoking. Doing some exercise is a good alternative

Avoid major triggers for smoking early in your quit attempt. Common triggers are alcohol, coffee and smoking friends.

**Remember:** Just one will hurt. Thinking “I can have just one” is the way most people go back to regular smoking.



Original author: **Dr Svein Hoegh Henriksen** Author of this edition: **Anders Østrem** Contributions from: **Nick Zwar, Onno van Schayck, Noel Baxter, Stephen Brunton, Radost Assenova, Catalina Panaitescu, Vidal Barchilon, Bruce Kirenga, Andy McEwen** Editors: **Hilary Pinnock and Siân Williams**  
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proteins. **Warnings and precautions:** Not for treatment of acute dyspnoea or status asthmaticus. Must be used regularly and should not be stopped abruptly. Patients who have required high dose emergency steroid therapy or prolonged treatment with high doses of inhaled steroids may be at risk of impaired adrenocortical function and may need supplementary systemic corticosteroid during periods of stress. Paradoxical bronchospasm may occur. Systemic effects may occur with high doses of inhaled corticosteroids. Titrate dose to lowest effective level. Reduced liver function affects the elimination of corticosteroids. Avoid concomitant ketoconazole, HIV protease inhibitors or other potent CYP3A4 inhibitors. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose/galactose malabsorption should not take this medicine. Regularly monitor height of children receiving prolonged inhaled corticosteroids. **Fertility, pregnancy and lactation:** Balance benefits against risk. **Undesirable effects:** *Common* - Cough and throat irritation, oropharyngeal candidiasis, difficulty in swallowing. *Rare* - Hypersensitivity reactions including rash, urticaria, contact dermatitis, angioedema and anaphylactic reaction, hypocorticism, adrenal suppression, growth retardation, depression, behavioural changes (mainly in children), restlessness, nervousness, hoarseness, dysphonia, bronchospasm, pruritus, erythema, bruising. *Very rare* - Cataract, glaucoma, decreased bone density. *Not known* - Psychomotor hyperactivity, sleep disorders, anxiety,

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