

Breathing Matters

E-publication of the Respiratory Programme

Kent Surrey Sussex

Edition 29
December 2015

We always remind you about winter planning earlier in the year, however in this issue teams from different parts of the care pathway write about their experience of SECamb's IBIS system. We hope these articles will encourage more of you to engage in this system.

NHS England quotes that 10% of admissions with AECOPD are new cases. The BLF have promoted work searching for the 'missing millions' and Kath Plumbe reports on one method of doing this: via the GRASP tool.

The subject of ordering oxygen in current smokers was discussed at the November 2015 [Respiratory Collaborative](#).

The home oxygen network are keen for regional guidance to be developed and we plan to support this work. Jim Pursell (London & SEC HOS Lead) gives us his personal take on this issue, do you agree with his stance?

And finally do you believe in Xmas? We are perhaps past that stage at Breathing Matters but there is still something magical about this time of year (sometimes...). But what about ACOS? Is there something magical about the way a new diagnosis appears to have been pulled out of a hat? Read on to hear two points of view. And if you have another viewpoint do let us know.

Although many of you will be contributing to patient care by working over the festive season we do hope you have time to relax and switch off for a little while. From all at Breathing Matters Merry Xmas and see you next year!

As ever comments, criticisms and suggestions are encouraged, email us at eva.lazar@nhs.net

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My PCRS-UK Northampton 16-17th Oct 2015

Dr Neil Banik

General Practitioner, South Kent Coast CCG

It was a great pleasure to be back at the PCRS-UK annual conference and catch up with the latest news and ideas with old friends and experts. The Primary Care Respiratory Society has a long track record of supporting clinicians based in General practice or the community, and attracts practice nurses/respiratory nurses/pulmonary physios and many GPs. Over the past year under **Steve Gaduzo** it has continued to work hard for better standards of respiratory care; updated educational modules on its website and continues to publish landmark free articles in *Nature*. <http://www.nature.com/npjpcrm/>

Some key areas the PCRS has been involved in over the past year:

National Review of asthma deaths [NRAD]

– with recommendations for primary care - <https://www.rcplondon.ac.uk/projects/outputs/why-asthma-still-kills>



National asthma audit

– working with asthma UK for structured asthma review and national standard template.

<https://www.asthma.org.uk/sites/healthcare-professionals>

Colour coding of inhalers

– the new generation of LAMA/LABA inhalers will NOT be coloured blue – to avoid confusion with the long standing convention that blue means a reliever inhaler.

Inhalers in schools

– a new law was passed so that schools from Oct 2014 can now hold salbutamol inhalers and give them to any child having an asthma attack. www.gov.uk/government/publications/emergency-asthma-inhalers-for-use-in-schools

The conference held detailed sessions on the

Emerging role of LAMA/LABA combi-halers

in COPD, separating out the asthma phenotypes; asthma-COPD overlap or ACOS and the interaction between physical and mental illness to name a few.

1. Dual LAMA/LABA inhalers in COPD

– where to place them? There is growing evidence and consensus from the experts that most COPD patients need a combination of non-steroid inhalers along with non-pharmacological therapies, like smoking cessation/pulmonary rehab/flu & pneumonia vaccines. The new LAMA/LABA dual inhalers allow

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us to get good symptom relief plus reduced exacerbations. High dose steroid inhalers may reduce exacerbations, but this comes at a price of doubling the pneumonia rate.

2. Can we step down ICS/LABA to just LABA

– in patients with better FEV1 >50% this can be done and seems quite safe too – even patients with more severe COPD have been stepped down – see the INSTEAD and OPTIMO trials.

http://www.researchgate.net/publication/281337633_Escalation_and_De-escalation_of_Therapy_in_COPD_Myths_Realities_and_Perspectives

3. Asthma sub-types do they matter?

With the increased use of exhaled nitric oxide [NO] testing by asthma clinics it has become more apparent that many asthmatics do not fall into the traditional

atopic/eosinophilic airway inflammation model. This may also explain the different response that patients have with step 3 asthma care.

4. ACOS where are we today?

Asthmatics can get COPD and vice versa - this overlap group does needs ICS as first line therapy.

5. The link between physical and mental health.

Fascinating talk by ex-RCGP president Iona Heath: poor mental health affects physical and of course we also see the converse everyday with our long term condition patients - 'can you rumple the jacket without rumpling the lining?'

Lots of posters were also on show – one project led by BLF caught my eye: that of sleep apnoea – creating community based clinics with direct access by primary care – which could free up huge

amounts of pressure on secondary care consultant led clinics; and also lead to reduced cardiovascular events and road traffic injuries. A detailed commissioning toolkit for the NHS has been created – <https://www.blf.org.uk/Page/OSA-toolkit>.

One can also look up facts/figures of your CCG area and service provision required with their online calculator –e.g. <http://calculator.blf.org.uk/brighton-and-hove>

The conference also held a **Mastermind quiz** for the speakers which was great fun and quite educative too!





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IBIS update

Kieran Cambell, Specialist Paramedic (Urgent & Emergency Care) Frequent Caller Lead

South East Coast Ambulance Service NHS Foundation Trust (SECamb) continues to develop its Intelligence Based Information System (IBIS) to improve how patients with long term conditions are managed when they need to call 999.

The IBIS system was initially commissioned in 2011/12 as SECamb was asked, under the CQUIN (Commissioning for Quality and Innovation) scheme, to enhance how we communicated with other parts of the health economy about the patients that we, as a provider, attended. We were also asked to develop a system for storing anticipatory care plans for patients with long term conditions in order to minimise the need to convey to hospital and therefore reduce admissions.

What emerged was IBIS. A fast and simple to use database which allows community specialist clinicians to upload data about their patient, along with specific care instructions. These instructions give the SECamb clinician additional context to their patients' care needs, and this can have a very positive impact on their conveyance decision making. For instance, knowing that, when well, a patient has low oxygen saturation, or how anxious a patient usually is, can really assist ambulance staff in deciding whether A&E is required, particularly where the 999 call relates to the patient's long-term condition.

One significant and hugely beneficial area where IBIS has been proven to have a positive clinical impact has been when used across Surrey Sussex and Kent within the respiratory speciality. An example of this has seen in-house hospital specialists utilise IBIS as an integral discharge tool, to facilitate those patients who are at risk of possible failure of discharge, whilst being managed within the community.



Tom Pullen

IBIS Clinical Leads:

Kieran Cambell Shirmilla Austin

The following respiratory teams are currently using IBIS:

- Maidstone & Tunbridge Wells Respiratory / Community Liaison Team
- Royal Surrey Hospital NHS Trust
- Sussex Community NHS Trust
- Virgincare West Surrey Respiratory Care Team
- Ashford & St Peter's NHS Trust

IBIS is showing consistently that in the presence of a detailed, high quality care plan, SECamb clinicians can contribute to care closer to home for patients receiving ongoing healthcare in the community.

Understanding the context to the patient's long terms health when they call 999 has a positive effect on decision making, and this means paramedics can avoid conveyance to A&E wherever safe to do so.

- Patients with an accessible care plan have a reduced risk of avoidable hospital admission
- The patient's care team know about each and every 999 call relating to their patients, and can act to prevent future problems
- IBIS has been active for over 4 years and there has not been a single untoward event
- Staff report more confidence to care for the most complex patients we attend

- The system can also notify the patient's health professional automatically in the event of a 999 call. This can be either by coded SMS to a mobile phone or Secure NHS.net email.
- IBIS also provides the SECamb clinician with contact phone numbers for both in-hours and out-of-hours periods
- Currently over 32,000 patient records available to be matched to incoming 999 calls
- Currently over 720 clinical teams from across the region registered to upload records

What makes a good care plan?

- Relevant
- Concise
- Kept up to date
- Considers the situation it is likely to be used in





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South East Coast Ambulance Service **NHS**
NHS Foundation Trust

How does the system actually work?

Whenever someone calls 999, the location details are entered into the CAD (Computer Aided Dispatch) system. The CAD contains a gazetteer which validates the address, which then generates a map reference and a postcode. Within IBIS, each patient has their postcode entered and it is the matching of a CAD postcode to an IBIS postcode which alerts the IBIS operator that there is a potential patient match for the location of the 999 call.

When a postcode match occurs, the next step is to match the street address and the house name or number. Once this has been matched positively, some demographic data is released and a final match can be made if the 999 call is regarding the patient on IBIS.

If a patient is successfully matched, the information left by the patient's health professional is passed to the attending crew. If the health professional who entered the record has opted to do so, they will receive notification by SMS or email to alert them to the 999 call. The SE-Camb clinician can also phone the patient's health professional on the phone number provided, to discuss the plan of care.

Can I see it in action?

To help demonstrate how IBIS works, we commissioned a short film showing a scenario, both with and without IBIS. You can view the film by following the YouTube link below:-

<http://www.youtube.com/watch?v=VByEYMjGcPA&feature=youtu.be>

The scenario in the film concerns a COPD patient, as we felt this demonstrates the potential of IBIS very effectively. We are currently commissioning a new film to ensure that we are up to date and accurate in line with clinical progression in this area of respiratory care.



Chris Mummy & Peter Glover
(IBIS Clinical Lead) (IBIS Educator)
at Engagement Session

How can I start using IBIS?

We are offering IBIS user accounts for any clinician who works for a commissioned health, social care or third sector provider in the South East Coast region and manages individual patient's care. The organisation needs to sign an Information Sharing Protocol first, which is a very simple process and may have already been undertaken in your organisation.

We can begin issuing user accounts. You can begin the process now by emailing us at IBIS@secamb.nhs.uk IBIS is a way of connecting a 999 call to a patient, which up to now has not been possible. We would like as many long term condition patients to be registered with IBIS as possible, as we want to ensure that their plan of care can be carried out, even if they call 999.

Patient Conditions Addiction (Drugs, Alcohol) Anaemia Angina Anxiety disorders Asthma Atrial Fibrillation Behavioural Disorders Bipolar affective disorder Cancer Catecholaminergic COPD CVA/TIA Dementia Depression Diabetes (Type 1) Diabetes (Type 2) Eating Disorders Emotionally Unstable Personality Disorder End of life Epilepsy Frequent Caller Frequent Fallers/Risk of Falling Heart Failure Hypertension Ischaemic Heart Disease Learning Disability Manic Episodes Motor Neurone Disease Multiple Sclerosis Neuro rehabilitation/paralysis Obsessive Compulsive Disorder Other (see history) Oxygen Alert Card with patient Panic Attacks Parkinsons Disease Psychotic illness Pulmonary Fibrosis Recurrent Urinary Tract Infections Renal Failure	1. Patient Details Session timeout: 15:02 First Name <input type="text"/> Surname <input type="text"/> Known As <input type="text"/> Phone <input type="text"/> NHS Number <input type="text"/> Date Of Birth <input type="text"/> Gender <input type="text"/> Team <input type="text"/> Ashford & St. Peters-Respiratory Team (north west)
	2. Patient Address House Name/Number <input type="text"/> Address <input type="text"/> Postcode <input type="text"/> Multi-Occy? <input type="text"/> N
	3. Patient's Surgery Find all surgeries with name or address containing: <input type="text"/> <input type="button" value="Search"/>
	4. Clinical Information Patient Consent Given? <input type="text"/> Allergies <input type="text"/> Clinical History and Associated Risks <input type="text"/> Clinical Instructions <input type="text"/>
	5. Notifications SMS at time of 999 call <input type="checkbox"/> Email at time of 999 call <input type="checkbox"/> Phone call at time of 999 call <input type="checkbox"/> SMS if conveyed <input type="checkbox"/> Email if conveyed <input type="checkbox"/> Phone call if conveyed <input type="checkbox"/> Secondary Notification (No Secondary Notification) <input type="text"/>
	6. Other DNACPR <input type="text"/> Personalised Advanced Care Plan <input type="text"/> Retire Patient after <input type="text"/> Document Upload <input type="text"/> None <input type="text"/> Never Retire <input type="text"/> Select PDF <input type="text"/>
<input type="button" value="Print Patient Details"/> <input type="button" value="999 Episodes"/> <input type="button" value="Save"/> <input type="button" value="Save & Exit"/> <input type="button" value="Quit without saving"/>	

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Impact of Intelligence Based Information System (IBIS) on Respiratory Patients' use of Secondary Health Care Resources

Julie Tollit, Clinical Specialist Respiratory Physiotherapist, Respiratory Care Team, Virgin Care, West Surrey and Stephanie Harlow, Clinical Specialist Physiotherapist ASPH (now Consultant Physiotherapist Royal Free Hospital, London)

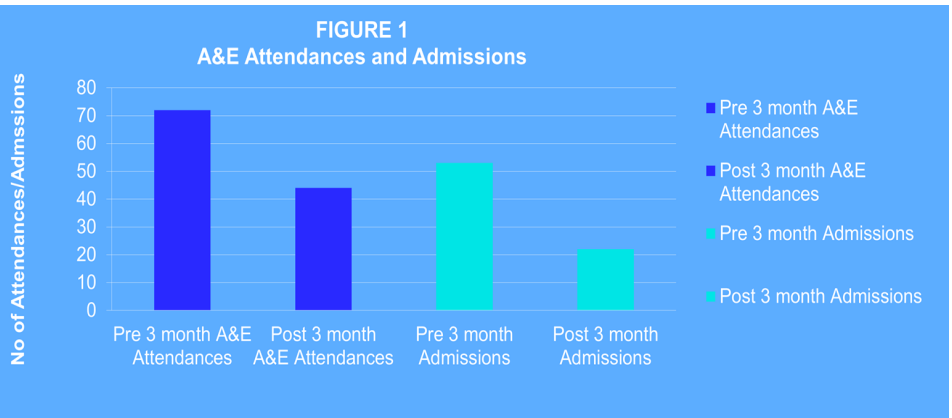


Julie Tollit

IBIS is a database developed by South East Coast Ambulance Service (SECAmb) to facilitate communication of individual patient care plans between SECAmb, primary care and secondary care. Its aim is to reduce the number of patients unnecessarily conveyed to hospital, (conveyance rate is a KPI for SECAmb). IBIS has two main functions: case management and clinical informatics. The case management function allows health care professionals (HCPs) to upload clinical instructions and management plans onto a safe, simple to use, web-based programme. Figure 1 shows a typical IBIS web page

SECAmb can then use this information to have a better understanding of the patient prior to arrival at the patient location. Clinicians who have entered patients on the system, in either or both primary and secondary care, are informed (via email or text) of all 999 calls and whether the patient is conveyed to hospital or not, which enables any appropriate follow up by the community HCP.

For example, Mr H called 999 because of increased shortness of breath. On assessment by paramedics on arrival he was found to have AECOPD, which was treated with oral antibiotics and steroids. The patient was very anxious. The Respiratory Care Team was informed and they were able to follow him up at home, with anxiety management and chest clear-



ance techniques. Mr H made a full recovery and did not need to be conveyed to hospital.

Virgincare and Ashford & St Peters NHS Foundation Trust joined forces to carry out an investigation aimed at establishing the impact of IBIS on respiratory patients' use of secondary care in our locality.

Data for all respiratory patients uploaded onto IBIS between May and November 2013 were included. Data collected from the Patient Administration System (PAS) included number of A&E attendances and admissions during the three months preceding, and three months after, patient care plans were uploaded to IBIS. Data were analysed with descriptive statistics and Wilcoxon Paired Test, utilising SPSS version 22. 65 patients were included in the analysis, with results as follows:

The bar graph shows the total actual number of A&E attendances and admissions to hospital, three months pre and three months post care plans being uploaded onto IBIS, and the reductions are clear. Due to lack of randomisation and variation over the year, however, one must be cautious about over-interpreting these results.

- There was a significant reduction in admissions ($p=0.011$).
- A reduction in A&E attendances was observed but did not reach significance ($p=0.064$).

- A sub-analysis of patients already utilising secondary care resources was undertaken. In this patient group a significant reduction in both A&E attendances ($p<0.0001$) and admissions ($p<0.0001$) was observed.

Our data showed, in this group of respiratory patients, use of IBIS was associated with a reduction in A&E attendances and admissions, with a more profound impact in those patients who had already utilised secondary health care resources.

Part of the beauty of the IBIS system is that it is both quick and simple to use. It can have a positive impact on the conveyance decision-making of ambulance staff, thus reducing unnecessary admissions. It also allows HCPs to provide timely follow-up of their patients who are not conveyed. This allows effective and appropriate management of patients with long term conditions.

This audit was presented at the Winter BTS conference 2014, and generated much interest and discussion surrounding how it could be introduced into other regions.

Reference:

SKM Harlow, J Tollit, MJ Irvin-Sellers, Intelligence based information system (IBIS) reduces respiratory patients' use of secondary health care resources, *Thorax* 2014 **69** (Suppl 2): Axxi P31



Finding the missing millions

Brighton and Hove's disease awareness campaign within a Respiratory Joint Working Project



Natasha Beckett

Background

In April 2015, North West Surrey CCG commissioned RespiCare Limited to undertake a case-finding initiative entitled the 'Early Identification of COPD Project'. The aims of this were to try to find patients currently attending a GP practice with undiagnosed COPD, to reduce health inequalities, to increase QoF COPD prevalence, to decrease prescribing costs and to promote long-term lung health.

Method

The method for undertaking this work was divided into two parts:

Part 1:

Patient Identification

Using the [GRASP external audit tool](#) to systematically identify 'at risk' patients. This involved a search being performed on GP patient data. Patients with certain risk factors were identified and a list was produced. This list was then scrutinised by the named GP in order to remove any inappropriate patients (e.g. palliative, housebound patients). A final list was then used to invite patients to a 'Lung Health Screening Check' at the local surgery.

Part 2:

Patient Review

RespiCare provided respiratory specialists to assess patients who attended their 'Lung Health Check'. This involved a thirty minute detailed assessment which included a subjective interview including CAT score, and objective tests such as spirometry and reversibility (if appropriate), chest auscultation, pulse oximetry, weight, height, blood pressure and heart rate. If possible a diagnosis was made;

if the patient was highly suspect for COPD they were referred for further investigations such as a chest X ray. A management plan was made by RespiCare and a handover was given to the lead GP at the end of each day.

The project targeted the most deprived practices in North West Surrey.

Results so far...

RespiCare have worked with 21 practices so far and are still working with a further 6 between now and the end of March. The total number of patients who have been reviewed to date is 850.

Of the appointments booked there was a 5% DNA rate. 62% of the patients seen were female, 38% male. The age ranges of patients who attended can be seen below:

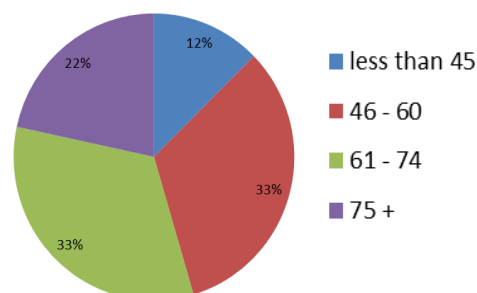


Diagram 1: Percentage Distribution of Patients Age Ranges

49% (431 patients) of the patients seen so far had a respiratory disorder. 30 patients were confirmed as not having COPD despite having risk factors. Diagram 2 shows the differential diagnoses. Where patients were deemed 'highly suspect for COPD' they were referred on for further investigations.

The combination of COPD diagnosis and the number of patients identified as being highly suspect awaiting chest X ray was 29% of the people seen so far. 76% of the patients screened were, or had been, a smoker. Of the people diagnosed with COPD, 9% were less than 45 years of age, 23% were between 46 and 60, 37% between 61 and 74 and 31% were over 75 years old. This meant we were able to identify a significant number of young

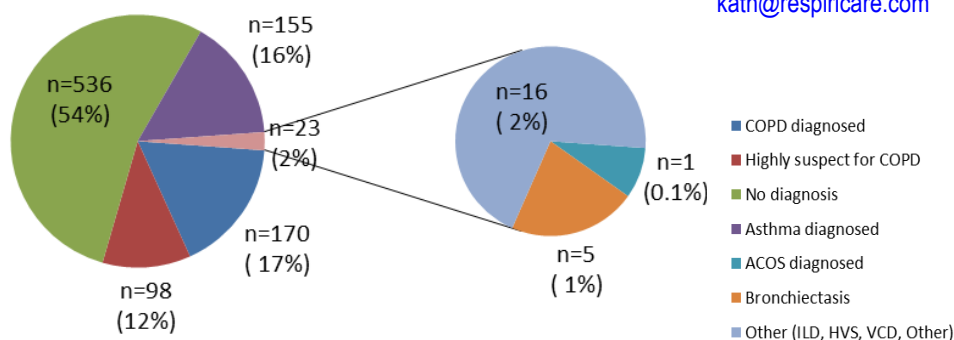


Diagram 2: Percentage Breakdown for Diagnosis



Kath Plumbe

patients in the early stages of the disease process. 60% of the patients seen had an MRC score of 4 or 5 so they were very symptomatic.

QoF

If patients were identified as having COPD or asthma a full QoF review was undertaken. So far 298 patients have had this completed.

Smoking Cessation

81% of smokers seen were referred to the stop smoking service and 62% accepted the referral. 38% declined.

The project is on budget and has received excellent feedback from clinicians and patients.

Next Steps

RespiCare will complete all the reviews by the end of March 2016 and will formally write up the results.

It has been so rewarding to be involved in a proactive initiative which has actively looked for and found some of the 'missing millions'. If you would like more information regarding the project please contact Kath Plumbe via email.

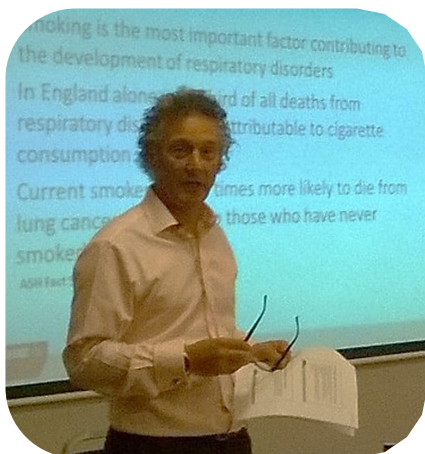
kath@respicare.com



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Viewpoint: Prescribing Oxygen for smokers

Jim Pursell, Home Oxygen Contract Manager London and Kent, Surrey Sussex



For the record, I hold the view that smokers should quit their addictive habit to improve their respiratory condition long before home oxygen supplies are given. Where they need the NHS should assist with smoking cessation. I have found very few clinicians that individually disagree with this stance.

But if you take the matter to a committee then the discussion very quickly turns to matters of human rights, medical ethics and research papers. This subject is an ethical minefield, full of strong opinions, legal concerns and a dearth of good clinical evidence to persuade the case for or against; what we need is a knock-out blow.

About the research

Let's walk you through the clinical trials that underpin the use of oxygen in Long Term Oxygen therapy (LTOT) as a treatment for COPD, but the following revelations seem worthy of note at this point:

- **MRC trial LTOT in COPD** - 43% were smokers
- **NOTT paper** - 38% of participants were smokers

And to pick through the bones, the studies showed that oxygen is helpful as a treatment for patients with COPD probably irrespective of the patient's smoking status. It is also interesting that both studies recommended that patients stopped smoking but many of them did not achieve smoking cessation.

Where does this leave us? Well these findings now hog-tie any opportunity to undertake further studies that could properly evaluate the relative advantages for either group.

But there is art to medicine as well as science.

Aren't we hunting for data and research to back up what we already know?*

As a result are we leaving patients at risk by not showing the leadership that is needed?

A bit about smoking

We do have very good evidence that smoking is bad for our health. We can confidently say that smoking is the number one cause of many respiratory, as well as other, diseases. The public haven't studied the research but they do know this too. Anti-smoking education has also formed part of the school curriculum for over 30 years. What non-smokers may not know is that smoking is quite a hard habit to pick up; youngsters have to be very determined to keep with it. Aside from the coughing and retching, then ridicule and ire of the family, teachers and the virtuous, the new smoker must overcome the financial and sometimes logistical challenges to establish their new hobby. And then having shown a level of determination to overcome the initial challenges, the habit is established and, like many addictions, very difficult to quit.



And so, as the smoker develops in their career into adulthood, often parenthood and subsequent middle age, it should come as no surprise that the irritating cough becomes more productive and the consequential respiratory diseases** take hold.

The downward path

A difficult few nights of breathlessness, reduced respiratory performance and anxiety attacks lead our smoker to the A&E department where the desperate patient is admitted and treated for their acute condition that has arisen from their smoking.

Within days the patient recovers sufficiently to be going out of the ward at regular points during the day and coupled with bed-pressures, they become an obvious target for a rapid discharge home. All too often the junior team make little referral to expert opinion and make the discharge arrangements, including the first supply of oxygen. With barely a mention on the discharge summary, the stock is ordered, the patient departs and the scene is set for their own potential mini-disaster.

What most people are unaware of is how low-key the transition can be from an independent and happy go lucky smoker to an encumbered COPD sufferer with their first oxygen supply whilst still smoking.

The risks of burns

Oxygen users are coming to harm through smoking whilst using their oxygen therapy. Newspapers are picking up with greater frequency the relationship between cigarettes and home oxygen burns and e-cigarettes and explosions. Below are some of the links.

Dog died from lung cancer 'caused by grandmother's second hand cigarette smoke' <http://www.mirror.co.uk/news/uk-news/dog-died-lung-cancer-caused-5392808>
Chiswick — fire an possible explosion http://www.londonfire.gov.uk/LatestIncidentsContainer_31Dec1395.asp
Firefighters issue e-cigarette advice after number of fires sparked by devices http://www.wimbledonguardian.co.uk/news/11576661.Firefighters_issue_e_cigarette_advice_after_number_of_fires_sparked_by_devices/
Home oxygen and domestic fires <http://breathe.ersjournals.com/content/11/1/4>
Inside the Ethics Committee — treating smokers <http://www.bbc.co.uk/programmes/b04cfgrg>
Case study — Difficulties in withdrawal of home oxygen therapy (presentation) http://www.poct.co.uk/File/Healthcare_Professionals_User_Area/i-STAT/Presentations/Difficulties_in_withdrawal_of_home_oxygen_therapy_-_Julie_Danby.pdf
Smoking and home oxygen therapy — a deadly combination <http://www.humbersidfire.gov.uk/newsroom/news/smoking-and-home-oxygen-therapy-a-deadly-combination>

Should oxygen be prescribed for smokers?

Let us ask this question in a different way. Would NHS resources be better spent on helping patients quit smoking before we add the risk of an oxygen supply?

I wonder what the public opinion would be on this matter when considering a patient that has smoked their way to infirmity and arrived at the hospital asking for help?

Clearly the help they need is immediate medical remedy, but also the knock-out blow that finally they have smoked enough to need to recognise the need to stop. Smokers have already demonstrated a determination to become a smoker and now many will need medical support to stop the habit.

Smoking cessation is treatment of the addiction of smoking and the first step to improving respiratory health is to stop smoking.

It seems to me that the general public are with this message and have been for 30 years. Many of the smokers are ready to hear it; we just need to persuade the clinicians!

* <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2111193/> Y Lacasse, J LaForge, F Maltais (May 2006) Got a match? Home oxygen therapy in current smokers. *BTS Thorax*.
 D Görecka, K Gorzelak, P Sliwiński, M Tobiasz, J Zieliński (1997) Effect of long-term oxygen therapy on survival in patients with chronic obstructive pulmonary disease with moderate hypoxaemia. *BTS Thorax*

**Other smoking related diseases are available

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Do you believe in ACOS?

Jo Congleton

Consultant Respiratory Physician and Clinical Lead, Respiratory Programme KSS AHSN



Next year will be 50 years since the birth of the phrase COPD (Chronic Obstructive Pulmonary Disease) and it has taken all that time for some die-hards to feel familiar with the term. Just when we are all comfy with it another four letter acronym comes along! Opinions have been divided as to whether to label patients with chronic airflow obstruction secondary to asthma as COPD or not; personally I don't, but it is an accepted practice. (If you do there is a READ code which allows for a diagnosis of both COPD and Asthma). Some patients do happen to have both – they are both common conditions so this is not too surprising.

So what is Asthma COPD Overlap Syndrome (ACOS)?

The thinking is that there are patients who clearly have asthma with no features of COPD and patients with clear features of COPD with no features of asthma, but that there are also many patients with features of both who are best served by a unifying diagnosis – ACOS. This clinical entity is more common in the older age group. Airway inflammation in asthma is predominantly eosinophilic, with a TH2 driven cytokine response (see box). Airway inflammation in COPD is predominantly neutrophilic, with a CD8 lymphocytic response. However it is now recognized that neutrophilic airway inflammation may occur in patients with longstanding asthma, particularly if there is a smoking history; also, that a subgroup of patients with COPD have eosinophilic airway inflammation. There is increasing evidence that COPD patients with eosinophilia benefit from ICS treatment significantly more than other groups of COPD patients, since eosinophilia is more responsive to steroid therapy than neutrophilia.¹



GINA and GOLD have joined forces to produce a joint statement on the condition²:

http://www.ginasthma.org/local/uploads/files/ACOS_2015.pdf

Although the statement does not give a clear definition of ACOS, one working definition has been suggested as 'The overlap of asthma and COPD is diagnosed when a patient has the defining characteristic of COPD, namely incompletely reversible airflow limitation as well as features of asthma'³.

<i>Clinical features of COPD versus Asthma</i>	COPD	Asthma
Smoker or ex-smoker	Nearly all	Possibly
Symptoms under age 35	Rare	Often
Chronic productive cough	Common	Uncommon
Breathlessness	Persistent and progressive	Variable
Night time waking with breathlessness and/or wheeze	Uncommon	Common
Significant diurnal or day-to-day variability of symptoms	Uncommon	Common

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Is there another point of view?

Other commentators have branded 'ACOS believers' as using a term akin to a demented lettuce!⁴. The esteemed authors of that editorial feel that the umbrella terms, asthma and COPD, have long outlived their usefulness. They and others⁵ recommend characterising patients with airways disease in more detail rather than lumping them together in three large groups. They argue that by characterising each component of the disease in each patient, a more personalised approach to management will be possible.

Why ACOS?

So what is the thinking behind creating this new diagnosis? Proponents argue that the significant proportion of patients who have features of both asthma and COPD have increased symptoms and poorer prognosis than patients with either chronic asthma or COPD. In addition, trials of asthma

and COPD therapy to date have excluded these patients, so we do not have evidence based therapies to use until such trials are carried out. The diagnostic approach that is suggested in the GINA/GOLD document is:

- Assess whether the patient has features that fit well with asthma as a single diagnosis.

- Assess whether there are features that fit well with COPD as a single diagnosis.

If there are features of both then the diagnosis would be ACOS.

- Spirometry is required to confirm the presence of airflow obstruction.

How common is it?

Because the 'condition' has not yet been clearly defined it is hard to answer this question. Studies have been carried out in varying populations using varying diagnostic criteria and the prevalence in patients with respiratory symptoms is quoted at between 15% and 55%.

Does a diagnosis of ACOS alter treatment plans?

The GINA/GOLD report recommend commencing treatment as for asthma if a diagnosis of ACOS is made, essentially this means commencing inhaled corticosteroid (ICS), though not at the high doses which have been licensed for COPD. The vast majority of patients would also require addition of a long acting bronchodilator and here the guidelines suggest either a LABA or LAMA. The report suggests that LABA monotherapy should be avoided for ACOS (as for asthma). So the main difference in therapeutic approach to asthma is the use of LAMA at an earlier stage. And the main difference compared to COPD is the use of lower doses of ICS. The report does state that ACOS is not a single disease and includes patients with different forms of airways disease (phenotypes). It states also that we are in the early stages of understanding the condition. Will the diagnosis of ACOS take off or will it fade into obscurity? Only time will tell, but in the meantime it gives us something else to ponder and take a view on.

Cytokines are the hormonal messengers responsible for most of the biological effects in the immune system

T lymphocytes are a major source of cytokines.

There are two main subsets of T lymphocytes: CD4 and CD8

The CD4 subset can be further divided into TH1 and TH2 cells

The cytokines produced by Th2 lymphocytes include interleukins 4, 5, and 13, which are associated with the promotion of IgE and eosinophilic responses in atopy

Read more here: *BMJ* 2000; 321 doi: <http://dx.doi.org/10.1136/bmj.321.7258.424>

CD8 lymphocytes

CD8 T cells (Killer cells) are very important for immune defence against intracellular pathogens, including viruses and bacteria, and for tumour surveillance.

When stimulated they secrete the cytokines TNF- α and IFN- γ , which have anti-tumour and anti-viral microbial effects.

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Breathing Matters



KSS Responsible Respiratory Prescribing Messages – we want your feedback!



Helen Marlow

Lead Primary Care Pharmacist and
NICE Medicines and Prescribing Centre
Associate, Surrey Downs CCG

In 2012 the South East Coast Respiratory programme developed **5 prescribing principles** and some key prescribing messages, to provide non-respiratory specialists with some top tips on managing asthma and COPD. The messages were designed to support the **Right Care** approach of maximising value:

- **The value that the patient derives from their own care and treatment**
- **The value the whole population derives from the investment in their healthcare**

The challenge for the NHS is to get 'more for less' in an era of "no more money". To do this, the NHS needs to shift from *lower* value interventions to *higher* value interventions



The KSS Respiratory Expert Advisory Group (REAG) felt now would be a good time to review and update these messages. The group agreed that the messages, as before, should include asthma as well as COPD, and include some specific messages about prescribing and using inhalers. The proposed updated messages have been discussed at the REAG and at an AHSN organised workshop on medicines optimisation in COPD, that included a wide range of stakeholders, including a whole table of patients. Included below are our proposed responsible respiratory prescribing messages, and we'd like your feedback and comments on what you think of the messages and how they might be used locally. Would you like them in a bookmark, on a slide set, in a patient friendly format, or any other suggestions?

Please email your comments and feedback to:
eva.lazar@nhs.net

Asthma

Do the right things:

Smoking cessation improves asthma control

Personalised asthma action plans improve outcomes and may reduce readmission rates

Prescribe according to the [guidelines](#)

Do the right things right:

Titrate dose of **inhaled preventative therapy** (up and down), to optimise asthma control and minimise risk of side effects

Educate patients to understand the difference between their preventer and reliever therapy

Check adherence to preventer therapy, consider if combination product would suit patient better

Know the equivalent dose of ICS when changing to a combination inhaler

Use an ICS patient safety card in patients on high dose ICS

Refer to specialist services if control is not achieved

COPD

Do the right things:

Smoking cessation is effective, it reduces exacerbations and slows progression of COPD

Flu vaccination reduces the risk of COPD exacerbations

Pulmonary rehabilitation reduces admissions and health care resource use, improves exercise capacity and health related quality of life

Aim to implement all of above before considering stepping up therapy

Prescribe according to [guidelines](#)

Provide individualised self-management plan and exacerbation rescue pack, to patients with COPD exacerbations

Do the right things right:

Undertake a 'trial of treatment, for treatments aimed at reducing symptoms', and don't be afraid to discontinue if symptoms aren't improved

Use an ICS patient safety card for patients on high dose ICS

Reserve ICS for more severe COPD and frequent exacerbation patients, to minimise risk of harm and optimise benefit

Inhalers

Do the right things:

With the patient, decide the best device for them, assess their ability to use, let them see, touch and feel the inhaler, then describe, show and provide written information

Do the right things right:

Ensure correct inhaler technique; most patients don't know how to use their inhaler and many health care professionals who teach the use of MDI cannot demonstrate it correctly

Use a spacer: when using an MDI correctly a max of 15% of the drug enters the lung. With a spacer this can be increased up to 30%

Prescribe inhalers by brand, so patient receives correct inhaler device

Rationalise inhaler devices for an individual patient, avoid mixing too many different inhaler types

Re-check inhaler technique and retrain patients often, inhaler technique deteriorates over time; lots of patients think they are using their inhalers correctly when they are not

Breathing Matters



Acute NIV Competencies Project Update and Xmas competition

Eva Lazar, Improvement Coordinator KSS AHSN

The Kent Surrey Sussex Acute NIV Competencies Project was introduced in the last edition of *Breathing Matters*. On the 27th Nov the project board meeting welcomed many Acute NIV Clinical Leads and Champions to meet and discuss two important items:

I. NHS Commercial Solutions has a CPAP and a BiPAP framework with a maximum life of 4 years. By law the current agreement needs to be replaced with a new one.

Aitor Cisneros (NHS Commercials) invited the NIV specialist clinicians to comment on the CPAP and BiPAP framework, thus help to get the specifications and the pricing right. If you would like to contribute please contact aitor.cisneros@nhs.net or eva.lazar@nhs.net

II. Andi Blackmore from eLearning for Healthcare was introduced: Andi is project managing the production of the Acute NIV E-learning sessions in collaboration with the **NIV Champions**, representing each acute trust in the region:

1. Introduction to ventilation
Marie Dormer/Steve Hunter (BSUH) and **Deb Dykes** (WSHFT)

2. Selection of patients for NIV
Meagan Whelan (QVH)

3. Set up
John McShane (SASH)

4. Monitoring
Debbie Higgs (EKHUFT)

5. On-going management and escalation
Jane Kindred/Dr Lisa Vincent-Smith (MFT)

6. Palliation
Leigh Hughes (ASPH) and **Nicole Ross** (FH)

The sessions will be subjected to multiple reviews: internal eLfh reviews as well as clinicians' review for clinical accuracy. The final modules will be published on the eLfh web-portal (hub) and will be accessible via the ESR (NLMS), with the potential to



The Acute NIV e-learning session series will be marketed by eLfh and we are looking for suggestions for a catchphrase and/or a witty strapline and a title.



If you have an idea, please **enter our Xmas Competition to win a bottle of bubbly:** send your suggestions to eva.lazar@nhs.net

be made available nationally (in the future). Andi Blackmore showed the project board the look of a finished product – to see an example, please visit eLfh website <http://www.e-lfh.org.uk/home/> The project board discussed options regarding how the impact of the e-learning sessions could be evaluated and supported by data. In particular, pro and contra of the inclusion of patient experience measures were debated: it was agreed that this is something to look into in the future.



NIV in MND



Dr David Oliver, Dr Sandip Banerjee and Dr Lisa Vincent-Smith, Wisdom Hospice, Rochester, UK, explain the background to their longer article published

in the July/August edition of the *European Journal of Palliative Care*. Their research shows how a multidisciplinary collaborative approach enables **patients with motor neurone disease** to be cared for, and die, in the place of their choice.

With increasing use of non-invasive ventilation (NIV), a closer relationship between the hospice, the MND team and the respiratory services has evolved. This has developed over the past three years – we now hold joint clinics, with both palliative medicine and respiratory consultants seeing patients together when considering whether to start NIV and in subsequent monitoring. Two junior doctors, who were interested in palliative care and neurology, undertook the audit. They looked at the notes of the 23 people who had died under the care of the team over a period of three years. The average time from the first symptom to death was 24 months, but this ranged from one to 84 months. Twenty-two per cent of the patients had a percutaneous endoscopic gastrostomy

inserted as they had developed swallowing problems. Sixteen patients were tested for respiratory problems and six started on NIV.

They were usually started on NIV and supported at home by the specialist respiratory nurse and seen in the joint clinic. The proportion of people starting NIV – 26% – was higher than found across the UK and similar to several larger MND centres. They continued with NIV until death. Of all the patients, 56% had expressed their views on their end of life care in the form of an Advance

Decision to Refuse Treatment, but only one of the six people on NIV had done so.

Of all the patients, 65% died at home, 22% died in the Wisdom hospice and 13% died in hospital – following an emergency admission for pneumonia, after a collapse at home or after being transferred back to the UK following a tracheostomy abroad. It seemed that we met the preferred place of death for 20 patients (87%).

This audit supported that the work we were doing was effective, but it did show that there was a need

to be more proactive in discussing advance care planning, especially with people starting on NIV. The regular reviews in the joint clinic, together with the community team, have allowed us to be proactive in providing treatment, have reduced hospital admissions and length of stay and allowed patients and their families to be cared for, and die, where they wished.

This multidisciplinary collaborative approach, based on national standards, has allowed patients with MND to be managed locally, avoiding long distance travelling to tertiary respiratory units. This may be an example for others, as we all need to develop a more collaborative and multidisciplinary approach to patient care.

For more information about the project, please email J.Oliver@kent.ac.uk



This text relates to a longer article, 'Non-invasive ventilation in motor neurone disease', by Imogen Nixon, Faustina Popkiewicz, Sandip Banerjee, Lisa Vincent-Smith and David Oliver, published in the July/August 2015 issue of the *European Journal of Palliative Care* (vol. 22.4). If you have a web-based subscription to the journal you'll be able to download this issue, plus all articles in the journal archive. You can also browse the archive and download articles by taking a 10-minute or 30-minute subscription. Members of the EAPC receive discounted subscription rates to the journal – [click here](#) to subscribe online.



Pulmonary Rehabilitation: Time to breathe better



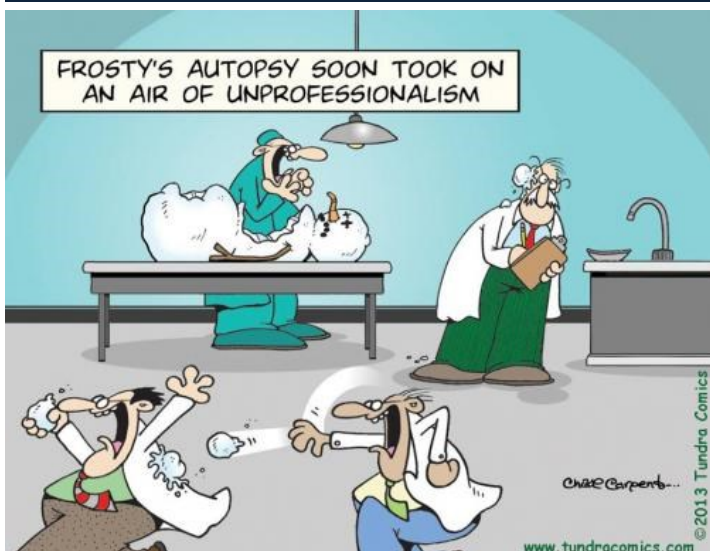
This audit report on the resources and organisation of PR services is the first comprehensive national audit of PR provision anywhere in the world, and it offers insight into the quality and quantity of provision of 224 programmes.

The information, key findings and recommendations outlined in the report are designed to provide readers with a basis for identifying areas in need of change and to facilitate development of improvement programmes that are relevant not only to Pulmonary Rehabilitation programmes but also to commissioners and policymakers.

<https://www.rcplondon.ac.uk/projects/outputs/pulmonary-rehabilitation-time-breathe-better>

'...as with other services, much of what is commissioned is for the short term and often temporary. It would be more sensible, as with other similar services, to commission longer duration contracts to allow programmes to mature and conclusively demonstrate their effectiveness. Hopefully this audit report will encourage that transformation.'

Prof Mike Morgan
National Clinical Director for Respiratory Services in England



Events Calendar

Pulmonary Rehabilitation Network

Tue, 1st Mar 2016, The Charis Centre, Crawley

Oxygen Network

Tue, 19th Apr 2016, The Charis Centre, Crawley

KSS AHSN Respiratory Collaborative

Tue 10th May 2016, Crowne Plaza, Gatwick (Crawley)

For updates please visit:

<http://www.kssahsn.net/what-we-do/service-improvement/KSS-respiratory-programme/Pages/default.aspx>



Sussex Practices RespIratory iNterest Group (SPRING)



This nurse group has been affiliated to PCRS for nearly four years and Fiona Thorpe is inviting local colleagues interested in meeting up—the next meeting will be held in April 2016 - do get in contact with

Fiona Thorpe

Practice Nurse, Buxted Medical Centre, NHS High Weald and Lewis and Havens CCG

fiona.thorpe@nhs.net

Find out more about what goes on in the world of respiratory care, beyond our region, visit



<http://www.respiratoryfutures.org.uk/>

Breathing Matters online/by email

If you wish to receive this newsletter quarterly by email, please contact eva.lazar@nhs.net
For previous editions visit <http://www.networks.nhs.uk/nhs-networks/south-east-coast-respiratory-programme> or <http://www.kssahsn.net/what-we-do/service-improvement/KSS-respiratory-programme/Pages/Breathing-Matters-newsletter.aspx>

Kent Surrey Sussex Academic Health Science Network

