Breathing Matters
E-publication of the Respiratory Programme
Kent    Surrey    Sussex

Edition 32
October 2016

We are proud of Breathing Matters but are keen to keep up with the times and are considering changing the format. We will be sending out a SurveyMonkey link for your view soon, please do respond, so we can aim to meet your wishes, (we promise to keep it short!). Respiratory Futures is a national e-resource which pulls in lots of helpful respiratory information and links, Aileen Muir explains more, do try it out. And while we are all about the modern, Vinesh Patel - a CMT trainee - tells us about an initiative using modern ways that can provide information to patients; he is keen for us to share, so read about HealthSketch, on page 2 then spread the word.

Is it just me, or do other colleagues who are rather long in the tooth get the feeling of GroundHog day when it comes to oxygen prescribing? I am not convinced I see any real improvement in the management of respiratory failure in my day to day work. You may have read the recent paper in ‘Clinical Medicine’ which used wristbands to aid prescribing. In our region Ashford & St Peter’s Hospitals have used a similar approach - Melanie Irvin-Sellers tells us how it went. Something that has come out of the EQ pneumonia and COPD discharge bundle work is that there is sometimes a disconnect between the clinician’s diagnosis and the coded primary diagnosis. It has taken me a while to rid myself of the (bad) habit of using terms such as ‘impression’ and ‘ABPA’ in the medical notes. Denise Blackman explains why this surely was a bad habit, and how the coding process works. The acute NIV project has been a great example of collaborative working. The ‘official’ launch was planned for 12th September but was re-arranged due to the planned, and unplanned, junior doctor’s strike (the 2nd time a NIV event has been affected in this way). The new ‘launch’ date is 2nd November, Lisa Vincent tells us how it went. Something that has involved in trialling an innovative idea to encourage safer administration of oxygen.

Medical Oxygen is a drug which, without an individual prescription or with inappropriate provision, carries a potentially fatal risk. The British Thoracic Society (BTS) runs an annual National Oxygen Audit that we, the respiratory department at St Peter’s, partake in. The national results prove that oxygen prescriptions, and its consequent monitoring in secondary care, are insufficient. Our results in St Peter’s were not discouraging, but there was certainly room for vast improvement. We were above national average for oxygen prescribing and monitoring on nursing rounds, however we were below peers for patients being within their target oxygen range (this is for our COPD patients requiring target saturations of 88-92% and all others 94-98%).

In previous years there have been a number of educational methods introduced to enhance oxygen prescription, monitoring and titration. The Trust has both face-to-face and on-line educational methods as part of induction training for all doctors, nursing staff and healthcare assistants. Throughout the years this has proved to be successful in improving oxygen administration and titration,1 but we hit a plateau with no further improvement.

What we needed was something different, something innovative, a visual cue that was brightly coloured; similar to the patient identification bands that alert nurses to allergies. That’s when we came up with our brightly coloured orange alert bands marked with ‘Target SpO2 88-92%’. We ordered and introduced these in October 2013.

These bands are effective, easy to use and passed the scrutiny of the infection control team. Our audit results showed significant improvement, such that nurses recordings during routine observation rounds were marked on the drug chart and, as a consequence, more patients had their oxygen titrated to maintain saturation within their prescribed target range2.

We have been continuing to use these bands on our respiratory ward since 2013 and have now also introduced a bright blue band ‘Target SpO2 94-98%’ for our non COPD patients. Our patients feel safer and have a better understanding about their oxygen while in hospital.

The patients with COPD have been continuing to wear their bands after discharge which, anecdotally, has ensured safer administration of oxygen by paramedics if they happen to be conveyed to hospital on future occasions.

See references on page 2

An Innovative Idea to Improve Oxygen Prescribing and Monitoring
Dr Melanie Irvin-Sellers, Consultant Respiratory Physician Ashford & St Peter’s NHS Foundation Trust

In October 2013 the patients on Aspen ward, St Peter’s Hospital in Chertsey, were involved in trialling an innovative idea to encourage safer administration of oxygen.

In previous years there have been a number of educational methods introduced to enhance oxygen prescription, monitoring and titration. The Trust has both face-to-face and on-line educational methods as part of induction training for all doctors, nursing staff and healthcare assistants. Throughout the years this has proved to be successful in improving oxygen administration and titration,1 but we hit a plateau with no further improvement.

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See references on page 2
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HEALTHSKETCH: Informing patients about COPD using digital media
Dr Vinesh Patel, CMT2 Trainee, Royal Sussex County Hospital, Co-founder, health-sketch.com

Getting the right information about COPD to patients, their families and the wider public can be challenging. Patients can find it difficult to remember information from their doctors, and families don’t always get the chance to ask all the questions they have about the condition. To many in the wider public, COPD remains an illness that isn’t well understood. For what is often a life-changing disease that is in most cases preventable, it is important that people know more about COPD in a way they can access and understand.

Modern technology and social media offers an opportunity that my colleagues and I have used to try and inform the general public about COPD. Nowadays, so many people get their health information from the Internet and want it in a form that they can easily understand and access. Looking at this reality, my junior doctor colleagues and I wanted to go beyond the main websites to try and produce a modern video about COPD to get the key messages to as many people as possible.

As part of a series of health videos in a project called HealthSketch, we have made a “whiteboard” style animation video about COPD lasting just over 5 minutes. “Whiteboard” is a format made as if someone is drawing illustrations on the screen to explain things, alongside a friendly voiceover that has become an increasingly popular way of bringing learning to people. In our video we cover all the main aspects of COPD - the causes, diagnosis, the treatments, prognosis and living with the illness. We have gone with our theme of realistic but positive information that is at the right level of detail and that gives people the basic understanding of the disease. Uploaded recently to Youtube, the video is currently approaching 10,000 hits – and we want to get more people to have the opportunity to use it.

We have had a great deal of positive feedback online but are keen to have the video more widely seen and used in clinical practice. That is why writing about the video in this edition of Breathing Matters is something we feel very positive about. Whether shown in a consultation, shared with patients at a group session, written on a leaflet, or shared on Facebook, we are keen on getting as many shares of our video link as possible.

Further to our COPD video, we have produced a video on idiopathic pulmonary fibrosis that is due for release in the next month. You can find all our content on our YouTube channel Healthsketch: https://www.youtube.com/channel/UCE2GdTW2WVCzqHF5otvgQ

We hope you enjoy them and look forward to hearing your thoughts on how we can use them to inform the general public better.

Editors comments
This is a very accessible video, very engaging and simple to understand; many of us would prefer to see the emphasis on PR earlier in the treatment options and the use of oxygen mentioned later, and perhaps a slightly more realistic view of PR content – e.g. not many PR programmes actually offer counseling...

References (Continued from page 1)

The definition of clinical coding is the translation of medical terminology that describes a patient’s complaint, problem, diagnosis, treatment or other reason for seeking medical attention into codes that can then be easily tabulated, aggregated and sorted for statistical analysis in an efficient and meaningful manner (Ref: National Clinical Coding Standards ICD 10 5th Edition (2016) NHS Clinical Classification Service).

The translation of the medical terminology is performed by a health informatics professional, known as a Clinical Coder. The majority of Clinical Coders will hold Accredited Clinical Coder (ACC) status – a recognised qualification in this field, or be working towards achieving the qualification. Clinically coded data is used to support financial reimbursement, such as Payment by Results, as well as morbidity and mortality peer and national benchmarking analysis, such as Hospital Standardised Mortality Ratio (HSMR) and Summary Hospital-level Mortality Indicator (SHMI).

The coded data, however, will only be as accurate and robust as the documented clinical information. Using the case notes/electronic health record, the clinical coding team extract, analyse and interpret the clinical information, assigning the corresponding ICD 10 (diagnoses) and OPCS 4 (procedure and intervention) classification codes; it is essential, therefore, that clinicians and their teams ensure the documentation is an accurate reflection of the factual clinical state of the patient. The rules governing clinical coders state that test results must not be interpreted by the coder to arrive at a diagnosis; this is the role of the responsible consultant (Ref: DGCS.4 Using diagnostic test results, National Clinical Coding Standards ICD 10 5th Edition (2016), NHS Clinical Classifications Service).

The single most frequent issue we encounter with respiratory patients is that the clinical interpretation of blood gas printouts is not documented, and therefore conditions such as respiratory failure cannot be coded, having a significant impact on finance and data quality.

*Market Forces Factor (MFF) is an estimate of unavoidable cost; differences between health care providers, based on their geographical location. The MFF is used to adjust resource allocations in the NHS in proportion to these cost differences, so that patients are neither advantaged nor disadvantaged.

Example 1
A 70 year old male patient with known COPD is admitted as an emergency. He is diagnosed with an acute exacerbation. The blood gas results identify that he is in respiratory failure; however the results are not translated into a formal diagnosis.

<table>
<thead>
<tr>
<th>Primary diagnosis</th>
<th>J44.0 COPD with acute lower respiratory infection</th>
</tr>
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<tbody>
<tr>
<td>Secondary diagnosis</td>
<td></td>
</tr>
<tr>
<td>HRG Description and value</td>
<td></td>
</tr>
<tr>
<td>COPD or Bronchitis, without NIV, without Intubation, without CC</td>
<td>DZ21K £1,565 (excl MFF*)</td>
</tr>
</tbody>
</table>

Example 2
A 70 year old male patient with known COPD is admitted as an emergency. He is diagnosed with an acute exacerbation. The blood gas results identify that he is in type 2 respiratory failure, which is formally documented as a clinical statement on the electronic discharge notification (EDN). The inclusion of the ICD 10 code representing respiratory failure has resulted in a higher value Healthcare Resource Group (HRG) being legitimately generated.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Secondary diagnosis</td>
<td></td>
</tr>
<tr>
<td>HRG Description and value</td>
<td></td>
</tr>
<tr>
<td>COPD or Bronchitis, without NIV, without Intubation, with Major CC</td>
<td>DZ21H £2,765 (excl MFF*)</td>
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</tbody>
</table>

To aid Clinical Coding Teams in the capture and creation of accurate data, clinicians are asked to:

- Write clearly and legibly in the case notes or enter precise information in the supporting electronic system
- Date every entry and clearly state when a handover of care has taken place
- Document all relevant comorbidities – clinical coders are not allowed to assume chronic pre-existing conditions from a list of medications
- Clearly identify the main condition being treated or investigated throughout the episode of care
- For patients admitted with injuries or poisonings, remember to state the cause of the injury or medicaments (including alcohol) responsible for the poisoning, also stating manifestations arising from the poisoning
- Avoid the use of terms such as ‘impression’, ‘likely’ or annotating a condition with ‘?’ – this would result in presenting signs and symptoms being coded.
- Use terms such as ‘treat as’, ‘presumed’ or ‘probable’ to identify conditions that are being treated as a clinical picture (without the benefit of imaging, histology or cytology)
- Interpret all significant findings, identified through clinical results, into actual diagnoses
- Avoid the use of ambiguous abbreviations – MS could mean multiple sclerosis or mitral stenosis
- Document the use of image control for procedures and interventions

*These and other tips can be found contained within the Top ten tips for coding: a guide for clinical staff © Royal College of Physicians 2007

https://www.rcplondon.ac.uk/projects/outputs/top-ten-tips-coding-guide-clinical-staff
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COPD: a commissioner’s view
Sarah Crouch, Strategic Commissioning Manager (Long Term Conditions)
Joint Commissioning Team, East Sussex County Council

A local approach

Eastbourne, Hailsham and Seaford CCG, and Hastings and Rother CCG embarked jointly on a radical COPD service redesign back in April 2012. By the summer of 2014, locally we had introduced:

1. An enhanced community respiratory service (more on this later)
2. A COPD discharge bundle at East Sussex Healthcare Trust (initially via a CQUIN)
3. A locally commissioned service for COPD in primary care, as well as the development of supporting information, such as self-management plan templates, a respiratory care checklist, and pathways and guidance to support primary care in their diagnosis and management decision making.

Introducing the COPD discharge bundle and primary care resources at the same time as enhancing the community respiratory service ensured that there were sufficient appropriate referrals into the enhanced community service to deliver the impact identified in the business case:

Primary care colleagues identified earlier COPD patients who would benefit from pulmonary rehabilitation (PR) programmes and other support to self-manage their condition.

The COPD discharge bundle helped to identify those patients who were bypassing primary care services and going straight to A&E, and who were not already known to the community service.

This collaborative work has resulted in a sustained reduction in COPD admission activity (fig.1) over and above the cost of introducing the additional resources into primary and community services.

The KSS AHSN COPD Dashboard and the Right Care Commissioning for Value respiratory data packs (published April 2016) also demonstrate that, compared to other CCGs in the region and nationally, EHS CCG in particular has one of the lowest non-elective admission spend per 1000 population in the country (see fig.2 and fig.3)

Through the recent national PR audit and other local service measures, the community respiratory service is also able to demonstrate positive impacts on patient outcomes such as:

- Clinically significant improvements in the 6 minute walk test, particularly for patients with MRC 3, 4 and 5.
- Clinically significant improvements in health and wellbeing status.

What does the enhanced community respiratory service look like?

The key functions of the enhanced community service are:

- Specialist respiratory assessment and clinical input e.g. physiotherapy for individual chest clearance or breathlessness management, and supporting patients with self-management, including planning for an exacerbation.
- Supporting urgent referrals to manage exacerbations in the community, including follow up review.
- Early supported discharge (where appropriate), within 3 days of hospital admission, for people with exacerbations of COPD.
- All patients admitted to East Sussex Healthcare Trust with primary reason of ‘exacerbation of COPD’ reviewed as an inpatient and followed up within 2 weeks of hospital discharge.
- A home oxygen assessment and review

Fig.1 Reductions in cost and admissions against the 2013/14 baseline for EHS and HR CCGs

<table>
<thead>
<tr>
<th></th>
<th>2014/15 % reduction</th>
<th>2015/16 % reduction</th>
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<tbody>
<tr>
<td>Cost of COPD emergency admissions</td>
<td>-19%</td>
<td>-18%</td>
</tr>
<tr>
<td>Number of COPD emergency admissions</td>
<td>-8%</td>
<td>-15%</td>
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Continue on page 5
service (HOS-AR) providing oxygen assessments and at least 6 monthly reviews to all patients receiving home oxygen therapy.

- PR – both standard 6 week and post exacerbation PR (PEPR) programmes.

Service hours have also been extended to provide seven day a week care.

Prior to the enhanced service, there were two community respiratory services covering different parts of East Sussex. However, the two services neither operated in the same way, nor used the same referral criteria. Although they provided many elements of the enhanced service, their response was limited by service capacity, i.e. too few staff trying to deliver too many things. Therefore, for the business case, a robust approach was taken to model the service capacity required to meet the needs of the local COPD patient population, based on the local and national evidence.

Although the financial business case for some elements of the new service, such as PR, was stronger than for other elements, the CCG Governing Bodies recognised that in order to achieve the desired outcomes, a combined approach to managing COPD was likely to be most effective. However, the increased funding to the service was agreed on the basis that a reduction in the cost of COPD emergency admissions by 15% would be achieved and sustained. Fig.1 demonstrates that this has successfully been delivered.

**Clinical Leadership**

Key to the success of the project was the commitment of the members of the Project Group, which was established to review and redesign the COPD pathway.

The Group brought together respiratory clinicians across primary care, community, secondary care and medicines management, along with commissioners, so that from the outset there was a clear understanding of not only shared aims, but also differences, so that these could be understood and resolved early on in the process. Although this required additional up-front time and resource to properly map out the existing and revised COPD pathways, it led to a well understood and robust service specification which reduced lengthy contract negotiations further down the line.

Strong clinical leadership has continued to be key to successful service delivery. Multi-disciplinary team meetings are held by the community respiratory service on a fortnightly basis, with the involvement of both a respiratory consultant and a primary care clinical lead, to review cases, as well as to discuss and address broader issues, such as the appropriateness of referrals, and managing key messages between the team and primary and secondary care.

The Project Group, which is now known as the East Sussex Clinical Respiratory Group, continues to meet three times a year to discuss and review a wide range of respiratory issues and provide recommendations back to CCG Governing Bodies.

**Sustaining the impact**

Commissioning does not stop once the business case is agreed and funding obtained; it is an ongoing, cyclical process. There are various examples of the commissioning cycle on the internet; fig.4 shows a version developed by the NHS Information Centre some years ago.
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Essential to ensuring a successful commissioning arrangement is an ongoing relationship between the commissioner and provider, to ensure progress remains on track, achieved outcomes are sustained and, as new guidelines or developments arise, there is ongoing and timely review to address issues and revise the business case and service specification accordingly.

**So in summary:**

1. Know your patient population and have an evidence based case for change
2. A collaborative approach from the start between commissioners and acute, community and primary care respiratory clinicians ensures there is an understanding of common aims, reduces lengthy contract negotiation and dispute, and increases the likely success of the project.
3. An ongoing relationship and regular reviews between the provider and commissioner is important to achieve sustained outcomes.

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**References**


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**Respiratory Futures**

Aileen Muir, Programme Director

Championed by Prof. Mike Morgan, respiratoryfutures.org.uk is growing from strength to strength as it engages respiratory healthcare professionals across primary, secondary and community care, as well as research, industry and the wider private sector. Our editorial direction reflects NHSE business priorities around best practice, commissioning and value. For us, innovation is about ‘identifying great ideas with the power to improve current systems’, especially where they adapt existing resources differently. This year we have developed peer-support forum software to assist individual CCGs as they work to improve outcomes for patients with respiratory disease. This facilitates ‘below the line’ discussion on key issues to increase awareness of, and find solutions for, the burden of lung disease in a given locality. In exchange, the will share their guidelines and examples of best practice openly on Respiratory Futures.

In 2016 we have been liaising with AHSNs to learn more about their priorities, and identify where ‘Respiratory Futures’ Innovation portal can add value. To kick-start ideas we are hosting a programme of AHSN action learning workshops from November, which will be a fantastic opportunity to meet the network. Supported by BTS, Boehringer-Ingelheim UK and NHS Innovation, our ‘Innovation Portal’ is a strong example of public-private collaboration, so AHSN involvement is particularly apposite. Over the next few months we will also be hosting a ‘Question Time’ style debate, exploring options for a virtual ‘think tank’ and introducing a glossary to help bust our sector’s jargon – we think this will prove useful for the initiated and the uninitiated alike! We welcome your ideas to ensure we use our finite resources creatively and appropriately, so please do get in touch.

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**Fig.4 An example of the commissioning cycle**

Image courtesy of The NHS Information Centre for health and social care. Full diagram available at: [www.ic.nhs.uk/commissioning](http://www.ic.nhs.uk/commissioning)
The BLF have recently published a comprehensive report on the current epidemiology of respiratory disease in the UK ‘The Battle for Breath’ – the impact of lung disease in the UK.

The BLF funded a 3 year research project, commissioning the same team that produced the previous BTS work, ‘The Burden of Lung Disease’ (published first in 2001 and again in 2006), plus some new blood. ‘The Battle for Breath’ summarises the results.

For those of you who enjoy poring over facts and figures there are lots of useful data in there. It is a handy resource for preparing those introductory slides for presentations.

There are some headline statements, such as the fact that 1 in 5 of us has been diagnosed with a lung disease; also, that lung disease is one of the three commonest causes of death, along with heart disease and non-respiratory cancers. Importantly, the report notes that, although deaths from heart disease have reduced by 15% since the last report in 2008, deaths from lung disease have remained static, with the cause of respiratory death split roughly evenly between lung cancer, COPD and pneumonia. The impact on health services is emphasised - lung disease accounting for over 6.1 million bed days per year.

Of note, the report highlights that the common lung diseases are an important factor in health inequality, with those in the most deprived quintile being two-and-a-half times more likely to be diagnosed with COPD, and twice as likely to develop lung cancer, than those in the highest quintile. Conversely, there are a greater number of diagnoses of bronchiectasis and sarcoidosis in the upper quintile (make of that what you will: ‘please enter Lady Windermere’ -Ed). Regional differences in mortality are noted and relate primarily to smoking rates (highest in the north west and north-east of England, urban Scotland and parts of south Wales). Although there are some gender differences in mortality noted, apart from some occupational conditions (mesothelioma being the most obvious), gender differences in conditions are relatively minor, with a small male excess in lung cancer and COPD, and a small female excess in pneumonia and asthma. Reflecting historical societal changes, for lung cancer male mortality is slowly declining, though female mortality continues to rise, leading to an overall stable lung cancer mortality rate.

As well as the overview figures, which include some easy to understand expanding pie charts, the report devotes a section to each of 15 respiratory conditions: asthma, bronchiectasis, COPD, cystic fibrosis, IPF, lung cancer, mesothelioma, OSA, pneumoconiosis, pneumonia and LRTIs, pneumothorax, pulmonary embolism, pulmonary hypertension, sarcoidosis, and pulmonary TB.

Those of us working out of tertiary centres (i.e. most of us) won’t be surprised by the finding that some conditions, such as bronchiectasis and the interstitial lung diseases, are more common than previously thought. The prevalence of bronchiectasis is at least four times NHS estimates (now who was it who previously proposed that bronchiectasis was an ‘orphan disease’? - Ed). The report shows that we have gone some way to finding the ‘missing millions’, with 1.2 million people living with a diagnosis of COPD, vs the Department of Health estimate of 835,000 in 2011.

COPD has the 2nd largest impact on emergency services of the respiratory conditions, with around 140,000 emergency admissions per year (there are over 200,000 admissions per year for pneumonia). The increase in OSA prevalence has been huge, largely thought to be related to increase in diagnostic capacity coupled with very low mortality rates. (It is unclear what the impact of rising obesity has on it, but it is undoubtedly a factor -Ed).

There are some good news stories: the mortality from pulmonary embolism reduced by 30% between 2008 and 2012, so the obligatory CTPA on admission has perhaps had some impact.

(One question though: just what are ‘respiratory conditions due to other external agents’?

Answers on a postcard please...Ed)

The BLF intends to use the information in the report to call for policy makers to take action and makes 6 suggestions as to what they should do. Of these, the two that I would pick out are:

4 Put respiratory disease funding on an equal footing with cancer and cardiovascular research funding – those of you who followed the Olympics will be aware of the link between funding and results!

And

6 Invest in prevention, including tackling smoking, obesity, physical inactivity and air pollution.

These two actions are well within the gift of our politicians and if you feel like making the case for better resources locally this report will be a useful resource.

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**Percentage of bed days by disease group and respiratory condition, UK 2011**

<table>
<thead>
<tr>
<th>Disease Group</th>
<th>Percentage of Bed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung diseases</td>
<td>10%</td>
</tr>
<tr>
<td>Other conditions</td>
<td>71%</td>
</tr>
<tr>
<td>Non-respiratory cancers</td>
<td>12%</td>
</tr>
<tr>
<td>Cardiovascular diseases</td>
<td>7%</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>3.8%</td>
</tr>
<tr>
<td>COPD</td>
<td>3%</td>
</tr>
<tr>
<td>Acute LRTI</td>
<td>1.7%</td>
</tr>
<tr>
<td>Lung cancer and mesothelioma</td>
<td>1.3%</td>
</tr>
<tr>
<td>Pulmonary vascular disease</td>
<td>0.8%</td>
</tr>
<tr>
<td>External agents</td>
<td>0.5%</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
</tr>
<tr>
<td>Perinatal and congenital</td>
<td>0.2%</td>
</tr>
<tr>
<td>Asthma</td>
<td>0.3%</td>
</tr>
<tr>
<td>Bronchiectasis</td>
<td>0.1%</td>
</tr>
<tr>
<td>Pneumothorax</td>
<td>0.1%</td>
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<tr>
<td>IPF</td>
<td>0.1%</td>
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Source: WHO Hospital Morbidity Database
First, hot off the press was the results of the HOT-HMV trial. Many of you will have played your part in this trial by recruiting patients for the Lane-Fox team, and it turns out that the results may change practice. You will remember that the trial recruited over 100 AECOPD patients, treated with acute NIV, who remained hypercapnic at 2 weeks (pCO2 > 7kPa). The two arms were HOT (home oxygen therapy) and HOT plus high pressure HMV (home mechanical ventilation); the primary outcome measure was survival time to a hospitalised exacerbation. There was a significant difference between the groups, the survival time being longer for the HOT-HMV group. These were patients with severe COPD so the 50% value on the Kaplan-Meier curve was 1.4 vs 4.3 months, but the team argue that admissions are a significant event for patients, associated with decline in function, and 28 day re-admissions were reduced by 1/3. The LFU team recommend arranging an ABG at 2 weeks post AECOPD requiring NIV and treating with Home NIV if there is persisting hypercapnia. Interestingly there was no effect on mortality. These are early data and it seems likely there will be more to learn from further analysis.

The year in review session covered thromboembolism and it was good to see the data from the Papworth group on thromboendarterectomy surgery for patients with CTEPH. They have reported on 880 consecutive patients (Cannon JE Circulation 2016;133:1761). 30 day mortality has fallen over time and is now reported at 2.4%. The PA pressure falls over 3-6 months, with around 35% left with a pressure > 30mmHg, which is the group associated with a subsequent increased mortality. Having just become used to MET calls and MET teams, I was rather surprised to hear that some U.S. and E.U. hospitals have Acute PE teams who rush to the scene and ponder whether to manage the case with pulmonary vessel catheter-delivering low dose tPa infusion or arterial venous ECMO!

There was a good session on non-pharmacological post exacerbation management which got me thinking about an ‘enhanced COPD discharge bundle’ for patients at high risk of admission - watch this space...As ever there was the unremitting search for a role for a telehealth device in COPD, I heard some interesting studies presented, none of which were positive. With only 1 day there, I didn’t have time to wander the vast industry exhibition area, I would have liked to have had a play with some Smart Inhalers.

I (Julia) did however, so had a look at the smart Symbicort inhaler which, once registered, automatically downloads to your smart phone app when in close proximity - either the patient’s own (if they’re that way inclined), which you can then access via a website, or direct to yours when you review the patient (if
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not so techy inclined). The catch, of course, is that these devices will inevitably cost (quite a bit) more!

I had a chance too, to play with the new EasyMate LOX system Dolby Vivisol are adopting and was exceptionally proud of myself managing to converse (ish) in German with the Dehas rep (1971 A-level being put to good use!)

Well in 4 whole days there was way too much to see and hear, and too many people to catch up with, so all I can do is share my highlights.

Following on from the NIV theme, there was a full symposium on the place of Hi Flow Nasal O2 Therapy (HFNT) compared with NIV in hypoxaemic ARF. The physiology was explained and explored by Nick Hill of Rhode Island (who I was lucky enough to visit and have long discussions with in the heyday of my NIV days– fascinating fact no 1: the ERS hasn’t been held in the UK, due to lack of a large enough venue, since 1991 when I first presented that work, but hopefully will now be again as this was the easiest venue to navigate in my memory!!)

Anyway…as HFNT maintains some positive pressure compared with low flow O2, and that the pressure is higher on expiration than inspiration, it maintains alveolar expansion - PEEP. In addition, the high flow increases dead space wash out, making it an effective oxygenator which doesn’t impede speech or eating. The importance of needing to keep the mouth closed for effective use was highlighted. It desiccates the mucosa less than NIV, so seems to have a positive effect on secretion clearance and, as it’s heated, avoids cool air bronchoconstriction; all of this makes it more comfortable than NIV so can be used 24/7. The warning though was that, like NIV, it is not the total panacea to extreme hypoxaemia, and intubation must still always be considered if a good response is not quickly attained.

There was of course a ton of stuff on PR, with the usual hand wringing on ‘how do we do it more/better/ more efficiently’. Some experts are postulating that there are ‘responders’ and ‘non-responders’. I added to the discussion with the view that there is additional variable to contend with – that of there also being a ‘therapist effect’, as there is in psychology. More work to be done….

Probably unsurprisingly, like Jo’s experience of the Telehealth studies, one on the use of a mobile app in patients with COPD didn’t improve physical activity. Likewise, unsurprisingly, frailty impacts negatively on PR completion – defined as >3 of slow mobility, weakness, weight loss, decreased activity and exhaustion. It is perhaps a topic for discussion in our PR network how to handle those patients.

PR in non-COPD conditions was discussed, with the surprise (hint: sarcasm) finding that, although beneficial, the effect wears off sooner in the (more rapidly progressive condition) IPF (wow really? - NO!!). A more useful finding was that the patients reported feeling lonely within the (mixed diagnosis) group, and that control of breathing was highlighted as a very important component for them. (Breathe 2016, 12).

Bronchiectasis patients in Australia had fewer exacerbations after undergoing PR, and elsewhere positive effects have been gained in post-op lung cancer patients, as well as those with PHT (after 3 weeks of inpatient training….). More interestingly PR in asthma patients reduced bronchial responsiveness, with an improved ACO and fewer exacerbations. (Thorax 2015).

The best day overall for me was the PRIMARY CARE day. Really getting into a patient’s condition from the GP’s perspective was most enlightening and the day concluded with two very different case studies which threw into question the importance, but enormous challenge, not only of early diagnosis and therefore correct management, but also the very real fact that we see patients who we believe have co-morbidities while the GP sees a person with multi morbidities, none of which is more important than the other generally, either to the GP or the patient.

- fascinating fact no 2- non adherence is more likely to be the NORM!! Patients’ beliefs and concerns about medicines being key. A typical barrier is the (very common) concern that the drug may cause harm. Indeed not unfounded it seems - fascinating fact no 3- did you know the Greek word Pharmacon meant both medicines AND poison??

Another (really enlightening) session, on psychology and behaviour, took us through possible reasons for non-adherence to therapy. One barrier may be an unrecognised disconnect between the (physician) and the patient on the perceived medication effect, maintenance or preventative therapy (such as ICS) being a good example. The healthcare professional understands the value, but to the patient it doesn’t make them feel better, so there is reluctance to take it (low belief in the benefit or necessity). Low belief and high concern (of harm) are related to non-adherence. Harder to control for, but important to be aware of, the patient may

trust & like the (doctor), but not the treatment, or (uh-oh) vice versa….

So we would all do well to consider these hidden inbuilt barriers at our consultations and visits! For those interested there are questionnaires to uncover these beliefs and concerns.

Hilary Pinnock as always gave a great talk (KSS is proud to be home to such a revered academic and jobbing GP), discussing the problems with guidelines and self-management plans implementation in ‘the real world’, reminding us how many are out there for general practice to grapple with.

And finally, (yet) another thought provoking session was around finding the Missing Million. We all know the argument for saving morbidity, money and time downstream, but from the general practice perspective, how can they cope with an even greater workload now? Moreover, unless we crack behaviour change, will it really prevent disease progression.

Questions, questions, questions...

Angela Scott
Nurse Consultant Respiratory
EKHUFT

I was fortunate to be able to attend the first London based meeting of the ERS in a number of years. It was great to see the number of attendees from the wider respiratory community and to appreciate how differently health economies are structured across the world.

As a secondary care based Nurse Consultant, I wanted to make the most of the opportunity to widen my understanding of the latest developments across a number of disease areas. I attended sessions on bronchiectasis, asthma, COPD, the overlap with respiratory conditions and cardiac conditions and sleep and ventilation.

It was really interesting to hear the debate amongst the international community regard-
Breathing Matters

Key issues that I would like to look at and develop locally following the conference include:

- Screening all of those diagnosed with cardiovascular disease for COPD/Asthma
- Developing the service locally for those with bronchiectasis
- Following what I felt was a really successful conference, I am hoping that we see the ERS return to London in the not too distant future.

But before that happens next year the ERS visits Italy so start planning your trip to Milan!

Update to BTS/SIGN Asthma Guideline launched

An important update to national guidance by the British Thoracic Society (BTS) and the Scottish Intercollegiate Guidelines Network (SIGN) on the management of asthma has been launched. The updated Guideline includes new or revised content in a number of areas including asthma drug treatment (replacing the previous stepwise approach); non-drug treatments; supported self-management; and the role of tele-healthcare.

This update should be really valuable as it gives healthcare professionals an evidence-based but highly practical approach to suspecting and confirming a diagnosis of asthma, as well as giving the latest guidance on the most appropriate treatments and interventions to combat the disease.

To read the press release go here: https://www.brit-thoracic.org.uk/pressmedia/


Pulmonary Rehabilitation Masterclass

Pulmonary Rehabilitation Masterclass with Sally Singh
Bridging the Gap
Tues 29 Nov, 9.30-4.30, Crowne Plaza Hotel, Gatwick

The aim of this exciting, but informal, day is to help translate recommendations from PR guidelines into achievable and effective PR sessions in your workplace, using evidence, mixed with discussion, Q&A and possibly some practical workshops. The focus will be on appropriate prescription and training, including progression, of both aerobic and strength exercises, aiming for optimum improvement in outcomes. We will aim to unravel key differences in training methods, such as interval and circuit training, and explore delivering sessions in different environments and with varying equipment availability. We will discuss breathing techniques, and body postures and positions, to use during exertion and to aid recovery. We hope also to have time to touch on other relevant topics, such as maximising uptake and minimising dropout.

See link for full details below and book both your team’s time out and your places now! To reserve your place(s) contact ellie.wells@nhs.net

Professor Sally Singh is a world name in the field of pulmonary rehabilitation. She is Head of Pulmonary and Cardiac Rehabilitation at the University Hospitals of Leicester NHS Trust, one of the largest rehabilitation programmes in the UK, with an established reputation for rehabilitation related research. She has been involved in the development of number of outcome measures to assess the impact of pulmonary rehabilitation, including the incremental shuttle walking test. Her current research interests include exercise assessment in COPD, Self management in COPD and all aspects of pulmonary rehabilitation. Sally co-chairs the ERS-ATS statement on PR.

KSS AHSN Respiratory Events Calendar

Pulmonary Rehabilitation Network Meeting Tues 11th October, 2016 13:30 – 4:30, The Charis Centre, RH11 7EL

Oxygen Network Meeting Tues 18th October, 2016 12:30 – 4:30, The Charis Centre, RH11 7EL

Respiratory Collaborative Tuesday 8th November, 9:30 – 16:00, Holiday Inn Gatwick, RH6 0BA
To register: https://www.eventbrite.co.uk/e/kss-ahsn-respiratory-collaborative-tickets-26419774256

Pulmonary Rehabilitation Masterclass (by popular request!) Tuesday 29th November, 09:30 – 16:30, Crowne Plaza RH11 7SX
To register: https://www.eventbrite.co.uk/e/kss-pr-masterclass-tickets-28046063531

Acute NIV Competencies Project Launch Event Wednesday 2nd November 15:00 – 16:30, Holiday Inn Gatwick, RH6 0BA
To register: https://www.eventbrite.co.uk/e/kss-safe-acute-niv-launch-event-tickets-27931729555
Breathing Matters

KSS AHSN Acute NIV Competencies Project

The Modules:
1: Introduction to Ventilation
2: Selection of Patients for NIV: Indications and Considerations
3: Set Up
4: Monitoring
5: Acute Non-invasive Ventilation Ongoing Management and Escalation
6: Difficult Decisions

The aim of this project is to improve the delivery of acute non-invasive ventilation (NIV) across the region, leading to improved outcomes. The main outcomes are anticipated to be a reduction in inappropriate NIV being commenced, and an increase in effective and successful NIV, resulting in a lower mortality for patients treated with acute NIV in our hospitals. There is the potential for this to be spread outside the KSS region.

Through new e-learning modules, with training material created by clinicians in the region, the knowledge, understanding and competencies of healthcare professionals involved in the provision of acute NIV care will be standardised and improved, leading to better adherence to guidelines in establishing and monitoring NIV delivery.

The NIV e-learning modules are aimed at all practitioners involved with the delivery of acute non-invasive ventilation and should provide the basis for improving training in NIV across the disciplines in every NIV service in Kent, Surrey and Sussex. The e-learning platform is nationally available and is FREE.

We are delighted to announce that the KSS Acute NIV e-learning modules are now live and available for use. You can access the modules here: http://www.e-lfh.org.uk/programmes/acute-niv/

The link will prompt you to register with e-LfH, following which you can log in and start your e-learning.

Ellie Wells
Events & Respiratory Programme Co-ordinator, KSS AHSN

Dr Lisa Vincent-Smith
Consultant Respiratory Physician, Medway FT
NIV Clinical Lead, KSS AHSN

There will be an event to introduce the NIV e-learning modules and accompanying practical session from 3:00 – 4:30 on Wednesday 2nd November at the Holiday Inn Gatwick, RH6 0BA. Please contact Ellie Wells, ellie.wells@nhs.net for more details.

The launch is aimed at colleagues who are involved with:
- Training and Education
- Patient Safety
- Delivering Acute NIV

There will be a welcome talk from Peter Carpenter and Lisa Vincent-Smith followed by the opportunity to discover more about each of the e-learning modules, as well as network with colleagues across Kent, Surrey and Sussex. There will be suggestions as to how it should be implemented in acute trusts and who the training is aimed at. The evaluation which has been put in place to ensure this is a high quality project will be demonstrated.

Please come and join us!

Safer Acute NIV
2017 National COPD Secondary care Audit

The pilot versions of the clinical and organisational datasets are now available on [https://www.rcplondon.ac.uk/projects/outputs/secondary-care-workstream-audit-resources](https://www.rcplondon.ac.uk/projects/outputs/secondary-care-workstream-audit-resources)

Questions to address:
- Who is going to collect the data?
- How will you identify cases admitted with COPD exacerbation?
- Who will be in your COPD audit team?
- Who will lead your team?  

96 sites and 79 trusts are currently registered. If your site hasn’t registered, please email the COPD team for a registration form now!

Competency assessment framework for diagnostic spirometry published

The framework sets out the new arrangements, which will be phased in from 1 April 2017 to 31 March 2021. It should be used alongside the Guide to Performing Quality Assured Diagnostic Spirometry, published in 2013, which describes how high quality diagnostic spirometry could be delivered and outlines the standards required.

STOP BEFORE THE OP VIDEO

Stopping smoking before surgery can help patients recover safely and quickly, even if they quit just a short time before the operation. BTS is promoting a new video, originally produced by Stop Smoking Wales, ‘Stop Before the Op’ which outlines in a personal and effective way the major benefits of kicking the habit before an operation. [https://www.brit-thoracic.org.uk/clinical-information/smoking-cessation/](https://www.brit-thoracic.org.uk/clinical-information/smoking-cessation/)

The premier respiratory conference for primary and community care health professionals

[https://pcrs-uk.org/annual-conference](https://pcrs-uk.org/annual-conference)

14-15th October 2016 Telford International Centre

Embedded in day-to-day clinical practice, this year’s PCRS-UK conference will explore how we respond to an ageing population with long term multi-morbidities at a time of huge changes in the healthcare workforce, budget constraints and new technologies, to support our patients with respiratory conditions optimise their physical, mental and spiritual health. A holistic programme - designed by a multi-disciplinary team of primary and community care respiratory experts. Sessions include thought provoking, interactive and inspiring keynote plenary presentations, patient-centred, essential clinical updates; key service development and commissioning topics, real-world research presentations and practical workshops - Click [HERE](https://pcrs-uk.org/annual-conference) for programme details.

How to communicate effectively with patients

1–22 November 2016, Online

If you would like to register for this course or read more information about it, please visit the ERS course page. [https://www.ersnet.org/professional-development/courses](https://www.ersnet.org/professional-development/courses)

Breathing Matters online/by email

If you wish to receive this newsletter quarterly by email, please contact ellie.wells@nhs.net
For previous editions visit [http://www.kssahsn.net/what-we-do/service-improvement/KSS-respiratory-programme/Pages/Breathing-Matters-newsletter.aspx](http://www.kssahsn.net/what-we-do/service-improvement/KSS-respiratory-programme/Pages/Breathing-Matters-newsletter.aspx)

Management & Service Improvement

6th DECEMBER 2016

Further details and booking are now available for this event which will take place the day before the Winter Meeting at the QEI Centre in London. For further information and to book online visit [https://www.brit-thoracic.org.uk/bts-learning-hub/bts-short-courses/management-service-improvement-2016/](https://www.brit-thoracic.org.uk/bts-learning-hub/bts-short-courses/management-service-improvement-2016/)