A big thank you to those of you who completed the Breathing Matters survey. The responses indicate that the current e-mail format is popular and the frequency of release is about right, but that the articles are sometimes a little on the long side, so we aim to take your advice and slim down a little. This edition contains a brief overview of the GOLD 2017 report and Vikki Knowles provides a solution for meeting the requirements of the forthcoming national spirometry register.

The cyclists of you out there may know about discussions on the potential effect of beetroot juice on VO\textsubscript{2} max, but is there an effect on exercise capacity in patients with COPD? This, and other such questions, can only be answered by well designed research. In this edition Syed Husain gives an overview of respiratory research in KSS and encourages us to get involved. We heard about the complexities of ordering home oxygen from Angela Scott at the November 2016 Respiratory Collaborative. If you need help with your HOOFing Dolby Vivisol now has an e-learning resource developed with help from other organisations in our region; Kath Plumbe explains all on page 5.

‘Too many options, too little choice’ was how the Drug and Therapeutics Bulletin (DTB) described the problem of getting inhaled therapy right in COPD. Well, help is now at hand, on page 4 Azhar Saleem briefly introduces the RightBreathe App and website; find out more at our May 16th Respiratory Collaborative - we do hope to see you there. But before that, KSS AHSN Respiratory Programme wishes you all Happy Easter (or Seasonal, if you prefer) egg hunting this weekend!

As ever comments, criticisms or suggestions are welcome (ellie.wells@nhs.net and jo.congleton@nhs.net)

Jo Congleton, Editor

Darzi Fellow Introduction

Peter Carpenter
Programme Director—Quality & Patient Safety Collaborative
KSS AHSN

I am delighted to welcome Sally Morgan, Darzi Fellow to the KSS AHSN Respiratory Programme team.

As you may know, Darzi Fellowships are now in their eighth year in London and have become prestigious and high profile; the initiative has been shown to have a profound impact on participants and their host organisations. The Darzi Fellowship programme is designed to build the training and development of senior clinical leaders in health and social care by providing them with work-based experience in a new environment, as well as a formal qualification in healthcare leadership.

Over the next year, we expect Sally will be focusing on three clinical areas: Chronic Obstructive Pulmonary Disease (COPD) discharge bundles, pulmonary rehabilitation (PR) and oxygen prescribing. As an AHSN we have a central role to play in the spread and adoption of breakthrough innovations and improving patient experience, outcomes and delivering financial sustainability. Sally will be involved in co-ordinating our work through the Respiratory Network; working across multiple providers, commissioners and the independent sector.

Congratulations Sally, we really look forward to working with you!
Interesting respiratory research already happening in KSS—but can we do more?

Dr Syed Arshad Husain FRCP (Glas), FCCP (USA)
Consultant Respiratory Physician, Maidstone & Tunbridge Wells NHS FT
Honorary Senior Clinical Lecturer, Kings College, Training Programme Director Respiratory Medicine, KSS Deanery, Respiratory Research Lead, KSS CRN

Traditionally, our training and teaching programs were very dependent on the tertiary centers in London to provide opportunities for trainees to do research and receive teaching. KSS is now an independent entity, with a separate Deanery itself, so now is the time to consider developing good fellowship programs so our trainees can carry out research in our own region. We have a cohort of patients who are very keen to take part in research for the benefit of other patients.

I have been recently bestowed with the new responsibility of Respiratory Research Lead for KSS. I have noted that participation in respiratory medicine research in this region remains very low and I feel there is definite room for improvement. Respiratory medicine is one of the very busy medical specialties; this makes it very challenging for clinicians to find time to do any research, unless supported by local Research and Development departments, or with NIHR funding. At Maidstone Hospital, we were given some funding for a Respiratory Research Associate post from January 2015 to January 2017 and appointed a post doctoral student, Dr Leon D’Cruz, to support us in bolstering Respiratory research.

I will introduce to you some of the trials we were able to participate in because of this support, selected from NHS portfolio studies:-

Can beetroot boost exercise endurance in COPD?

A very interesting (double-blind) trial was on the effects of beetroot juice consumption on exercise endurance performance in COPD patients undergoing pulmonary rehabilitation—the ON-EPIC trial. We conducted this jointly with the Royal Brompton Hospital, London, and had a lot of media interest in the trial (BBC south east broadcasted this in their News Bulletin). In one arm the juice was nitrates deprived, and the other group received nitrates rich beetroot juice. We will be publishing the result of this trial later this year.

LASER trial

Another novel study we took part in was the LASER TRIAL (Laminar Airflow in Severe Asthma Exacerbation Reduction trial). This was a multicentre, randomised, double blind, placebo controlled, parallel group trial of the effectiveness of the nocturnal use of a temperature controlled laminar airflow device (TLA) Airsonett® in adults with poorly controlled, severe allergic asthma. The device was designed to blow allergens away from around the patient’s face and bedside. Double blinding was achieved by one group having their TLA devices with filters and the other group without. The TLA device reduces airborne particles (>0.5µm) by 3000-fold and can reduce cat allergen exposure by 7-fold. It reduces exposure to allergen particles generated by turning in bed at night. Compared to the ‘best in class’ traditional air cleaner, TLA reduces allergen exposure by a further 99%. The hypothesis is that this would lead to a reduction in both asthma exacerbations and symptoms. The patients who participated in this trial have been given active machines (with filters) to use for a five year period, on a goodwill basis, by the manufacturers. We hope to publish interesting results of this multi-centre UK trial in the future.

Overview of other Respiratory trials in KSS

- EMBARC: The European Multicentre Bronchiectasis Audit and Research Collaboration is a registry and observational study. Maidstone Hospital, and Brighton and Sussex University Hospitals, are participating.

- OPTIMUM Trial: Randomised controlled trial comparing outpatient management of malignant pleural effusion via an indwelling pleural catheter and talc pleurodesis, versus standard inpatient management, in improving health related quality of life. Conducted at Medway Maritime Hospital.

- TAPPS: Evaluating the efficacy of thoracoscopy and talc poudrage, versus pleurodesising talc slurry: a randomised trial to determine the most effective method for the management of malignant pleural effusion in patients with good performance status. Conducted at Medway Maritime Hospital.

- Can we help people with the oral allergy syndrome eat fresh fruit?: A double-blind, placebo controlled, randomised trial to study the effects of birch pollen specific immunotherapy (BPSIT) on the symptoms of the oral allergy syndrome in adult patients; Brighton and Sussex University Hospitals.

- Tidal Oximetry: Non-invasive assessment of respiratory mechanics from pulse oximetry waveform—conducted by Brighton and Sussex University Hospitals.

- Home monitoring to predict Cystic Fibrosis exacerbations: A multicentre feasibility study of remote monitoring in adult CF patients. Frimley Park Hospital, and Ashford and St Peters Hospital, have done well by getting several respiratory commercial studies going, as has Crawley CCG.
be considered which could bring funding streams for doing research in your own settings. My personal experience shows that creating 3 to 4 Fellow positions in KSS could go a long way in improving the research culture in our region, which is good for our trainees and for our patients.

I would be more than happy to provide assistance in starting research in Respiratory Medicine in the KSS region, syedhusain@nhs.net

RightBreathe Communications Information

Dr Azhar Saleem
GP Respiratory Lead, NHS London Procurement Partnership

RightBreathe is a website and accompanying app designed specifically to inform the selection, prescribing, and on-going use of inhalers. Development was supported and managed by NHS London Procurement Partnership. Its overall aim is to optimise medicines use in this increasingly complicated area. It has been developed by NHS GPs and Pharmacists in conjunction with user testing by patients and expert clinicians.

RightBreathe covers each and every inhaler and spacer device licensed in the UK for treating asthma and COPD. It also covers the inhaler technique videos for all inhalers available to prescribe in the UK. It presents specific, tailored information on each option in a standardised format and with assured quality. RightBreathe enables clinicians to search and filter the options to suit individual circumstances and patients’ needs. It also maps all of the available options against local (London), national, and international prescribing pathways, hence reducing the complexity of decision making for the clinician.

RightBreathe presents its content through the website, as well as through a mobile device application (available for iOS and Android); the RightBreathe app includes features developed specifically to support patients with their ongoing adherence with inhaled therapy.

RightBreathe is the most comprehensive, freely available respiratory resource of its kind that takes clinicians from the start of the prescribing process to the end of a patient using a device. It is anticipated that RightBreathe will reduce the time and effort required by healthcare professionals to understand prescribing options and will provide them with a resource to which they can direct patients in order to help them optimize their own inhaler technique. The net effect of this should be that more patients are prescribed the inhaler that’s most appropriate for their unique needs at every stage of disease. There should be a resultant improvement in inhaler technique and adherence as patients will have a resource they can conveniently and regularly refer to for inhaler technique. This should culminate in better clinical outcomes, better quality of life for patients with respiratory disease and better value for money for the health economy.

BLF Supporting Pharmacists

We have made the point many times in Breathing Matters of the important role pharmacists play in respiratory patient care. The BLF have recently produced a simple guide to support pharmacists when talking to respiratory patients, either as part of a medicine use review (MUR) or during routine visits. It focuses on medication adherence and understanding, as well as promoting healthy life styles.

The document is available via the Pharmaceutical Services Negotiating Committee (PSNC) website http://psnc.org.uk/our-news/new-resources-from-blf/

The BLF is also planning to produce a detailed document that can be used as a MUR template form for pharmacists to use – watch this space!
Breathing Matters

Update: GOLD COPD 2017 Guidelines

Dr Jo Congleton
Consultant Respiratory Physician and Clinical Lead, Respiratory Programme KSS AHSN

The NICE COPD guidelines (2010) are now rather long in the tooth. Although NICE produced an evidence review in 2016 and considered new bronchodilators as they came along, the only new drug with a technical appraisal is roflumilast (in 2012 - recommending that it only be used as part of a research study). The next full update is currently out for consultation as to the scope of the document, so a release is not expected until Autumn 2018. It is therefore not surprising that many of us are turning to look at the GOLD 2017 Report. There is much to take from the document, and it provides a wealth of useful references and some useful strategies for management. Here is a brief overview:

We are used to showing our patients the Fletcher diagram to help explain why stopping smoking would be a good thing; however, a more accurate depiction of the evolution of COPD is given by Lange’s study. This makes the point that it is not only the rate of decline of FEV1 that is important, but also the maximum FEV1 obtained by age 30 (i.e. before lung function starts its inexorable age-related decline). There is increasing interest in the degree of impact of COPD in the socially deprived (one can think of several mechanisms as to why FEV1 ‘growth’ could be impaired) and it suggests we should be looking much earlier (e.g pre-natally) if we wish to reduce respiratory health inequalities. There is an excellent copyrighted graph demonstrating this on pg 12 of the GOLD report.

I still receive referrals in which spirometry seems to be the starting point of the diagnostic process, rather than it being used as a confirmatory tool. The GOLD guideline presents a useful strategy here. It explains that to consider the diagnosis there needs to be a risk factor (smoking in the UK) and respiratory symptoms; only then should one perform spirometry to confirm the presence or absence of airflow obstruction and quantify its extent.

A major change in this guideline is to do away with the FEV1% predicted as an aid to management. GOLD 2017 suggests categorising patients, instead, by two criteria:

- symptoms (dyspnoea grade or CAT score)
- exacerbation history (NB remember- GOLD use mMRC which spans from 0 to 4, while the UK and QoF use MRC which spans from 1 to 5, BM31 June 2016). This is an interesting decision; clinically, one needs to be clear that the symptoms leading to an escalation of treatment are secondary to COPD and not indicative of another condition.

Using this scheme four groups are generated:

- **A**: Low symptom burden, low exacerbation rate
- **B**: High symptom burden, low exacerbation rate
- **C**: Low symptom burden, high exacerbation rate
- **D**: High symptom burden, high exacerbation rate

GOLD recommends that first line pharmacological treatment aiming to reduce exacerbation rate is now a long acting bronchodilator (LAMA, LABA or LABA/LAMA), reserving LABA/ICS as 3rd choice for group C and 2nd choice in group D patients. The guidelines make the point that group D patients are at higher risk of developing pneumonia on ICS treatment.

So-called ‘triple therapy’ (LAMA + LABA/ICS) is reserved for group D patients, who continue to have exacerbations despite all other measures. In fact, the guidelines state that more evidence is required to draw conclusions on benefits of LABA/LAMA/ICS compared to LABA/LAMA.

Non-pharmacological interventions are covered, and the benefits and cost-effectiveness of pulmonary rehabilitation (PR) are reiterated. There are sections on exacerbations, end of life care, co-morbidities and interventional treatments, and I think you will find these guidelines a useful resource.

References:

1. [https://www.nice.org.uk/guidance/CG101](https://www.nice.org.uk/guidance/CG101)
3. [www.goldcopd.org](http://www.goldcopd.org)
4. Lange et al, NEJM 2015;373:111-22

Interestingly GOLD has stuck with the fixed ratio of FEV1/FVC of < 0.7 (70%) as indicating airflow obstruction, as opposed to LLN (lower limit of normal), and justifies the decision on pg 29. Things will be interesting if NICE takes a different line!
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Dolby Vivisol Launch New Innovative HOS-AR e-learning Programme
Kath Plumbe MSc.
Clinical Consultant
Dolby Vivisol

Background

Dolby Vivisol (your home oxygen supply company) recognised that there is currently a limited number of resources and training packages available for new staff commencing work in the field of home oxygen assessment and review. This often leaves new clinicians daunted at the prospect of taking on such a role. In light of this, we decided to create a package ourselves to meet this need!

Collaborations

Dolby Vivisol has worked collaboratively with RespiriCare Limited, BluePrint Design Company and the University of Brighton to create the eLearning programme. The material has been written using national and local guidelines. Brighton University has awarded the initial 8 units of this programme with their Recognising Educational Quality (REQ) mark, and will continue to monitor the content and evaluate its use. The final 4 units will go to the REQ panel for review in May 2017.

Overall Aim

The overall aim of the eLearning training package is to upskill staff, increase knowledge and standardise practice in the field of home oxygen therapy.

Programme Contents

The eLearning Programme currently consists of 12 units, 6 for Dolby Vivisol staff (internal) and 6 for clinicians (external):

- Unit 1 Basic Principles of Long Term Oxygen Therapy (LTOT) (Internal)
- Unit 2 Basic Principles of Long Term Oxygen Therapy (LTOT) (External)
- Unit 3 Pulse Oximetry – what you need to know (Internal)
- Unit 4 Pulse Oximetry – what you need to know (External)
- Unit 5 Long Term Oxygen Assessment Process (Internal)
- Unit 6 Long Term Oxygen Assessment Process (External)
- Unit 7 Oxygen in the Home Safety Considerations (Internal)
- Unit 8 Oxygen in the Home Safety Considerations (External)
- Unit 9 Oxygen Equipment (Internal)
- Unit 10 Oxygen Equipment (External)
- Unit 11 Home Oxygen Ordering (Internal)
- Unit 12 Home Oxygen Ordering (External)

Our aim was to make it interesting and comprehensive. Short films cover the contents of each unit with graphics and diagrams to help highlight key points. The associated PowerPoint presentations and transcripts are available to read in addition to the films.

Competency Assessment

The programme has been designed with an online quiz at the end of each unit for participants to complete. This tests that the content of the unit has been both completed and understood. The pass mark is 85% and, if successful, certification is awarded. If unsuccessful, participants need to review the unit and resit the quiz, which will have different questions to the previous attempt, and pass in order to receive the certificate.

Access

The programme is accessible via the Dolby Vivisol website and is free to clinicians within the South East and South Central regions. To access the site, you will need to register on the website where there will be clear instructions for you to follow. We aim to launch the programme in March 2017.

Future

We plan to develop additional units in the future so watch this space!
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Delivering Quality Assured Spirometry Locally
KSS AHSN Respiratory Programme

We are interested to hear about initiatives that aim to deliver ‘quality assured spirometry’, a fundamental tool in making correct respiratory diagnoses. Vikki Knowles and Simon Dunn have led KSS AHSN work on this topic. Simon is about to take up a new (job share) role as Chair of the Canterbury and Coastal CCG so will be (we hope temporarily!) stepping down from the KSS Respiratory Programme REAG (Respiratory Expert Advisory Group). We would like to take this opportunity to thank Simon for all the work he has done and wish him all the best in his new post.

The article below is an edited excerpt from one due to be published in ‘Primary Care Respiratory Update’, the PCRS-UK local journal which gives regular links to what is going on in the respiratory world. The article interviews Vikki Knowles (previously clinical lead for West Surrey’s community multi-disciplinary respiratory care teams, now employed by Guildford and Waverley CCG as respiratory Nurse Consultant, and an active member of the KSS AHSN REAG and PCRS-UK).

Delivering Excellence Locally: an affordable solution for meeting the standards of the new National Register for quality assured spirometry

The new competency assessment framework, which describes the process by which healthcare professionals can become certified and join the new National Register for quality assured spirometry was launched in April and has been welcomed by PCRS-UK. But there is a fear it may be seen as causing difficulties for CCGs and practices which could, in financially challenging times, see the cost of training healthcare professionals to the required Association for Respiratory Technology and Physiology (ARTP) standard as unaffordable.

We need to be careful that the new scheme is not interpreted as requiring all those in primary care who provide respiratory care to undergo ‘gold standard’ training. Locally there has been concern that practices might not reach the level of competency identified in the new scheme, leading to disengagement in the provision of spirometry. If this were to happen there is the possibility of a significant increase in referrals, either to another service to perform the spirometry, or to secondary care clinics to diagnose and manage those with long term conditions, who could otherwise be looked after in primary care.

The issue was explored by the KSS AHSN REAG. Vikki came up with a pragmatic solution to spirometry training for her locality: there was a need to upskill the workforce to meet the requirements identified in the new scheme. The workforce consisted of practice nurses carrying out spirometry, with a mixture of those who had undergone good training, though not necessarily to the ARTP standard, while others had done only a minimal half day study. Meanwhile, some of the more highly qualified nurses were reaching retirement age, leading to a shortage in the skill set. Many GPs had concerns regarding their spirometry interpretation skills because they had devolved spirometry to their practice nurses. The REAG had discussed the need for an affordable training package as a viable, safe, and cost effective ‘silver standard’ alternative.

A local package was developed, comprising an existing, locally available, study day with an assessment at the end of the day. Six weeks later candidates are required to submit a portfolio of their work to Vikki for review, to ensure the spirometry is being performed to the correct standard, and that calibration and cleaning logs have been completed. Additional traces with interpretation are submitted for the candidates responsible for reporting spirometry.

This ensures that everything is to the standards set by the requirements of the new register. Vikki can record that she is satisfied that the spirometry performed is of a high quality and meets the quality guidance that has been set for Kent, Surrey and Sussex AHSN. Vikki is hoping that candidates who have attended the training, and completed the portfolio to a satisfactory standard, can then be accepted on to the register via the Experienced Practitioner Scheme.

Vikki’s eventual aim is to have at least one nurse and one GP from every practice across Guildford and Waverley CCG complete the course and she attends every study day to ensure she is marking the spirometry to the level that it is being taught.

Guildford and Waverley CCG have put forward a business case for a Locally Commissioned Service (LCS), to provide a diagnostic spirometry service from next year, which will support the training. This is excellent news for the CCG; however, Vikki says: ‘The bottom line is, that although the LCS is in the pipeline, it will be reliant on working with our colleagues in Higher Education Establishments (HEE) and industry to fund the training during this financially challenging time’.

Tips for setting up a training scheme for performing spirometry:

- Look at what your local needs are
- Identify locally committed people who can work with you, because you can’t do it on your own
-Nominate a spirometry champion to support practices achieve the training
- Identify support within your CCG
- Link with existing organisations who provide spirometry training and agree a training package that meets your local needs
- Access PCRU here https://pcrs-uk.org/pcru

References:
1. Improving the quality of diagnostic spirometry in adults: The National Register of certified professionals and operators: https://www.pcc-cic.org.uk/article/quality-assured-diagnostic-spirometry
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News

Safety in Chest Drain Insertion Course
Course is specifically geared for Respiratory & Acute Medicine, ITU & Respiratory Trainees i.e. G (I) middle grade doctors, ST3/SPR’s, CT1/2 & FY2’s. Doctors are encouraged to progress to Level 1 competencies in chest ultrasound and be safe and competent to insert chest drains under guidance.

Date: Friday 19th May 2017
Venue: Postgraduate Centre, Maidstone Hospital, Hermitage Lane, Maidstone, Kent ME16 9 QQ.
Faculty Course Organiser: Dr Syed Husain, drsyedhusain@gmail.com
To book a place contact: Najtna Amir, 01622 223050
Course website: www.thoracicultrasound.com

Breathing Matters online/by email
If you wish to receive this newsletter quarterly, please contact ellie.wells@nhs.net
For previous editions visit the Breathing Matters website

ACPRC Conference
Date: 28th - 29th April 2017, York
Further details and tickets available here

ERS International Congress 2017
Date: 9th—13th September, Milan
Further details and registration available here

Summer BTS Meeting
Date: 22nd—23rd June, Birmingham
Further details and registration available here

PCRS Annual Conference
Date: 22nd—23rd June, Birmingham
Further details and registration available here

KSS AHSN PR Network
Date: Wednesday 14th June
Further details will be circulated to the PR Network shortly

KSS AHSN Oxygen Network
Date: Tuesday 20th June
Further details will be circulated to the O2 Network shortly

KSS AHSN Respiratory Collaborative
Date: Tuesday 16th May
Venue: Holiday Inn Gatwick, Povey Cross
Further details and registration available here