Abstract P28 Table 1 CT guided lung biopsies, complications and bed days per biopsy from 2008–2011

| | Total no. of procedures | Total no. of complications | Admission rate for complications | Total bed days per biopsy | Projected bed days if ambulatory care for complications implemented |
|---|---|---|---|---|---|
| 2008 | 35 | 4 | 4/4 (100%) | 81/35 (2.31 days) | |
| 2009–2011 | 73 | 13 | 9/13 (69%) | 9/73 (0.12 days) | 1/73 (0.014 days) |

appropriate information leaflet. A CXR to confirm resolution of the pneumothorax could be done when the patient returns to clinic for their biopsy results.

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## P29 ACUTE RESPIRATORY ASSESSMENT SERVICE (ARAS): A NEW NURSE-LED SERVICE MANAGING PATIENTS WITH ACUTE RESPIRATORY CONDITIONS IN SECONDARY AND PRIMARY CARE

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**Background** Acute respiratory disorders are a huge burden to acute medical services in any healthcare system. Our institution has two large teaching hospitals providing care to a population of over 600,000 people; a mixture of inner city and rural areas.

**Aim** A retrospective review of outcomes of a new nurse-led specialist respiratory assessment service supported by respiratory consultants for the management of acutely unwell respiratory patients.

**Methods** We developed the ARAS team consisting of 3 specialist respiratory nurses supervised by 2 consultant respiratory physicians. The ARAS team reviewed all acute respiratory admissions, twice daily, to the acute medical specialist unit. They assessed inpatients on medical wards and intensive care, and provided early community discharge reviews. The ARAS team worked with community-based respiratory, oxygen, dietician and smoking cessation services.

**Results** Over 9 months (November 2010 to July 2011), a total of 813 patients were managed through ARAS; 446 (54.9%) COPD, 77 (9.5%) asthma, 111 (13.7%) pneumonia, 90 (11.1%) lower respiratory tract infection (LRTI), and 89 (10.9%) with other respiratory conditions. More than half (52.4%) of the patients admitted were discharged within 96 hours. There were 254 (31.2%) patients who had supported discharges, of which 153 (60.2%) were discharged within 96 hours. Early supported discharges (<96 hours) were mainly for patients with COPD (124 (81.0%)) and asthma (23 (15.0%)). The 30-day readmissions were 122 (15% of total), of which 10.2% and <1% of all ARAS-reviewed patients had COPD and asthma, respectively.

**Conclusion** A dedicated specialist service provides high standard of care for patients with acute respiratory disorders and a link between the acute hospital and community services resulting in a reduced length of hospital stay with reasonably low re-admission rates in an area in the UK with high prevalence of respiratory disorders.

## P30 FEASIBILITY OF A NEW OUT-PATIENT BREATHLESSNESS SUPPORT SERVICE

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**Background** Breathlessness is a common and devastating symptom affecting many patients with advanced malignant and non-malignant disease. Management comprises non-pharmacological and pharmacological interventions best delivered by a multidisciplinary group.

**Aim** To describe the feasibility of a study testing a newly established Breathlessness Support Service (BSS) at King's College Hospital, London.

**Methods** An innovative BSS with palliative care and respiratory medicine (consultant, nurse, physiotherapy, occupational therapy, and social work) input is offered since October 2010 to patients with refractory breathlessness due to advanced malignant and non-malignant disease. Patients are seen twice in the clinic and offered a home visit by physiotherapy and occupational therapy. The new service is evaluated in a phase 3 fast track randomised controlled trial (RCT) comparing immediate or delayed (after 6 weeks) access to BSS.

**Results** Between October 2010 and June 2012, 191 patients have been referred to our study, of which 88 patients have consented to partake in the study (48/88 male; median age 68 y (range 40–84 y); 62/88 carer present; COPD 45, Cancer 17, ILD 18, heart failure 6, Asthma 1, other 1). Of these 88 patients, 60 patients have completed the study (primary endpoint at 6 weeks), with 11 patients awaiting their 6 week assessment. The current attrition rate for the primary endpoint of the study (6 weeks) is approximately 19%, much less than 40% we originally anticipated. 40 have completed the 12 week follow up home visit (secondary endpoint), with 12 patients awaiting their 12 week assessment. The current attrition rate for the secondary end point is 34%, reflective of the complexity of retaining palliative care patients in a RCT. The BSS is well received by patients. Main organisational problems relate to transport to the BSS and patients being unwell to attend the second clinic visit.

**Conclusion** Referral to the study is similar to what we expected with the number of patients consenting (46%) to partake similar to that reported in the pulmonary rehabilitation literature. Once in the trial, attrition is low. Overall, the BSS seems to be feasible.

## P31 DO LUNG CANCER PATIENTS GET A BETTER DEAL IF THEY PRESENT BY TWO WEEK WAIT PATHWAY?

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**Introduction** Introduction of one stop lung cancer[LC] clinics have shortened the patient journey of 2 week wait [2WW] referral

patients to reach diagnosis and treatment however because of multiple referral sources, non 2 week [N2WW] patients follow a different journey. Our aim was to find out whether there is significant difference in patient outcome in these two groups in a multisite NHS Trust.

**Method** Between January 2008 & December 2011 all patients who had a radiological & or histological diagnosis (n=996) made in LCMDT were included in this study. Demography, time to diagnosis, time & number of deaths, staging & histology were compared.

**Results** In 2WW group 439 [Age 71(35–95)years, 177 female and In N2WW group 557 [Age 72(22–95), 232 female were compared. No significant difference in age, however significant difference were noticed in time to diagnosis [referral to diagnosis] 24.9 (0–167) in 2WW & 27.4(0–176) days in N2WW group [p=0.029]. 313 died in 2WW group and 451 in N2WW till June 2012. The time between date of referral to date of death was also significant between 2WW and N2WW group 258 [15–1328] days to 185[3–1271] days respectively (p=0.001)). In the 2WW group 62% [74%NSCLC, 15%SCLC, Others 10%] vs. 46% CLC 17% others 17%. 124(28%) of 2WW and 163(29%) of N2WW presented with metastatic disease [p=ns], 149(33.9%) of 2WW and 142(26%) of N2WW presented with T4 disease. Median PS was 1 and 2 respectively.

**Conclusion** The data suggests there is a significant difference between patient journey and outcome between two groups despite no significant difference in staging. Poor documentation and use of upgrading to 2WW made it difficult to find out why so many were under N2WW. Physicians are encouraged to review and alter patient pathway for N2WW group to ensure equal access to health care and appropriate outcome for all patients with LC diagnosis.

## P32 DOES DISEASE SEVERITY AFFECT PATIENT ACTIVATION SCORES IN COPD?

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**Background** As part of the NHS Plan patients are encouraged to manage their own health. Healthcare professionals have a responsibility to ensure that patients have the right tools and education to self-manage their conditions. Hibbard *et al* have developed a patient activation measure (PAM) which measures the extent to which individuals have the attributes and skills to manage their condition. The PAM determines how "activated" an individual is and can highlight what help an individual needs to improve self-management skills. For example, Level 2 indicates when patients lack confidence/knowledge to take action, whereas Level 3 is where individuals start to take action.

**Methods** 18 patients attending consultations or pulmonary rehabilitation(PR) during a one-week period in June 2012 were recruited to participate in this observational study.

**Results** We recruited 18 COPD patients [8 Females, 10Males, Mean age 68 yrs ±8], eleven with moderate COPD, 5 had severe COPD and 2 had very severe COPD. The group had a mean percent predicted FEV1 of 53% and a mean MRC Score of 3±0.8. Five were current smokers and 12 were ex-smokers. In total there had been 10 respiratory admissions and 45 exacerbations in the last 12 months. The group mean PAM score was 66.9±21, and the mean level of activation was 2.89±1.13. Those who had more hospitalisations in the last 12 months had a lower PAM score (Pearsons correlation= –0.456, p=0.066). There was no correlation between COPD stratification and PAM Score (Pearsons correlation= –0.343, p=0.164). Sub-analysis (Table 1) showed 6 patients who had not received PR [mean age 66±5.6, mean MRC Score 2.62±0.48], 8 who were currently doing PR [mean age 71±11, mean MRC Score 3±0.75] and 4 who were post-PR [mean age 67.3±3.6, mean MRC Score 3.38±1.10].

**Conclusions** Pilot results show that there was no correlation between COPD severity and PAM Scores. Differences in PAM scores were found between those in current PR, as well as those with more hospitalisations. Further work is needed to evaluate the PAM as a tool for multiple points in an individual's journey such as at diagnosis, after a first or repeat admission and as part of PR programmes.

Abstract P32 Table 1

| | Mean PAM activation score | Mean PAM level | PAM Level (frequency, Level 1–4) | P value |
|---|---|---|---|---|
| Pre- Pulmonary rehabilitation (n=6) | 66.4 ±21.3* | 2.83±1.0 (Level 2) | 1=0, 2=3, 3=1, 4=2 | No significant difference in PAM scores P=0.308 |
| Currently undertaking Pulmonary Rehabilitation (n=8) | 74.0±23.3* | 3.25±1.03 (Level 3) | 1=1, 2=0, 3=3, 4=4 | |
| Post – Pulmonary rehabilitation (n=4) | 53.4±13.0* | 2.25±1.5 (Level 2) | 1=2, 2=0, 3=1, 4=1 | |

## P33 IMPROVING MEDICINES MANAGEMENT IN COPD: IDENTIFYING AND ADDRESSING SUB-OPTIMAL TREATMENT

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Medicines for Chronic Obstructive Pulmonary Disease (COPD) cost the NHS £317m pa. A national improvement programme worked with primary care sites to test practical ways to identify and address potentially sub-optimal prescribing, with a view to improving outcomes and containing cost.

Building on learning from initial test sites, selected practises in three CCG areas were supported to analyse primary care data for patients on the COPD disease register and optimise care for these patients. Practises process mapped their current system for managing COPD patients to identify potential improvements. Different methods for data extraction were used to audit diagnosis, disease severity and treatment in relation to NICE guidance. Patients identified as potentially sub optimally treated were called in for review with support of local nurse specialists. Data was collected on respiratory chapter prescribing costs per month per practize, patients reviewed, reasons and outcome. At CCG level, appropriate tools, training and support were developed to help sustain and spread improvement.

Early findings from data analysis and patient review identified up to 20% of patients with scope for optimisation of treatment, for reasons including inaccurate diagnosis, poor interpretation of spirometry, and over- or under-treatment in relation to assessment of disease severity. Detailed analysis of patient records required significant input of time and skills, but data extraction tools allowed groups of patients to be targeted more quickly. Review of patients is ongoing.

**Conclusions** Data analysis and practical support at practise level can identify and address existing problems of misdiagnosis and sub optimal treatment, but are labour intensive and reactive. It is essential to develop a reliable pathway to ensure accurate and timely diagnosis and treatment are maintained for the future. Tools, guidelines, and ongoing education and support can help sustain this.

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