by GPs and hospitals. <50% took action when concordance reports showed variance (under or over use) from prescribed treatment.
2. Lack of ability to detect hypoxic patients with >20% community healthcare sites not having access to an oximeter.
3. Fire safety officers are rarely advised about the persistent smoker (only 16%) despite the potential risk to patients, their families and the general public. Local guidance on appropriate steps to take is rare (35%). 3 HOS units denied LTOT for smokers and one assessed this by exhaled carbon monoxide measurement.
4. A variety of methods for protecting patients from excessive oxygen are favoured but use appears limited. When asked what policy respondents favoured, universal precaution (as promoted by ambulance guidelines) was most popular (60%) while 20% favoured oxygen cards and 20% patient specific protocols (PSP).
5. A specific local policy for removing oxygen when no longer indicated or used is rare (<25%). This, coupled with inadequate follow-up of patients started on oxygen during hospital admission, suggests significant waste with the current oxygen provision.
6. Respondents indicated guidance on oxygen removal, contract monitoring, assessment for ambulatory oxygen and training in arterial or capillary blood gases as being required.

Conclusions Problems in healthcare coordination, public and patient safety and in removing oxygen once ordered were common. There is a need to integrate hospital and community teams and to prepare for safe mobilisation and contract management so that a quality home oxygen service can be provided in the future.

P103 THE PRACTICE OF PRESCRIPTION OF LONG-TERM OXYGEN THERAPY TO PATIENTS WHO CONTINUE TO SMOKE

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Introduction Although patients who receive long-term oxygen therapy (LTOT) are discouraged from smoking, a substantial proportion of active smokers receive this therapy. There is limited published guidance addressing this issue.

Methods The authors designed a questionnaire consisting of six multiple choice type questions based on the practice of the prescription of LTOT, particularly focusing on the provision of LTOT to active smokers. This was sent to all consultant respiratory physicians in Wales.

Results 35 out of 45 (73%) questionnaires were returned. 17 physicians (49%) did not prescribe LTOT to active smokers, whereas 18 (51%) did. For those who did not prescribe LTOT to smokers, this was according to departmental policy in 9 (53%) and personal practice in 8 (47%). In this group, all respondents stated the reason for not prescribing oxygen was due to risk of harm to the individual, with the majority (88%) also citing risk to other household members. Other reasons included the reduced likelihood of benefit and effectiveness in smokers (35%) and as an incentive to smoking cessation. 7 (41%) of this group would consider prescribing oxygen to smokers as palliation for severe hypoxia and malignancy. Of the physicians who prescribed LTOT to active smokers, 16 (89%) felt there was existing evidence suggesting benefit in both smokers and non-smokers. 10 (55%) of this group considered it unethical to deny patients LTOT and 11 (61%) felt it was the responsibility of individual patients. LTOT was prescribed only after risk and capacity assessment. Contraindications to prescribing LTOT in this group included cognitive impairment and inability to comprehend the risks. 22 (63%) regularly monitored patients' smoking status while on LTOT. Of these, the majority (68%) did so by history alone. 6 (27%) performed Carbon Monoxide monitoring. 31 respondents (89%) routinely counselled patients on risks of fire and burns with continued smoking on LTOT. 22 respondents (63%) had seen burns or injuries from smoking with LTOT on at least one occasion.

Conclusion There are substantial variations in practice among respiratory physicians across Wales and likely nationwide. National guidance on this particular issue needs to be addressed to ensure standardisation of care.

P104 SOUTHAMPTON CITY: FINDING THE MISSING MILLIONS AND REDUCING ADMISSIONS THROUGH MEDICAL INTELLIGENCE

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Background Southampton City PCT was highlighted in a BLF report as the only hotspot on the South Coast with a population at high risk of hospital admissions with an acute exacerbation of COPD (AECOPD). The reasons stated were a low number of registered COPD patients (1.5%), high smoking prevalence (32%) and deprivation. Predicted levels of COPD from local healthcare modelling were 6%. The trust was also experiencing a year on year increase of 15% in admissions for an acute exacerbation of COPD.

Method Southampton University Hospitals developed a primary care support team led by consultant respiratory physicians with support from respiratory nurse specialists to support primary care in the diagnosis and management of COPD. The education was delivered in a variety of formats from interactive lectures to groups of primary care doctors and nurses, small spirometry educational sessions with practice nurses, within practice education, locally led COPD diploma modules, and the development of a website (http://www.copdeducation.org.uk). The audit was performed on all admissions coded as COPD Exacerbation from the last 3 years and all notes reviewed to confirm diagnosis.

Results During the year long project COPD prevalence (from QOF) rose from 1.5% to 2.27%; an increase of 50%. The audit revealed several trends (1) admissions through the ED department rose by 10% each year from 2007 to 2010; (2) patients increasingly self presented to secondary care and (3) a large proportion of the admissions (22%) were due to a small number of frequent attendees (34 patients responsible for 176 admissions). We cohorted the frequent attendees and with a combination of discovery interviews and nursing/clinical support reduced admissions in this cohort by 78%). During this period COPD admissions reduced by 19% and 30 day readmission reduced from 13% to just 1.7%!

Conclusion Through the process of primary care education supported with other teaching modalities the diagnosis of COPD improved in Southampton. Medical intelligence of the admitted population combined with an appropriate intervention can reduce COPD admissions. This is just one of the ways the finding the missing millions part of the national strategy can be delivered.

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P105 DIRECT ACCESS PULMONARY FUNCTION TESTING FOR PRIMARY CARE

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Hinchingbrooke Hospital is a Diagnostic pilot site for the NHS Lung Improvement Programme, providing direct access from local GP

Abstract P105 Table 1 Outcomes for direct access pulmonary function testing

Diagnosis	Referring GP	Laboratory	Agreement pre- and post-test diagnosis?	100% of patients would have been referred to chest clinic without this service. Was this referral pathway changed?	
COPD	11	8	Abnormal: abnormal (same) 11 (61%)	Yes	13 (72%)
Asthma	5	3	Abnormal: abnormal (different) 3 (17%)	No	5 (28%)
Fibrotic lung disease	0	0	Abnormal; normal 2 (11%)	This means that 72% of referrals have not required a chest clinic referral because of this new service.	
Normal	0	4			
Other	2	3			

All GPs who have completed questionnaires were either **satisfied** (15%) or **very satisfied** (85%) with regard to referral process, waiting time, management plan given and outcome of plan. No negative responses were given.

Patient comments:	"Quick appointment given"	"Very efficient service"	"Very good approach"	"Staff very helpful"	"Clear explanation of tests given"	"Pleased with knowledge and manner of physiologist"
GP comments:	"Excellent service, Thank you"	"Very useful service"	"You are all wonderful"	"Very good service"		

Practices to Respiratory Physiology. Hitherto, patients have been referred to Respiratory Clinic; most have Pulmonary Function Testing in a linked appointment on the same day. An audit of these patients showed 30% of referrals were immediately discharged back to the GP and could have been diagnosed and managed in primary care (estimated total saving of £10 000 a year).

Aims for the LIP service More accurate diagnosis of respiratory disease in primary care. More appropriate management pathways for respiratory patients, with enhanced access to smoking cessation services, COPD respiratory nurse specialists and pulmonary rehabilitation services. Ultimately, this will result in a reduction in hospital admissions due to better diagnosis and management in primary care. The aim was to reduce referrals to the Chest Clinic by 25%. To provide a quality service to the GPs and patients.

Methods Referrals for pulmonary function testing were received directly from Primary Care. Quality assured tests were performed: spirometry, gas diffusion and static lung volumes. At the point of testing, patients received detailed information regarding their results and diagnosis from a trained respiratory physiologist, giving an opportunity to have one to one conversations regarding fears or concerns about their diagnosis. Tests were reviewed by a respiratory consultant and a fully interpreted report Faxed to referring team. If Chest Clinic referral was advised, the cost of the services was deducted from the Chest Consultation tariff. Therefore the service is at least cost neutral.

Results (See Abstract P105 table 1).

Conclusions This service has been successfully set up, with a steady referral stream of patients from primary care. The main difficulty encountered has been awareness levels in primary care, despite promotion through standard channels. Outcomes show a high level of satisfaction with the service from both patients and GPs. 75% of patients who used this service have subsequently been managed within primary care, with an estimated cost saving of £1800 to the health economy.

P106 REDUCTION OF INAPPROPRIATE OXYGEN PRESCRIPTIONS BY A HOME OXYGEN SERVICE

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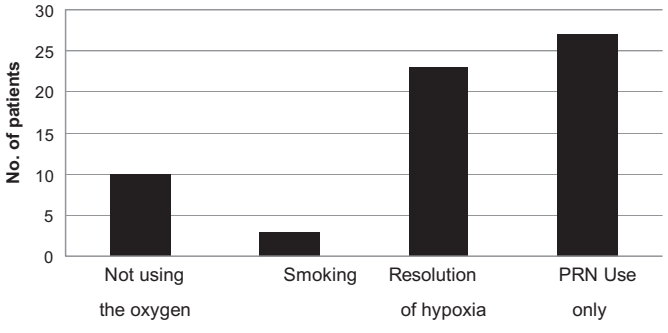
Introduction and Objectives Home Oxygen in England costs around £110 million yet it is estimated that 30% of patients derive no clinical benefit (DH, 2010).[1] In addition oxygen can be harmful if used inappropriately. The RD&E Home Oxygen Service was set up in 2008 to provide a comprehensive oxygen assessment service for all adult patients requiring Long Term Oxygen Therapy (LTOT) including the provision of follow-up in the patient's home. 1044 patients have been seen by this service so far, and 63 concentrators removed following assessment by the home oxygen team.

Methods We evaluated retrospectively the patients who had oxygen removed. The characteristics of this population were investigated including reason for removal, whether an oxygen assessment had been undertaken and the appropriateness of oxygen prescription.

Results On assessment 85% (54/63) had saturations >92% and 49% (31/63) were not using their oxygen. Of the 63 patients who had their oxygen removed more patients (53%) had their LTOT initiated in Primary Care. These patients therefore received no formal assessment prior to initiation. When assessed 67% did not meet the criteria for LTOT. Of the 63 those established on LTOT by the Home Oxygen Service, it was primarily in the context of an inpatient stay. In these cases adequate follow-up and review allowed oxygen to be removed once stable. The economic saving from the removal of inappropriate oxygen is considerable. 60% (38/60) no longer required oxygen therapy amounting to a cost saving of £20 330. 39% were re-categorised to a lower tariff but 17% proved difficult to wean and continued on Short Burst Oxygen (SBOT) despite inadequate evidence for this therapy.

Conclusion Our experience suggests as integrated oxygen service allows a more robust approach to oxygen prescription and monitoring. It reduces the risk of harm from oxygen prescription, and unnecessary prescriptions. This has both financial and medical



Abstract P106 Figure 1 Reason for removal of oxygen concentrator.