probably relates to a loss of functioning alveolar units but doesn't appear to impact exercise physiology or QoL. The main lasting impact appears to be psychological. In the absence of a control group, the impact of critical illness is difficult to separate from that of ECMO, however in this uncontrolled single centre observational study much reassurance can be gained about medium term impact of ECMO.

Service design and delivery

P198

ANCHORING COPD SCREENING TO DRUG SERVICES IN HEROIN AND CRACK SMOKERS TO IMPROVE DIAGNOSIS

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COPD is associated with social deprivation which can reinforce health inequality, especially in difficult to access groups. Heroin and crack smoking is associated with early onset severe COPD but this population engages poorly with non-emergency medical services although they engage effectively with specialist drug services. As such, despite an expansion in community spirometry provision, different models of care may be needed to optimise COPD diagnosis and management. In order to access this group Liverpool Clinical Commissioning Group (CCG) funded a COPD screening programme where all current and former heroin and crack smokers using local drug services were offered spirometry at drug key worker appointments where they collected their opiate substitute prescription. If willing they also completed MRC, CAT, a record of cigarette and drug exposure and had oxygen saturations measured. They also provided feedback about the programme

Eight hundred and seven (807) out of the population of 1100 participated which represents 73% of the client group. Airflow obstruction consistent with COPD was present in 379 (47%) with a further 50 (6%) having reversible airflow obstruction consistent with asthma. Of those with COPD, 154 (41%) had mild, 144 (38%) moderate and 81 (21%) severe or very severe COPD. Mean FEV1 was 2.93L (0.93), mean CAT was 19.5 (10.5) and mean MRC was 2.64 (1.29). Of the 379 with COPD, only a minority (41%) were diagnosed, a third of people were prescribed no inhaler therapy and, when prescribed, treatment was typically sub-optimal. Amongst those with COPD, 337 (90%) were current cigarette smokers while 93 (25%) and 105 (28%) still smoked crack and heroin respectively.

When asked to feedback 96% of respondents were happy with the process and 93% would be willing to attend future COPD appointments at drug centres.

Anchoring spirometry to key worker appointments in heroin and crack smokers was popular amongst service users and a majority completed spirometry. Airway disease was present in a majority with 47% having mostly undiagnosed but symptomatic COPD with significant scope to improve treatment. This model of screening and treatment improved healthcare access and could be used in other hard to reach groups, such as the homeless.

P199

A MULTIDISCIPLINARY COPD HYPERINFLATION SERVICE: REPORT OF DECISION OUTCOMES

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Introduction and objectives Lung volume reduction (LVR) via unilateral VATS or endoscopic placement of endobronchial valves (EBV) in carefully selected individuals with severe emphysema can result in a major improvement in quality of life. Despite being approved by NICE, there remains patchy service provision across the UK. ¹

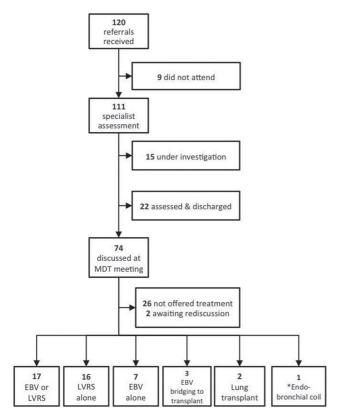
In 2010, we established a multidisciplinary COPD Hyperinfla-

tion service for our region. There is a scarcity of information on such services and we report on our referral outcomes for 2015. **Methods** Our Hyperinflation MDT includes specialist COPD physician, specialist nurse, thoracic radiologist, thoracic surgeon, interventional pulmonologist and transplant physician. We review clinical features, CT and lung function to decide on specialist assessment, progressing to detailed physiological assessment, lung perfusion scanning and MDT discussion in some. We retrospectively reviewed outcomes on 120 patients referred for LVR assessment between 1/1/15–31/12/15.

Results 111 patients underwent specialist assessment. 20% of patients were discharged, as they did not meet NICE criteria. Nonetheless, many of these patients benefited from clinical phenotyping and management recommendations. 67% of patients were discussed at MDT. 35% of patients were not offered LVR (high risk and lack of hyperinflation targets). 64% of patients were deemed suitable for LVR or transplantation [(EBV or LVRS 37%; LVRS 35%; EBV 15%; EBV bridging to transplantation 7%; transplant 4% (Figure 1)]. One patient received endobronchial coils as part of a clinical study. Patients who are considered suitable for EBV with intact or <10% defect in fissure undergo bronchoscopic balloon catheter assessment for collateral ventilation.

Conclusion Our experience with this service model shows that LVR can be incorporated into existing pathways. Our model has evolved to triage patients at various points to ensure high quality discussion of selected patients at the dedicated MDT. As a result, the proportion of patients at the MDT offered LVR procedures is relatively high. MDT expertise allows optimal patient selection with effective utilisation of existing resources. We hope that these data will stimulate others to develop local models of care to enable better access to LVR for COPD patients.

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Abstract P199 Figure 1 Flow of patients through our COPD Hyperinflation service in 2015. MDT: multidisciplinary team; EBV: endobronchial valve; LVRS: Lung volume reducation surgery.* Endobronchial coil was offered as part of a clinical trial

REFERENCE

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P200 LARGE SCALE IMPLEMENTATION OF COPD DISCHARGE BUNDLE

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Introduction COPD Discharge Bundles have been associated with reduction in 30 day re-admission rates. Kent, Surrey, Sussex Respiratory Programme aims to improve respiratory care by spreading good practice and reducing variation. We monitor outcomes via our regional COPD Dashboard. In 2014 we decided to start a project to support acute hospital trusts to deliver a COPD discharge bundle

Methods We held twice yearly collaborative meetings with respiratory clinicians establishing region wide support for implementation of the bundle. By consensus working the teams agreed wording for a KSS bundle, based on the BTS bundle. A data dictionary and a data collection tool were created to standardise collection of data. Results are fed back to teams monthly via a bespoke reporting tool. Educational sessions on improving quality and delivery of the bundles are part of the collaborative meetings, e.g. 'train the trainers' inhaler technique.

Results 10 of 11 acute trusts in the region now deliver the COPD discharge bundle. 8 of those submit data to the regional reporting tool. Prior to the project only one trust in the region was systematically delivering the COPD discharge bundle.

At the start of the programme in October 2014, for the trusts reporting data, 222 patients per month (45% of HES recorded COPD admissions) were receiving at least some elements of the tool. By October 2015 the number had increased to 330 (66% of HES recorded COPD admissions).

The percentage of recorded patients documented as receiving each element of the bundle in KSS is shown in Table 1.

By October 2015, the percentage of AECOPD patients recorded as receiving every element of the discharge bundle had increased from a baseline of 4% to 25%. We aim to assess impact of bundle compliance on outcome measures. Data to Q4 2015/16 show a regional reducing 30 day readmission rate trend compared to prior to the project .

Conclusion With strong clinical networks and collaborative working it is possible to implement a more unified approach to delivery across a large geographical area.

	Oct 2014	Oct 2015
Inhaler technique checked	24%	49%*
Written Information given	9%	40%
Rescue Pack Prescribed	27%	40%
Referred for smoking cessation	59%	72%*
Referred for PR	27%	47%
Follow up arranged	27%	47%*

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P201 INTEGRATING PATIENT SUPPORT GROUPS INTO RESPIRATORY CARE PATHWAYS

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Strategy for change The British Lung Foundation wanted to test if integrating respiratory support groups into the local pathway produced a better understanding of health care services available and lung disease; increased medicine management and compliance; increased patient confidence and development of new skills. Did it also impact on control of health and demand on NHS services including unplanned hospital admissions?

Assessment The aim of this evaluation was two-fold:

- A process evaluation: to look at the barriers and facilitators to integrating a support group into a respiratory care pathway.
- 2. An outcome, impact and economic evaluation: to measure impact on both physical and mental wellbeing and the benefits to NHS services, clinicians and commissioners

Methodology We employed validated questionnaires to measure physical, psychological and general wellbeing outcomes in participants. These were disseminated to control and test group at baseline and at 6 monthly intervals. Impact on NHS services was self-reported via telephone interviews with patients.

Effects of changes There was a self-reported 42% reduction in unplanned GP visits and a 57% reduction in unplanned hospital admissions compared to standard support groups.

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