Introduction and Objectives Exacerbations because of COPD are the third largest cause of emergency hospital admissions in the UK. This systematic literature review explored the relationshipbetween hospitalisation rates and the COPD co-morbidities, anxiety and depression.
Methods The Centre for Research Dissemination's framework for systematic reviews was followed using search terms relating to COPD, anxiety, depression and hospital admission. Papers identified were assessed for relevance and quality using a suitable CASP tool and the Mixed Methods Assessment Tool (MMAT).
Results Quantitative studies (18) indicated that anxiety and depression led to a statistically significant increase in the likelihood of COPD patients being hospitalised. These co-morbidities also led to an increased length of stay and a greater risk of mortality post discharge. Other significant factors included lower BODE scores, female gender, lower socioeconomic status, poorer patient perceived quality of life, increased severity of lung function and less improvement in dyspnoea from admission to discharge. It was also highlighted that only 27–33% of those with depression were being treated for it. Qualitative studies (6), revealed that patients saw anxiety and depression as a major factor that affected their ability to cope with and self-manage their condition.
Implications Findings from the systematic review have highlighted a need for better recognition and treatment of anxiety and depression amongst individuals with COPD. On-going research will develop and test strategies for promoting better management and self-management as a means of reducing hospital admissions.

M19 THE IMPACT OF CO-MORBIDITIES ON PHYSICAL FUNCTION AND HEALTH STATUS IN CHRONIC OBSTRUCTION PULMONARY DISEASE (COPD)

NS Gale, AM Albarrati, IC Munnery, MM Munnery, JC Cockcroft, DJ Shale; *Wales Heart Research Institute, Cardiff University, Cardiff, UK*

10.1136/thoraxjnl-2013-204457.429

Background Co-morbidities are of increasing importance in patients with COPD. However, the implications for function and health status have not been fully established. We hypothesised that the number of co-morbidities would relate to physical capacity, health status and impairments as measured by the comprehensive geriatric assessment (CGA) in COPD but not comparator subjects.
Method As part of the longitudinal Assessment of Risk in Chronic Airways Disease Evaluation (ARCADE), 500 patients with stable COPD (confirmed with spirometry) were compared to 141 comparator subjects (past or current smokers) free from respiratory disease. In all subjects previously diagnosed co-morbidities including; hypertension, hypercholesterolemia, angina, myocardial infarction, Stroke/TIA, atrial fibrillation, diabetes, and osteoporosis were recorded using a standardised health questionnaire. Spirometry, BMI, six minute walk distance (6MWD), the Timed Up and Go (TUG), and the number of impairments were determined using the CGA. Patients with COPD also completed the St George's Respiratory Questionnaire (SGRQ).
Results Patients and comparators were similar in age, gender and BMI, but differed in FEV_1% predicted 59 (20) and 105 (14) respectively ($p < 0.01$). Patients had more co-morbidities median (range) 2 (0–6) than comparators 1 (0–3) ($p < 0.01$). Of the patients, 24% had no co-morbidity, 54% had 1–2 co-morbidities and 22% had over 3 co-morbidities, while 54% of comparators had no co-morbidities and 45% had 1–2 co-morbidities ($p < 0.01$). Patients also had more impairments (CGA score), reduced 6MWD and increased TUG (all $p < 0.001$). The number of co-morbidities related to age, BMI, 6MWD, TUG, fibrinogen, the CGA and SGRQ and but not FEV_1 in patients with COPD, and only to CGA score in comparators (Table 1).
Conclusion The number of comorbidities in COPD related to physical function, health status and impairments, independent of lung disease. Early management of co-morbidities may improve outcomes in patients with COPD.

Abstract M19 Table 1. Relationship between the number of co-morbidities and outcome measures

	COPD	p=	Comparator	p=
	r_s		r_s	
Age (years)	0.209	<0.001	0.119	0.161
FEV_1/FVC (L)	-0.014	0.751	0.089	0.295
FEV_1% predicted	-0.031	0.488	0.045	0.598
BMI (kg/m^2)	0.208	<0.001	0.144	0.088
6MWD (m)	-0.208	<0.001	-0.147	0.081
TUG (s)	0.192	<0.001	-0.020	0.814
CGA score	0.450	<0.001	0.352	<0.001
SGRQ total score	0.147	0.001	-	-

r_s = Spearman's Correlation Coefficient

M20 FINDING THE MISSING MILLIONS: CASE FINDING FOR COPD IN PEOPLE ATTENDING OTHER LONG TERM CONDITION CLINICS IN PRIMARY CARE

DMG Halpin, S Holmes, J Calvert, D McInerney; *NHS SW, Taunton, UK*

10.1136/thoraxjnl-2013-204457.430

Over 40% of people with COPD remain undiagnosed. Co-morbidities are common in people with COPD but COPD is also a comorbidity of other long term conditions. As SHA respiratory leads in the SW we used this fact to develop a pilot programme to case find people with COPD among patients attending other long term clinics in primary care. The project was developed by the Leads and partially supported by Astra Zeneca, Boehringer Ingelheim, Chiesi & Novartis who provided support for additional health care professional time, but it was also adopted by Bristol CCG.

Practices were asked to show all current or ex-smokers aged ≥ 35 attending a long term condition clinic who were not known to have COPD a Patient Information Sheet and ask them to complete a questionnaire designed to help identify people with COPD (1). Patients were also asked to perform microspirometry using an ASMA-1 device, their age, height, & smoking status were recorded. If they scored highly on the questionnaire and had an FEV1 below the lower limit of normal (LLN), their MRC breathlessness and CAT scores were recorded and they were offered further assessment within the practice to confirm the diagnosis. Smokers were offered referral to cessation services.

573 patients (323 men) were seen in 11 practices between Sep 2012 & May 2013. Mean age 64.6 (range 36–90). 265 had high questionnaire scores and 115 of these also had FEV1 less than LLN–20% of all patients seen. The mean FEV1 (%pred) in these patients was 58.6 (range 5.5–77.6). 86 had an FEV 50–80% predicted, 25 30–50% predicted. 44 had an MRC score of 0, 13 of 1, 44 of 2, 8 of 3 and 4 of 5. The mean CAT score was