disease. A key problem for patients with severe asthma is impaired exercise capacity and often reported as a trigger for symptoms. In COPD it is recognised that reduced Physical Activity (PA) levels can be linked with poorer morbidity and increased exacerbations. In Severe Asthma (SA) there has to date been no formal evaluation of self reported PA levels in comparison to objective measurements and Quality of Life (QoL).

Objectives To evaluate self reported PA in a population of patients with SA compared to 6 Minute Walk Test (6MWT) results.

To compare PA levels with others measures of disease including lung function and QoL measurements (Short Form 36 or SF36)

Methods 35 patients (12 male:17 Female) with SA completed the Dukes Activity Status Index (DASI) which gives an estimated maximum metabolic equivalent (METs) as an estimation of self reported physical function. QoL was measured with the SF36 where Physical component scores (PCS) and Mental Component Scores (MCS) were collected. Objective measures of Forced Expiratory Volume in 1 second percent predicted (FEV₁ %) and 6MWT distance (metres) were also collected.

Results

Abstract M3. Table of demographics

	Median (range)
Age	45 (52)
FEV ₁ %	68.1 (87.4)
6MWT(metres)	390 (650)
SF36 PCS	33.1 (42.1)
SF36 MCS	50.2 (49.4)
DASI	22.3 (51)

The 6MWT had medium correlations with SF36 MCS ($r_s = 0.372$, $p > 0.03$) and SF36 PCS ($r_s = 0.480$, $p > 0.004$) and a strong correlation with the DASI ($r_s = 0.604$, $p > 0.0001$). Moreover the Physical function component of SF36 (SF36PF) also had a strong correlation with 6MWT ($r_s = 0.541$, $p > 0.001$). FEV₁ showed a medium correlation with 6MWT ($r_s = 0.413$, $p > 0.19$).

Conclusion Patients appear to estimate PA levels accurately with the DASI, with higher scores of estimated METs correlating with increased 6MWT distance. QoL appears higher in those patients who achieve a greater distance in their 6MWT, especially in relation to their physical function. FEV₁ preservation also appears to correlate with improved 6MWT distances. Further investigation of PA in this population is warranted.

M4 THE IMPACT OF AN ASTHMA INREACH SERVICE ON ASTHMA MANAGEMENT AND FOLLOW UP

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Introduction Suboptimal discharge management of asthmatic patients increases risk of early re-hospitalisation leading to avoidable burden on healthcare services. Previous BTS asthma audits have demonstrated that discharge planning was an area for improvement. In Sept 2011 we developed an asthma Inreach team (2 band 6 nurses, 1.3 whole time equivalents) to improve asthma inpatient care. In Oct 2012 this service was expanded to actively trace all patients who had attended the Emergency

Department (ED) in the previous 24hrs and arrange follow up in an asthma nurse specialist clinic (ANS) within one week. We evaluated the impact of this service.

Methods Data was extracted from clinic letters. The asthma Inreach team reviewed patients admitted to the respiratory wards and a proforma was used to document interventions.

Results ED: Between Oct 2012 to May 2013, there were 215 patients with 245 attendances to ED. 12 patients were readmitted within 30days. Only 26 (12%) patients were known to chest clinic. 138 (64%) attended follow up in the ANS clinic. 70 (51%) had poor compliance issues addressed. 48 (22%) had a significant change in treatment and 30 (14%) were referred onto the difficult asthma clinic. All received written asthma management plans (WAMP). Asthma Inreach: Between Sept 2011 to May 2013, the asthma inreach team undertook 240 reviews on 213 patients. 142 (68%) patients given WAMP 91 (43%) inhaler technique initially poor improved with education. 65 (27%) had poor compliance. 155 (73%) patients were subsequently followed up in ANS clinic. 30 day readmission rate decreased from 2.7% in 2011/12 to 1.9% in 2012/13.

Conclusion This study demonstrates that the introduction of an asthma inreach service & ANS clinic has significantly improved asthma management, follow up according to BTS guidelines and reduced 30 day readmissions. A significant number of patients had evidence of poor compliance, poor inhaler technique, lack of WAMP which was addressed by the asthma team. A number of patients were more complex and required review in the difficult asthma clinic.

M5 LUNG FUNCTION AND PSYCHOLOGICAL WELL-BEING: ONE-YEAR OUTCOMES IN SEVERE ASTHMA

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Aims Psychological comorbidity and impaired quality of life (QoL) are commonly reported in severe and difficult to treat asthma. These factors appear to contribute to asthma attacks and hospital admissions. Changes in these markers over one-year were studied following multidisciplinary intervention.

Research Design and Methods All new referrals to the Severe and Brittle Asthma Unit (SBAU), between 2009 and 2012 were assessed using a structured protocol including asthma diagnosis and severity, associated co-morbidities, lung function, QoL and drivers of poor asthma control. Patients received multidisciplinary interventions over a one-year period and outcomes were reassessed. Measures used included the Hospital Anxiety and Depression Scale (HADS) and the Juniper QoL. Lung function measures included FEV₁ and the Asthma Control Questionnaire. Paired T-Tests and Multiple Regressions were used to analyse the data.

Results 142 patients (N = 108, 76.06% female) completed the baseline measures. After one-year of multidisciplinary intervention 66 completed the HADS, 69 completed the Juniper QoL and 102 had FEV₁ reassessed. The majority (N = 96; 85.71%) of these patients met the criteria for refractory asthma. The number of patients on antidepressants significantly decreased over the year from 17.61% (N = 25) to 10.71% (N = 12; $p = 0.021$). Depression on the HADS showed a non-significant reduction from 53.5% (N = 76) to 42.4% (N = 28; $p = .192$) after one year. Anxiety on the HADS showed clinically significant reduction from 57.7% (N = 82) to 40.9%