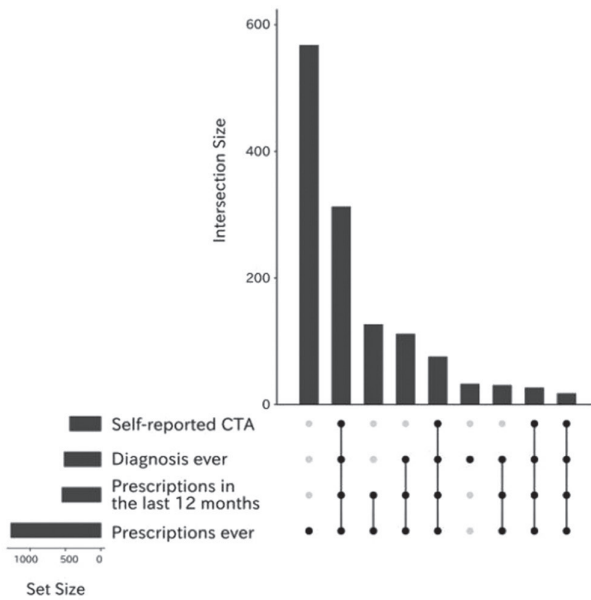
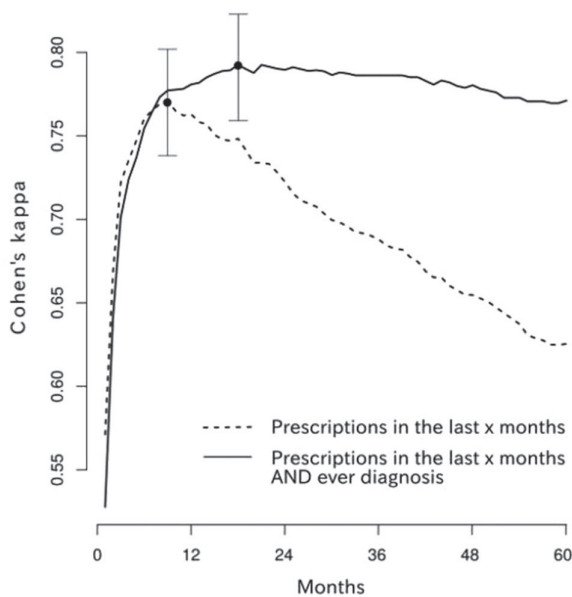


(A) Intersections between the study variables.



(B) Cohen's Kappa for concordance between self-reported CTA and recorded prescriptions over varying backward intervals with and without "ever diagnosis" condition.



Abstract 148 Figure 1

prescriptions', 'ever diagnosis', and 'having prescriptions in varying backward intervals from mid-2014', with the latter repeated by adding 'ever diagnosis'.

Results Of 4,291 eligible people, 10.2% self-reported CTA but, of these, 11.2% had no prescriptions in the past 12 months and 22.4% had no recorded asthma diagnosis ever. Figure 1A shows full intersections between the variables. For concordance between self-reported CTA and each of 'ever prescriptions' and 'ever diagnosis', Cohen's kappa was 0.42 and 0.68, respectively. For concordance between self-reported CTA and 'prescriptions in backward intervals', kappa was 0.76 for the 12-month interval but peaked to 0.77 at 9-months. After adding 'ever diagnosis', the kappa became 0.78 for the 12-month measure (which represents

the treated asthma criteria of the Quality of Outcomes Framework, QOF), and peaked to 0.79 at 18-months (Figure 1B).

Conclusion In Wales, self-reported currently treated asthma showed good concordance with the QOF treated asthma criteria but a slightly better concordance with 'any prescriptions in the last 18 months and ever diagnosis' measured from routine GP data. However, the concordance remains suboptimal, demonstrating that self-reported CTA should be used with caution, and objective measures from routinely collected health data are preferred.

P149 **DESIGNING A MANAGEMENT PLAN: A MIXED METHODS APPROACH TO EXPLORING PATIENT JOURNEYS IN CHILDREN WITH SEVERE AND RECURRENT WHEEZE**

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10.1136/thoraxjnl-2016-209333.292

Introduction Management plans, while recommended nationally to reduce burden of asthma on individuals and healthcare systems, are poorly and infrequently used (BTS/SIGN 2014). Studies show a mismatch between patients' expectations and what professionals provide. (Ring *et al*, 2011).

Aim An exploration of health journeys of children with severe and recurrent wheeze: what makes a good management plan?

Methods Purposeful sampling techniques were used to recruit patients. A convergent mixed-methods design, comprised of semi-structured interviews and notes review, was used. Data was analysed using inductive thematic analysis and descriptive statistics.

Results Eleven children were recruited. Parents are motivated by symptoms and their own perceptions of wheeze to take action. They seek advice from multiple sources according to their own preferences, rather than symptom severity. The median number of admissions to A and E in the last two years was 3, and of GP consultations was 6.5; there was a negative correlation between these.

Barriers to self-management include lack of knowledge, confidence and appropriate resources. Notably, healthcare professionals influenced the ability and willingness to self-manage by either empowering patients or providing paternalistic instruction. There was occasionally poor communication of agreed actions between primary and secondary care, which confused patients. Not all A and E attendances were noted in the GP system, and only one of 5 requests for GP follow-up was carried out. It was noted that patients see A and E as 'specialist' and may not follow-up with a 'general' physician upon discharge.

Parents and children saw management plans as able to address key barriers. However, *no* notes in both GP and A and E mentioned providing a written plan.

Conclusion Our data suggests the need to 'nudge' parents to self-manage before escalating appropriately by modifying existing management plans. Plans should be personalised, for example to target management of key triggers. Crucially, patients and both primary and secondary healthcare professionals must work together to implement mutually acceptable plans.

We are using our data to create a mobile-based application which can be integrated into primary and secondary care, and is responsive to patients' desires. Preliminary results show this will be well-received, and is perceived to be superior to paper-based plans.

P150 PERCEPTIONS OF ASTHMA CONTROL IN THE UK – A CROSS SECTIONAL STUDY COMPARING PATIENT AND HCP PERCEPTIONS OF ASTHMA CONTROL WITH VALIDATED ACT SCORES

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10.1136/thoraxjnl-2016-209333.293

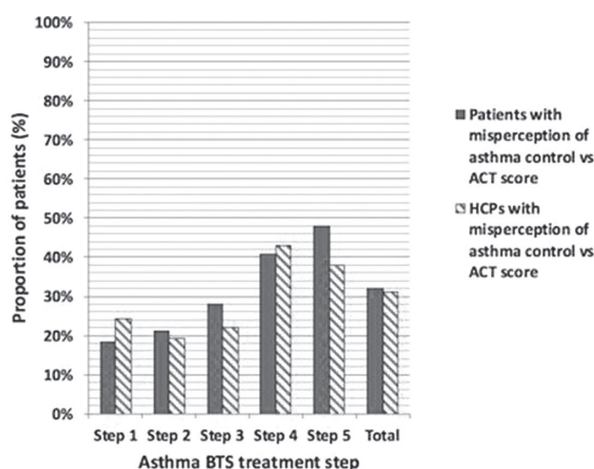
Uncontrolled asthma is a major health problem. Personal perceptions of asthma control often vary between patients and their treating physicians, and both may differ from actual control. This can be a major barrier in optimising patient asthma care.

The aim of this cross-sectional survey was to provide UK-specific data on actual and perceived asthma control in a sample of adult (18–75 years) asthma patients attending routine asthma reviews in primary, secondary and tertiary settings. Differences between healthcare professionals' (HCP) and patients' perceived assessments of asthma control were evaluated via an online questionnaire and compared to a control – the validated Asthma Control Test (ACT) questionnaire, which was completed by the patient.

Patients with a documented diagnosis of asthma who were taking medication (at least a short acting β -agonist) were enrolled and consented by their HCP within a month of their last clinic appointment. Individuals with a history of an asthma exacerbation within prior 4 weeks; a diagnosis of another respiratory condition; or a smoking history >10 pack years were excluded. Patients were grouped into BTS/SIGN treatment Steps 1–5.

260 patients were screened. 234 patients were eligible for the study: 33, 52, 50, 49 and 50 patients in Steps 1 to 5, respectively. Women composed 70% (164) of the study population. 47.4% of patients were aged 45–64 years. 164 patients (70%) were classed as non-smokers by HCPs.

The ACT results suggest that asthma was only controlled in 54.7% of patients overall (defined as ACT score ≥ 20), with levels of uncontrolled asthma highest in Step 4–5 patients. This is in contrast to 84.2% of patients and 73.9% of HCPs who perceived that asthma was controlled.



ACT- Asthma Control Test, BTS/SIGN- British Thoracic Society/ Scottish Intercollegiate Guidelines Network, HCP- Healthcare professional, percentages are based on the number of patients in the full analysis set. BTS Step 1= Mild intermittent asthma, Step 2= Regular preventer therapy, Step 3= Initial add-on therapy, Step 4= Persistent poor control, Step 5= continuous or frequent use of oral steroids

Abstract P150 Figure 1 Perception of asthma control did not correlate with ACT score: Patients vs HCPs

These data suggest a high level of uncontrolled asthma in UK asthma patients, especially Step 4–5 patients. A significant

proportion of both patients and HCPs may have an incorrect perception of asthma control, representing a significant unmet medical need in terms of optimal asthma management.

Overall, correct correlation of ACT score with perception of controlled or uncontrolled asthma only occurred in 67.9% of patients and 68.8% of HCPs. The poorest correlations occurred in Step 4–5 patients.

P151 WITHDRAWN: EFFECT OF HIGH-INTENSITY EXERCISE ON LUNG FUNCTION, AEROBIC PERFORMANCE AND AIRWAY INFLAMMATION IN ASTHMA

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10.1136/thoraxjnl-2016-209333.294

P152 INHALED CORTICOSTEROID (ICS) AND LONG ACTING BETA-ADRENOCEPTOR AGONIST (LABA) THERAPY ADHERENCE REPORTING AND MONITORING IN CLINICAL TRIALS OF SEVERE ADULT ASTHMA DRUG TREATMENTS: A SYSTEMATIC REVIEW

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10.1136/thoraxjnl-2016-209333.295

Background Assessment of adherence to inhaled corticosteroids and long-acting beta-agonist therapy, allows identification of patients classified as having refractory asthma. It is crucial to ensure that adherence is adequately assessed in clinical practice and in the conduct of clinical trials to target the patients who may benefit from expensive potential add-on therapies. We hypothesised that adherence to inhaled corticosteroids and long acting β_2 -agonists is under-assessed and under-reported in clinical trials of add-on drug treatment interventions in adolescent and adult patients with severe asthma.

Methods A systematic literature search of six major databases was performed to identify randomised controlled trials (RCTs) of asthma drug treatment interventions conducted in severe adolescent and adult asthma patients taking inhaled corticosteroids (ICS) alone or in combination with long-acting beta-agonist therapy (ICS/LABA). Identified studies were reviewed concerning key characteristics of the trial and the intervention; reporting and monitoring of adherence to ICS/LABA and the relationship between measuring adherence and study outcomes was assessed. This systematic review had been registered on PROSPERO; registration number CRD42015029611.

Results The electronic search retrieved 5869 articles with an additional 19 identified from references. 4008 articles were screened after removal of duplicates of which 72 RCTs were included and underwent data extraction and quality scoring. Of these, only 12 RCTs reported adherence to ICS or ICS/LABA therapy. Measures of adherence used included; self-report, n = 1; self-report and inhaler technique, n = 1; inhaler technique, n = 1; inhaler technique and FeNO, n = 1; dose counting, n = 1; diary, n = 2; prescription records, n = 1; weighing inhaler canister, n = 1; assumption that primary respiratory physician had assessed adherence, n = 1; and method of adherence assessment not reported but measure of adherence included in n = 2 studies. High levels of heterogeneity across studies with