Outcomes COPD Assist was launched in March 2014, then publicised to all Salford's primary care clinicians supported by 5 training seminars with over 70 clinicians attending.

Within 4 months following its launch, COPD assist was downloaded 622 times by different users, with an average use time of 7 min and average of 9 screens viewed per session. 52% of users have used the app more than once.

Feedback was excellent, particularly around ease of use and simplicity.

Conclusions This bespoke smartphone app to support the implementation of local primary care COPD guidelines appears to be widely acceptable to users and could potentially promote these guidelines. However, more research around clinically meaningful outcomes, such as adherence to guidelines and impact on prescribing, is required to assess the true impact of such technology on the management of COPD in primary care.

P29 IMPACT OF RESPIRATORY VIRTUAL CLINICS IN PRIMARY CARE ON RESPONSIBLE RESPIRATORY PRESCRIBING AND INHALED CORTICOSTEROID WITHDRAWAL IN PATIENTS WITH COPD: A FEASIBILITY STUDY

[1]GM d'Ancona, [2]I Patel, [3]A Saleem, [3]F Royle, [3]A Hodgkinson, [3]V Burgess, [1]C McKenzie, [2]J Moxham, [2]T Sethi. *[1]Guy's and St Thomas' NHS Foundation Trust, London, UK; [2]Kings College Hospital, London, UK; [3]Lambeth CCG, London, UK*

10.1136/thoraxjnl-2014-206260.179

Introduction There is considerable variation in accuracy of diagnosis and long-term management of COPD in the UK. High rates of inhaled corticosteroid (ICS) prescribing have been reported, raising concerns about their over use, with less focus on high value interventions like stop smoking support/pulmonary rehabilitation. ICS are indicated in severe COPD patients (FEV_1 <50% predicted) with frequent exacerbations (>2 per year). Primary care data from SE London showed that 38% of COPD patients were over treated with high dose ICS, resulting in 12 additional cases of pneumonia, and costs >£500,000, annually. There is limited guidance on methods and feasibility of withdrawing ICS in these patients.

Methods A responsible respiratory prescribing group including CCG medicines management, respiratory pharmacist and integrated respiratory team agreed COPD prescribing guidance across primary/ secondary care. GPs were supported with COPD review templates, written step down protocols and educational events. Virtual clinics with an integrated respiratory consultant/ GP respiratory lead were offered to support ICS withdrawal in primary care.

Abstract P29 Table 1 Outcomes associated with the ICS gradual withdrawal recommendation

Outcome	Number of patients (n = 198)
ICS successfully stopped	61
ICS stepped down	58
Patient due for step down at time of data submission	33
Patient was not stepped down, but reason not given	19
Patient asked not to have ICS stopped	9
Patient did not tolerate lower dose	9
Patient excluded as no-longer fulfilled inclusion criteria	7
Patient could not be contacted	2

Results 45/48 (94%) of CCG practices took part. Data from 372 patients on COPD registers reviewed over 25 virtual clinics is presented. 321 (86%) patients had confirmed COPD (including 33 with COPD and asthma), 34 had asthma, 15 needed more spirometry and 2 had another diagnosis. 279/321 (87%) patients had a recommendation made: 64 (23%) referred for PR, 53 (19%) for spirometry, and 45 (16%) for smoking cessation. Changes to drug therapies were also recommended: 42 (15%) patients had a LAMA recommended, 16 (5%) a LABA, and while 117/321 COPD patients (37%) required no change to ICS therapy, a graduated step down/stop was suggested for 198 (63%). The outcomes associated with this are in Table 1.

Overall, from Q4 13/14 prescribing data, there was a 4% decrease in high dose ICS (as proportion of total ICS use) resulting in a saving of £50,000.

Conclusion Integrated working through respiratory virtual clinics offers hugescope to improve high value care for COPD patients. Overuse of ICS in COPD is common and GP-led withdrawal of high dose ICS where appropriate is feasible, acceptable and well tolerated by patients.

P30 USE OF A REGIONAL COPD DASHBOARD TO EFFECT LARGE SCALE CHANGE J CONGLETON, J WOOKEY, J BOTT KSS AHSN RESPIRATORY PROGRAMME

J Congleton, J Wookey, J Bott. *KSS AHSN, Crawley, Sussex*

10.1136/thoraxjnl-2014-206260.180

Large scale change is difficult to bring about. The regional Respiratory Programme began in 2011 with the aim of improving outcomes in COPD and asthma. We designed a COPD dashboard with key metrics aiming to track progress and encourage involvement in service improvement. The Quality Observatory maintain the dashboard and release quarterly updates which we email out to our network members and other key people (n = 396) accompanied by commentary indicating issues for consideration and highlighting trends. The target audience includes clinicians in primary, secondary and community care plus managers and commissioners. This work is supplemented by running oxygen and pulmonary rehabilitation clinical networks which provide support and training to clinicians plus a quarterly educational and information sharing *e*publication 'Breathing Matters'. We track trends in metrics. COPD bed days are a key outcome measure and the table below shows the yearly value since the program commenced.

Looking at the admission figures on a population basis i.e. admissions per 1,000 COPD population (population weighted for prevalence of COPD using ERPHO modelled estimates and projections) there is a similar trend:

County 1 2010/11 17.9 per 1000 vs 13.2 per 1000 in 2013/14

County 2 2010/11: 12.5 per 1000 vs 10.3 per 1000 in 2013/14

County 3 2010/11: 15.8 per 1000 vs 13.8 per 1000 2013/14

Abstract P30 Table 1

	County 1	County 2	County 3	Total
2010/11	24,788	17,976	11,596	**54,360**
2011/12	22,272	16,764	11,888	**50,924**
2012/13	23,884	16,996	11,912	**52,792**
2013/14	20,820	14,300	10,380	**45,500**

There has been a reduction in variation between acute trusts in the number of admissions and length of stay (without an increase in re-admission rate). We believe our COPD Dashboard has helped drive this change.

P31 INTELLIGENCE BASED INFORMATION SYSTEM (IBIS) REDUCES RESPIRATORY PATIENTS' USE OF SECONDARY HEALTH CARE RESOURCES

[1]SKM Harlow, [2]J Tollit, [1]MJ Irvin-Sellers. *[1]Ashford and St Peter's Hopsitals NHS Foundation Trust, Chertsey, UK; [2]Respiratory Care Team North West Surrey, VirginCare, Chertsey, UK*

10.1136/thoraxjnl-2014-206260.181

Background IBIS is a database developed by South East Coast Ambulance Service (SECAmb) to facilitate communication of individual patient care plans between SECAmb, the Respiratory Care Team (RCT) and secondary care. It aims to reduce the number of patients conveyed to hospital.

Aims and objectives The investigation aimed to establish the impact of IBIS on respiratory patients' use of secondary care in our locality.

Methods Respiratory patients uploaded into IBIS between May and November 2013 were included. Data were collected from the Patient Administration System including, number of A&E attendances and admissions in the three months preceding and three months after patient care plans were included in IBIS. Data were analysed with descriptive statistics and Wilcoxon Paired Test utilising SPSS version 22.

Results 65 patients were included in the study. Table 1 demonstrates the impact of IBIS on A&E attendances and admissions. There was a significant reduction in admissions (p = 0.011). A reduction in A&E attendances was observed (p = 0.064). A sub-analysis of patients already utilising secondary care resources was undertaken. In this patient group a significant reduction in both A&E attendances (p = 0.000) and admissions (p = 0.000) was observed.

Conclusions IBIS assists in reducing respiratory patients A&E attendances and admissions. The impact of IBIS is more profound in patients who have already utilised secondary health care resources.

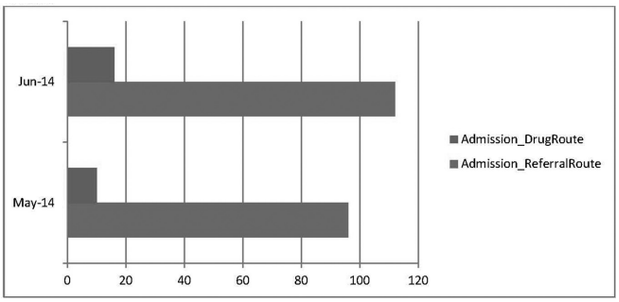
Abstract P31 Table 1

	Median (range)	p=
n= A&E attendances		
3 months pre IBIS	1(0 to 12)	0.064
n= A&E attendances		
3 months post IBIS	0(0 to 6)	
n= Admissions		
3 months pre IBIS	0(0 to 12)	0.011
n= Admissions		
3 months post IBIS	0(0 to 2)	

P32 A NOVEL AUTOMATED REFERRAL SYSTEM USING THE ELECTRONIC PRESCRIPTION OF PREDNISOLONE ≥30 MG AND NEBULISED BRONCHODILATORS TO THE RESPIRATORY SPECIALIST TEAM IS ROBUST AND EFFECTIVE

RC Colclough, T Avent, K Breese, C Craddock, D Curry, K Swindells, S Gompertz. *Queen ElizabethHospitalBirmingham, Birmingham, UK*

10.1136/thoraxjnl-2014-206260.182



Abstract P32 Figure 1 Average time difference from time of admission to time of referral/ Drug route (Automated email) in hours

Introduction Patients admitted to hosptial with an exacerbation of COPD should be cared for by respiratory teams (COPD Quality Standard 10, NICE 2011). The earlier the patient is reviewed by a specialist the greater the impact on length of stay (COPD NICE guideline 101, 2010). A rigorous and rapid referral system is required.

A new electronic referral system triggered by the prescription of prednisolone >=30 mg AND nebulised bronchodilators (salbutamol and/or ipratropium) via our Prescribing Information Communication System (PICS) was implimented. This replaced the laborious paper sift of the admissions book for admissions with airway exacerbations. The general medical team was also permitted to refer directly to the respiratory team via email.

Referral numbers were compared over a 2-month period to ensure that the new automated system is robust.

Method

1. The new automated referral was created.
2. Data was collected from the three referral routes a) paper sift, b) automated referral system, c) email from general medical team.
3. Comparison between: a) monthly automated and email referrals was made, b) paper sift and automated referrals route was made.

Results Each month there were:

1. 262 (mean) admissions screened via paper sift of which 96 (mean) were inappropriate (36%).
2. No patients identified by paper sift or email were missed by the automated system.
3. 138 (mean) automated referrals- time from admission to automated referral 13 h (mean) 10–16 h (range).
4. 75 (mean) email referrals - time from admission to email referral 104 h (mean)- 96–112 (range).

Conclusion Paper sift is time costly and laborious with a third of referrals inappropriate. Automated referrals are sent 91 (mean) hours quicker than emai referrals. Automated referrals reduce the delay between admission and specialist review. They can be received from any location in the hospital throughout the day using Smart Phones.

The automated referral eliminates the need for once daily paper sifting of the admission book, and replaces it with a more timely and robust method of directing the specialist respiratory team to the patient's bedside.