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HOW DOES THE SALFORD LUNG STUDY IN COPD (SLS COPD) PATIENT POPULATION FIT INTO THE GOLD 2017 CLASSIFICATION GRID?

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Background GOLD 2017 separates spirometric staging from the 'ABCD' groupings defined by symptom burden/exacerbation risk. SLS COPD, a 12 month randomised controlled trial, demonstrated the effectiveness and safety of initiating fluticasone furoate/vilanterol versus continuing usual care in COPD patients in UK primary care (Vestbo J et al, New Engl J Med 2016;375:1253–60).

Aim Map SLS COPD patient distribution and treatment patterns to the GOLD 2017 classification grid.

Methods In this post-hoc analysis, patients were classified by GOLD 2017 (groups A–D based on exacerbation frequency history and baseline CAT score) and by the previous spirometry-based GOLD 2007 system (stages 1–4 based on baseline post-BD FEV₁).

Results Baseline characteristics were (ITT; n=2799): 49% ≥ 2 moderate/severe exacerbations in past year; 90% CAT score ≥ 10; 14% on long-acting BD only, 34% ICS ± LABA or LAMA, 52% ICS/LABA+LAMA. The figure shows key data. Distribution by GOLD 2017 was (n=2796): A 7%; B 43%; C 3%; D 47% and by GOLD 2007 (n=2199 with spirometry data): no airflow obstruction 12%; 1 10%; 2 48%; 3 24%; 4 5%. Around 60% of patients had mild/moderate airflow obstruction while 90% were GOLD group B/D due to symptoms and exacerbation risk. GOLD ABCD distribution and

treatment patterns in patients without spirometry data were similar to the overall population.

Conclusion These data suggest that COPD exacerbations and symptoms are driving appropriate GP COPD management in routine primary care.

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Please refer to page A258 for declarations of interest in relation to abstract P26.

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DEPRIVATION IN THE COPD SALFORD LUNG STUDY (SLS) IS ASSOCIATED WITH HIGHER HEALTHCARE COSTS BUT DOES NOT MODERATE THE MAIN OUTCOMES

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Introduction and Objectives The SLS was a pragmatic randomised controlled trial (RCT) of initiating fluticasone furoate/vilanterol (FF/VI) versus continuing usual care (UC) and aimed to recruit a real life population in a near normal care setting. The 12 month study required only two patient visits and most data was collected using electronic health records. This post-hoc sub-study assesses the impact of deprivation on health behaviours, healthcare costs and main/safety outcomes.

Methods Deprivation scores were derived by postcode using the countrywide indices of deprivation (version 2010). The indices were categorised into quintiles. The primary effectiveness endpoint of mean annual rate of moderate or severe

Abstract P26 Figure 1 SLS COPD patient distribution and baseline treatment by 2017 and 2007 GOLD classification systems.

exacerbations, and primary and secondary care contacts were re-analysed using the same generalised linear models as for the original SLS study but with the addition of a treatment by deprivation quintile interaction term.

Results Participants in the more deprived categories were more likely to be younger, more likely to smoke and slightly more obese but were balanced between genders. There was no association with deprivation and withdrawal rates or with adherence (proportion of days covered). An additional post-hoc analysis demonstrated that Deprivation was associated with more primary and secondary care contacts and higher costs (Table). Deprivation did not interact with the effect of FF/VI v UC on the primary outcome measure (annual rate of moderate to severe exacerbations) or health care contacts or safety endpoints including all-cause mortality and pneumonia.

Conclusions The unique design of SLS allowed the RCT to be conducted in a deprived population who would normally be excluded from RCTs. Higher deprivation was not associated with higher drop-out rates or poor adherence, but was associated with higher rates of smoking, obesity and co-morbidities and higher health care consumption and costs. With its once daily dosage and ease of use FF/VI had potential to benefit people with poor adherence and preferentially benefit deprived populations, however deprivation scores did not moderate the effect of FF/VI v UC in primary, secondary or safety outcomes.

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Abstract P27 Table 1 Deprivation and primary and secondary care contacts and total COPD costs (medication including study medications and healthcare costs for COPD)

Deprivation Quintile	Mean (SD) Number of Healthcare Contacts		COPD Care Costs Per Subject	
	FF/VI	UC	FF/VI	UC
1 (most deprived)	32.0 (23.38)	29.4 (22.24)	842.1 (2.33)	981.4 (2.08)
2	29.7 (21.77)	28.4 (21.84)	742.5 (2.11)	984.1 (2.12)
3	29.9 (19.02)	28.4 (20.32)	819.0 (1.96)	955.2 (2.13)
4	29.2 (19.26)	27.4 (18.59)	730.7 (1.89)	894.8 (2.02)
5 (least deprived)	27.5 (22.40)	21.3 (14.89)	743.4 (2.03)	823.6 (1.84)

Note: SD=Standard deviation

P28 THE USE OF A NOVEL CASE-FINDING ALGORITHM IN THE IDENTIFICATION OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) PATIENTS IN PRIMARY CARE – EARLY RESULTS OF THE ASSIST STUDY

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Introduction In the UK around 9 00 000 people have a diagnosis of COPD. Despite its high prevalence under-diagnosis is common in primary care with an additional 2 million cases suggested. Opportunities for early diagnosis and intervention

are frequently missed. The best strategy for targeted case finding is unclear.

Methods The ASSIST study (Rec: 15/5C/598580) used a previously trialled, computerised case-finding algorithm,¹ applied remotely into primary care systems for case finding. It applies weighted risk factors as search terms (e.g., smoking history, history of breathlessness, use of inhalers and antibiotics). To date, eight GP Practices, serving 1 01 754 patients in Hampshire, UK have been screened (figure 1). The algorithm identified 1725 possible undiagnosed patients; 506 were excluded by their GP and study team. The remaining 1216 were invited for an hour long assessment with a specialist respiratory nurse at their surgery, which included medical and smoking history, vital signs and spirometry.

Results To date, response rates are 18% (222). Of respondees, 178 were eligible and attended for screening (Male 55%, mean age 64.1, SD 5.5, age range 48–72). 27% (48) had obstructive spirometry (FEV₁/FVC<0.7) without reversibility. 40% (19) of these had moderate obstruction (FEV₁50%–79% predicted) (mean FEV₁% predicted 88%, SD 15.6). Of those with obstructive lung function, 46% (22) have a MRC score of ≥2% and 8% (4) had exacerbations within the previous year. The mean pack year history was 31.9/34.9 (SD 24/108) for obstructed vs. non-obstructed.

Abstract P28 Figure 1 Patient flow through the study.

Conclusion Early Results from the ASSIST study show 27% of primary care patients who were identified as at risk of having COPD by the algorithm and attended for screening were confirmed to have the disease. Many had a significant disease