NOVELTY will primarily be documented in electronic case report forms, not EMRs. The lack of lung function data in many countries suggested divergences in diagnosis of asthma/COPD between clinical guidelines (which include lung function tests) and clinical practice.

Abstract P138 Table 1 Range of proportions of patients with asthma and/or COPD for whom EMRs contained any of selected variables

Country	EMR source	Age/sex, %	Height/weight, %	Lung function tests, %	Haematology tests, %	PROs, %
Australia	A (GPs)	100	21–32	0	31–66	0
Canada	A	100	34–42	1–10	38–52	0
China	B	100	0	0	2–83	0
(outpatient)						
France	A	99–100	13–46	0	7–19	0
Germany	A	100	18–23	0	0	0
Italy	A	79–100	18–24	0–4	13–23	0
Japan	B	100	0	0	0	0
Spain	A	100	24–41	0	26–35	0
Sweden	C	100	34–55	33–56	NA	0
UK	A (GPs)	100	30–72	0–57	31–59	0
USA	A, C	100	32–100	0–17	10–>70	0

A, physician records; B, hospital records; C, registries; COPD, chronic obstructive pulmonary disease; EMR, electronic medical record; GP, general practitioner; NA, available but not assessed; PROs, patient-reported outcomes.

Please refer to page A271 for declarations of interest in relation to abstract P138.

P139 THE BURDEN OF COPD ACROSS THE EUROPEAN UNION: DEVELOPMENT OF THE EUROPEAN COPD ATLAS

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Background Estimating current and future impact of chronic obstructive pulmonary disease (COPD) within the European Union (EU) is essential for targeted and well-informed policy-making, however, current global and regional estimates are contradictory, and comparable standardised data is lacking. Without it the burden felt by individuals and healthcare systems cannot be fully quantified and a collective and coordinated response cannot be achieved to protect economies and communities from further harm.

Aim Our purpose was to

- Collect data to enable a comparative assessment of the COPD burden across EU 28 member states and highlight variation.
- Show the impact of COPD in the workplace, on healthcare utilisation and on quality of life of the EU population.
- Use the data to underpin a simulation model to demonstrate future impact on societies, health inequalities and healthcare utilisation depending on which interventions are selected.

Methods A systematic literature review was performed to identify regional and national data on COPD prevalence, risk factors (e.g. smoking, air pollution), impact and costs across the EU. Workshops with stakeholders from a range of European countries were convened to test the face validity of the data, and to develop policy-level questions from which a simulation model could be developed.

Results Prevalence estimates of COPD varied considerably (1.26% to 13.87%), partly because of different definitions. As smoking rates are less affected by definition differences, these were used in a model that predicts COPD incidence, prevalence and mortality. Correction factors were applied to account for non-smoking related causes and under diagnosis of smoking. Smoking prevalence rates were used to estimate data for equivalent countries for the countries where smoking data were not available. The simulation model is currently in development and first results are expected in Autumn 2016.

Conclusion The European COPD Coalition (ECC) will use the results to facilitate dialogue with EU decision makers (European Commission Council and Parliament) on health policy, outlining the problem and providing evidence to support the call for political actions on COPD. It will also be of significant interest to healthcare professionals, patients, and respiratory organisations with a passion to improve COPD care

P140 COMORBIDITIES OF SWEDISH PATIENTS DIAGNOSED WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AND/OR ASTHMA

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Introduction and objectives Standard of care treatments for asthma and COPD are commonly administered in single-dose or multidose dry powder inhalers. There is a dearth of evidence around the prevalence of comorbidities, especially those that may affect inhaler device handling, among Swedish asthma and COPD patients.

Methods This retrospective study from the Swedish National Health Registries included 495,254 patients receiving inpatient or specialised outpatient care in Sweden between January 1, 2005 and December 31, 2014. Estimates of severity were based on number of asthma/COPD drugs used. Diagnostic codes were used to assess number of patients with a pre-specified comorbidity potentially affecting device handling.

Results Patient characteristics, treatments and comorbidities are summarised in the Table. Comorbidities that may impact inhaler handling were observed in 15.8% (asthma), 50.4% (COPD) and 55.3% (asthma/COPD) patients; incidence was increased with disease severity (patients with severe disease: 26.3%, 52.0%, 55.9%) and advanced age (patients 60–69 years: 33.2%, 45.2%, 50.5%, respectively).

Conclusions Comorbidities potentially affecting device handling were common across all groups, and unexpectedly high among elderly asthma patients. Furthermore, the data indicate that a substantial percentage of patients use two or more separate inhalers. These findings highlight the need for newer, easier to use inhalers, as well as training and monitoring of device use in patients who may have more difficulties using their devices correctly due to comorbidities.