European Respiratory Society
Annual Congress 2012

Abstract Number: 7170

Publication Number: P2727

Abstract Group: 1.12. Clinical Problems - COPD

Keyword 1: COPD - management **Keyword 2:** Comorbidities **Keyword 3:** Epidemiology

Title: Multicenter COPD registry for quality improvement and comparative effectiveness research

Jerry A. 290 Krishnan jakris@uic.edu MD [1], David H. 291 Au dau@u.washington.edu MD [2], Shannon S. 292 Carson shannon_carson@med.unc.edu MD [3], Todd A. 293 Lee toddlee@uic.edu MD [1], Peter K. 294 Lindenauer Peter.Lindenauer@baystatehealth.org MD [4], MaryAnn A. 295 McBurnie MaryAnn.McBurnie@kpchr.org [5], Richard A. 296 Mularski Richard.A.Mularski@kpchr.org MD [5], Edward T. 297 Naureckas tnaureka@medicine.bsd.uchicago.edu MD [6] and William M. 298 Vollmer William.Vollmer@kpchr.org [5]. [1] Medicine, University of Illinois, IL, United States, 60612-7227 ; [2] Medicine, University of Washington/VA Puget Sound Health Care System, Seattle, WA, United States ; [3] Medicine, University of North Carolina at Chapel Hill, NC, United States ; [4] Center for Quality of Care Research, Baystate Medical Center, Springfield, United States ; [5] Center for Health Research, Kaiser Permanente Northwest, Portland, United States and [6] Medicine, University of Chicago, United States .

Body: RATIONALE: Studies evaluating quality, safety, effectiveness, and costs of care using registries linking Electronic Health Records from diverse healthcare settings are attracting increasing interest because they can provide information more applicable to 'real-world' patients and clinicians. METHODS: The COPD Outcomes-based Network for Clinical Effectiveness and Research Translation (CONCERT) developed a multicenter COPD registry (COPD DataHub) linking 8 U.S. academic healthcare institutions. Inclusion criteria were based on age (>40 yrs), ICD-9 billing codes, problem lists, medications, or spirometry from 2006 to 2010. The prevalence of Charlson comorbid conditions was estimated. An in-person study visit was used to collect additional information, including height, weight, smoking status, symptoms, and lung function. Preliminary findings are presented here. RESULTS: In 226,261 patients, the five most common co-morbid conditions (hospital and outpatient encounters) were diabetes (32 and 23%), heart failure (26 and 11%), renal disease (20 and 9%), malignancy (20 and 12%), and peripheral vascular disease (16 and 8%). In 1,216 patients who completed the study visit, 73% were overweight or obese, 84% were ever smokers, 44% smoked >40 pack-years, 34% had chronic bronchitis symptoms, and 54% had fixed airflow obstruction (post-BD FEV_1/FVC<70%). CONCLUSIONS: Quality improvement and comparative effectiveness research in COPD should 1) include lung function testing to confirm the diagnosis, and 2) address a range of comorbid conditions, including overweight or obese body habitus and smoking-related behaviors. Given the high levels of comorbidity, heterogeneous treatment effects appear likely.