European Respiratory Society
Annual Congress 2013

Abstract Number: 2273

Publication Number: P717

Abstract Group: 5.1. Airway Pharmacology and Treatment

Keyword 1: COPD - management **Keyword 2:** No keyword **Keyword 3:** No keyword

Title: Identification of COPD patient factors associated with nighttime and early morning symptoms

Sean 17284 Sullivan sdsull@u.washington.edu [1], Qian 17285 Cai CCai@healthcore.com [2], Judith 17286 Stephenson JStephenson@healthcore.com [2], Hiangkiat 17287 Tan JTan@healthcore.com [2], Abhishek 17288 Kavati kavatiabhishek5@gmail.com [2], Michelle 17290 Mocarski Michelle.Mocarski@frx.com [3] and Jalpa 17318 Doshi j.a.doshi@gmail.com [4]. [1] Department of Pharmacy, University of Washington, Seattle, WA, United States ; [2] HealthCore, Inc., Wilmington, DE, United States ; [3] Health Economics & Outcomes Research, Forest Research Institute, Inc., Jersey City, NJ, United States and [4] Health Services Research Unit, University of Pennsylvania, Philadelphia, PA, United States .

Body: INTRODUCTION Patients with COPD often report poor sleep quality and consider morning as the worst time for symptoms. This study identified factors associated with nighttime (NT) and early morning (EM) symptoms in COPD patients. METHODS HealthCore Integrated Research Database claims data (9/1/10 to 8/31/11) were used to identify patients ≥40 years with ≥1 ICD-9-CM COPD diagnosis code medical claim or ≥1 COPD maintenance medication pharmacy claim. Respondents (N=752) completed a survey with questions from the COPD Assessment Test (CAT), modified Medical Research Council Dyspnea (mMRC) scale, and Morisky Medication Adherence Scale (MMAS). Respondents were classified based on NT and/or EM symptom experience in the past week, and enrollment was stratified based on NT/EM symptoms. Multinomial logistic regression identified factors associated with symptoms. RESULTS Patients reported having both (42.3%), either (32.7%), or neither NT/EM symptoms (25.0%). Compared to patients without NT/EM symptoms (OR; 95% CI), those with both were more likely to be a current smoker (2.61; 1.18-5.78), have used oxygen in the past week (2.20; 1.02-4.71), and have dyspnea (2.73; 1.56-4.76), worse health status (8.03; 4.33-14.89), or low (2.58; 1.34-4.93) or moderate (2.04; 1.13-3.67) COPD medication adherence; in contrast, only worse health status (2.78; 1.70-4.54) was a significant factor for patients with either NT/EM symptoms vs those without symptoms. CONCLUSIONS Health status, dyspnea, smoking status, medication adherence, and oxygen use were associated with NT and EM symptoms among COPD patients. Targeting these factors may lead to more successful treatment strategies for COPD patients.