

**PAR5****HEALTH CARE RESOURCES UTILIZATION IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE**Lachaine J<sup>1</sup>, Bradley-Kennedy C<sup>2</sup><sup>1</sup>University of Montreal, Montreal, QC, Canada; <sup>2</sup>Boehringer Ingelheim Canada Ltd, Burlington, QC, Canada

Chronic Obstructive Pulmonary Disease (COPD) is among the leading cause of death in North America. Despite its high prevalence, morbidity and mortality, little is known about its impact on health care resources utilization.

**OBJECTIVES:** To define the patient profile for COPD and quantify health care resource utilization of patients with a diagnosis of COPD in term of hospitalization, visits to the emergency department, use of medical services, and medications use.

**METHODS:** The study was conducted using data from the Quebec Provincial Drug Plan (QPDP) databases. From a random sample representing 10% of the population covered by the QPDP, two different cohorts were extracted from the databases—one comprising subjects diagnosed with COPD and a comparison group, matched for sex and age group, of subjects without COPD.

**RESULTS:** The proportion of COPD in the population covered by the QPDP drug plan was 4.8%, with a higher proportion among men than among women. On average the cost difference between COPD and non-COPD was \$8,897 (\$14,728 vs. \$5,831) over a three-year period or \$2,966 per patient per year. In both groups costs of health care resource increase with age, but cost in the COPD group were higher than in the non-COPD group for each age category. COPD patients had more days of hospitalization, more visits to the emergency, more hospital outpatient clinics and more physician visits in private offices. In addition, the consumption of medical services and pharmaceutical services was higher in the COPD group than in the non-COPD group.

**CONCLUSION:** COPD is a frequent disease affecting a large proportion of the elderly population and represent a significant burden to the health care system. Patients with COPD use a higher quantity of health care resources than those who are not diagnosed with COPD. This translates into higher health care costs.

**PAR6****ESTABLISHING THE RELIABILITY OF EVIDENCE FOR THE SIGNIFICANT IMPACT OF ALLERGIC RHINITIS ON HEALTH RELATED COSTS**Sullivan S<sup>1</sup>, Armstrong DS<sup>2</sup>, Ershoff D<sup>3</sup><sup>1</sup>Institute for Health and Productivity Management, Scottsdale, AZ, USA; <sup>2</sup>Integrated Therapeutics Group, La Verne, CA, USA; <sup>3</sup>Integrated Therapeutics Group, Tarzana, CA, USA

**OBJECTIVES:** To describe the similarities of the magnitude of lost work performance related to allergic rhinitis in multiple industries.

**METHODS:** 14,000 employees from 10 western U.S. employers in four industries (local government, public schools, gaming/casino, and healthcare/medical) were asked to participate in a cross-sectional study of allergic rhinitis. An anonymous, self-administered questionnaire was distributed at the worksite and returned to a third party to assure confidentiality. The questionnaire included items assessing allergy severity, symptomatology, medication use, health service utilization, self-management knowledge and practices, sociodemographics and lost work performance (due to full and partial missed days and presenteeism). Response rates by industry ranged from 30% to 85% with 2,493 employees reporting that they currently had allergies.

**RESULTS:** The average age of responders ranged from 39 to 46. 92% of responders from the healthcare/medical industry were female compared with 82% from public schools, 66% from gaming/casinos and 63% from local government. Approximately 75% of employees from local government, public schools and gaming/casinos reported moderate to severe allergies versus 60% in the healthcare/medical industry. On average, 25–33% of employees across industries reported use of non-sedating antihistamines. Despite demographic differences, there were consistencies regarding lost work performance across all industries ranging from 16.4 hours lost in public schools to 18.1 in gaming/casinos. Presenteeism accounted for the majority (75%) of these hours across industries.

**CONCLUSIONS:** The replication of lost work performance findings provides strong evidence of the substantial disease burden of allergic rhinitis of a diversity of workers across different occupational categories and industries. This study supports estimates that lost work performance from allergic rhinitis is four to five times greater than direct medical expenditures and must be included when measuring total health related costs to employers. Allergic rhinitis, like migraines, presents a significant opportunity for employers to reduce health-related costs via targeted interventions.

**PAR7****ECONOMIC CONSEQUENCES OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A NATIONAL SAMPLE OF US ADULTS**Sendersky V<sup>1</sup>, Law AW<sup>2</sup>, Gause D<sup>3</sup>, Sung J<sup>3</sup><sup>1</sup>Duke University/Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA; <sup>2</sup>Duke University, Durham, NC, USA;<sup>3</sup>Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

**OBJECTIVES:** Chronic obstructive pulmonary disease (COPD) is a significant public health problem resulting in substantial societal burden. The main objective of this study was to estimate direct medical costs attributable to COPD.

**METHODS:** Data from the Household Component of 1996 Medical Expenditures Panel Survey (MEPS), a nationally representative sample of the non-