resource utilization and cost to determine whether functional decline is associated with smoking. Longitudinal, observational, cross-sectional data were collected using standardized assessments to determine HCRU and cost results for each patient.

PRS34 CLINICAL AND ECONOMIC BURDEN OF ASTHMA AND CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN POLAND: ESTIMATED IMPACT OF POOR INHALATION TECHNIQUE WITH INHALED CORTICOSTEROID AND LONG-ACTING BETA AGONIST FIXED-DOSE COMBINATIONS

Keywords: Asthma, COPD, Inhalation technique, Poland

OBJECTIVES: To perform an analysis of the changes in the number and cost of hospitalizations of COPD patients after the introduction of the new inhalation medications into the Positive drug list (PDL). METHODS: It is retrospective, real life observational study on the hospitalizations of COPD patients due to exacerbations and the inclusion of new medicinal products for the treatment of COPD in PDL for a 6-year period (2009–2014). Data for the number of hospitalizations due to COPD exacerbations, their cost, and the number of COPD patients with valid health insurance status was collected from National Health Insurance Fund (NHF). Newly entered medicinal products for COPD were extracted from the PDL. Macro-costing approach was applied to evaluate the impact of new inhalation medications on the cost of care per patient. RESULTS: The number of COPD hospitalizations decreased by 8.6% (p = 0.001). The number of hospitalizations due to exacerbations of asthma decreased by 10.4% (p = 0.002), with the highest decrease observed in the group of patients with chronic obstructive pulmonary disease (COPD). The cost of hospitalization decreased by 14.6% (p = 0.001), longer lengths of stay (p < 0.001) and significantly higher total costs (pharmacy + medical) ($180,828/year vs $162,072/year)(p = 0.004). CONCLUSIONS: The cost burden of smoking is high from a public policy perspective. In Poland, the estimated annual government expenditure on managing smoking related diseases was Hong Kong (HK$26,200), Malaysia (MYR 14,600), Thailand (THB 8,480), Philippines (USD 7.70 billion), South Korea (KRW 1.61 billion), Singapore (S$ 0.72 billion) and Australia (AUD 1.69 billion). Among the 7 countries, the smokers spend the most in Hong Kong. The cost of smoking is considerable in Poland and poor inhalation technique is a substantial contributor to costs of unscheduled healthcare events. Novel inhalers with easier inhalation technique may offer clinical and economic benefits in the management of asthma and COPD.