ECONOMIC BURDEN OF HOSPITALIZED PNEUMONIA FROM A PRIVATE HEALTH CARE SYSTEM PERSPECTIVE IN BRAZIL
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OBJECTIVES: This study aimed to evaluate the economic burden of hospitalization and its associated costs in the Brazilian Private Health Care System. METHODS: An administrative claims database containing over 18 million lives was used to identify hospitalized pneumonia episodes, in all ages, between Oct/2010 and Dec/2013. Pneumonia episodes were identified using ICD-10 codes of A41:0, 032.0, 1, 131, 135, 150, 2, 135.5, 136, 138, 138.9, 139, 202, P23.3. Pneumonia costs included were taxes and exchange, medicines, materials, medicinal gases, food, medical fees, exams, procedures and personal hygiene. The costs at index date were calculated on the basis of patients age at hospitalization, prevalence and incidence of COPD, mortality, drug and hospital resource use from the perspective of private health care systems (PHCS). RESULTS: A total of 16,227 pneumonia patients were identified with a total of 17,781 hospitalizations, representing an average of 1.1 hospitalizations per pneumonia patient in all ages. The aggregate costs for all inpatient treatment were BRL292,687,872.71 representing an average of 130,406 hospital days across the pneumonia patients. The average days for hospitalization per patient is 7.5 days. The average expenditure for the health insurance provider represents BRL12,490.78 per patient or BRL11,399.13, when evaluating per hospitalization. This translates to an average daily expenditure of BRL1,704.06 per patient or BRL555.13 per hospitalization. CONCLUSIONS: Costs related to pneumonia hospitalization are high and represents a large impact to the private health care system. Given the significant economic burden associated with pneumonia, there is a need to better implement prevention strategies such as flu and pneumococcal vaccinations and smoking cessation.

COST-MINIMIZATION AND BUDGET-IMPACT ANALYSIS OF FIXED-DOSE ICS/ LABA COMBINATION INHALERS IN THE TREATMENT OF ASTHMA IN SLOVENIA
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OBJECTIVES: To compare the expected costs and outcomes associated with the novel once-daily fixed-dose combination (FDC) of inhaled corticosteroid (ICS) and long-acting beta agonist (LABA) fluticasone furoate/vilanterol (FF/VI) against those expected with currently available FDC options, fluticasone propionate/salmeterol (FP/S), budesonide/formoterol (BUD/F), and beclometasone dipropionate/formoterol (BD/F), for asthma treatment in Slovenia. METHODS: We developed a Markov model based on the day of hospitalization in the Slovenian National Medical University Hospital. The model takes into account the complexity of asthma treatment and particularly accompanying disease titration. Using available clinical evidence, we assumed that the clinical efficacy and incidence of adverse events associated with all four FDCs were similar. We compared FF/VI with other FDCs of ICS/LABA from the Slovenian payers' perspective at the price levels determined by international reference pricing as of April 2014. We followed a cohort of 8,100 patients aged 50 years old with asthma based on the results of seminal study GOAL (Gaining Optimal Asthma Control) that compared health care resource utilization (HRU) and costs between Medicare beneficiaries with IFF and matched non-IFF controls. METHODS: Administrative claims from a 5% random sample of Medicare beneficiaries aged 65+ from years 2000 to 2011 were analyzed. Incident IFF patients were identified based on ICD9-CM diagnostic codes, with at least one year enrollment before (pre-index) and after (post-index) the first diagnosis (index date). Up to 5 beneficiaries without IFF were matched to each incident IFF patient based on sex, age, race, and total medical costs (excluding outpatient drug costs) during the pre-index and post-index periods were compared between IFF patients and the matched controls and univariate analyses were performed to identify the differences. RESULTS: A total of 7,855 IFF patients were matched to 38,856 controls. During pre-index period, IFF patients had 3 folds higher risk of COPD, asthma and lung infections, 80% higher risk of hospitalization (28.8% vs. 15.8%), and higher total medical costs ($10,124 vs. $5,888) matched control patients. During post-index period, IFF patients had a higher risk of hospitalization (48.7% vs. 20.8%) and all other types of HRU with the total medical costs $11,955 higher than controls ($20,887 vs. $8,932) (all p<0.05). Incapent care accounted for 50% of total medical costs of IFF patients in both pre-index and post-index periods. CONCLUSIONS: In the US, IFF patients aged 65 or older had a greater burden of comorbidity and incurred more HRU and medical costs than matched controls. Multidisciplinary team based approach and effective therapies are needed in the given unmet needs.