related event, adjusting for gender, age, ethnicity, presence of comorbid respiratory diseases, number of other co-morbidities, pre-index use of short-acting beta agonists (SABAs), oral steroids and theophylline, and pre-index events. **RESULTS:** A total of 4447 patients were identified, 2435 (55%) on IPR, 1088 (24%) on ICS alone, 410 (9%) on ICS + IPR, 299 (7%) on SAL alone and 215 (5%) on ICS + SAL. Compared to IPR alone, the use of ICS alone (HR 0.82, 95% CI: 0.69, 0.96), SAL alone (HR 0.62, 95% CI: 0.46, 0.84), and ICS + SAL (HR 0.64, 95% CI: 0.45, 0.91) were associated with a lower event risk when controlling for the other factors. Factors that were significant predictors of an increase risk of an event were: being white, having a co-morbid respiratory disease, using pre-index SABAs, and having pre-index events. **CONCLUSION:** The results of this analysis suggest that the use of inhaled corticosteroids and salmeterol were associated with a significant decrease in the risk of COPD-related hospital/ED events compared to the use of IPR alone in a population of Medicaid patients. This was an observational retrospective analysis and these data should be confirmed by prospective studies.

**Abstracts**

**PRP7**

**USE OF LONG-TERM ASTHMA CONTROLLER MEDICATIONS BEFORE AND AFTER A HOSPITALIZATION OR EMERGENCY DEPARTMENT VISIT**

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**OBJECTIVES:** The purpose of this abstract is to examine the use of long-term asthma controller medications (LTACM) before and after asthma-related inpatient stays and emergency department events (EDE). **METHODS:** Data was drawn from the 1997 Medstat-Marketscan claims database. Asthma-related events were defined as EDE or inpatient hospital stay with a primary or secondary diagnosis of asthma (ICD-9 code 493). LTACM included corticosteroids, xanthines, leukotriene modifiers and combination medications. **RESULTS:** The sample included 464 individuals with an asthma-related EDE and 747 with an inpatient hospital stay. Of the EDE sample, 60% filled a prescription for LTACM during the calendar year. A total of 32% had filled a prescription prior to the EDE with an average of 85 days between the prescription being filled and the EDE. Twenty percent filled a prescription during the month subsequent to the EDE and 35% during the subsequent calendar year. Of those with a hospital stay, 60% filled a prescription for LTACM during the calendar year. Of those that filled a prescription prior to the hospitalization, there was an average of 70.4 days between the filling of the prescription and the event. Forty four percent of the hospital sample filled a prescription afterward, with 65% doing so within 30 days. **CONCLUSIONS:** We find that many of those receiving care in inpatient ad emergency departments are not using long-term controller medications. It is likely that virtually all of these individuals have been prescribed medications, but have not complied with the drug regimen. Even after an adverse event, a slight majority continues to not fill prescriptions. One approach for improving the health of those with asthma and reducing asthma expenditures.

**RESPIRATORY DISEASES/DISORDERS—Economic Outcomes**

**PRP8**

**COMPARISON OF THE ECONOMIC IMPACT OF MONTELUKAST AND INHALED CORTICOSTEROID AGENTS ON ALLERGIC RHINITIS-RELATED UTILIZATION IN PATIENTS WITH ASTHMA**

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**OBJECTIVES:** Montelukast has been approved for the treatment of seasonal allergic rhinitis. The study's objective was to compare allergic rhinitis (AR) associated medical and pharmacy utilization in asthma patients with comorbid AR initiating inhaled corticosteroids (ICS) or montelukast (MO). **METHODS:** A retrospective, observational study using healthcare claims from 25 United Healthcare plans was conducted. Subjects less than 65 years old and newly started on either ICS or MO between 01.01.1999 and 12.31.2000 were identified. Subjects with at least one asthma (493.xx) and one AR (477.xx) medical claim, 24 months of continuous enrollment, and either an AR claim or a non-sedating antihistamine (NSA) related event, adjusting for gender, age, ethnicity, presence of comorbid respiratory diseases, number of other co-morbidities, pre-index use of short-acting beta agonists (SABAs), oral steroids and theophylline, and pre-index events. **RESULTS:** A total of 1706 subjects were matched, (853 ICS and 853 MO). Compared to ICS subjects, MO subjects received significantly more refills for NSA (median of 2.55 vs. 3.34, p < 0.0001), significantly more days of NSA therapy (median days supply of 30 vs. 60, p = 0.0001), and fewer NCS refills (median of 0.63 vs. 0.54, p = 0.0459). Additionally, MO subjects had significantly higher AR pharmacy cost ($130 vs. $107, p = 0.0028) and total AR cost ($279 vs. $214, p = 0.0180). **CONCLUSIONS:** In this population, compared with ICS, the use of MO in asthma subjects with comorbid AR was associated with greater AR health services cost in the 12-month follow-up period.