

label prospective study was conducted among 208 COPD patients who were admitted in a tertiary care teaching hospital in south India after obtaining the ethical clearance. Demographics, medication adherence and quality of life of the patients were measured using Morisky scale (Adherence) & St. George Respiratory Questionnaire (HRQoL). Statistical analyses were performed using SPSS® version 20. **RESULTS:** Mean age of the study population (n=208) was 58.42±9.72. (Males =93.5%). After the drug treatment, males showed statistically significant (p < 0.05) improvement in pulmonary function, medication adherence and HRQoL. Patients with COPD duration of < 5 years showed a significant improvement in pulmonary function and HRQoL scores. Literate patients had a significantly higher improvement in Medication Adherence and HRQoL than illiterate patients. **CONCLUSIONS:** The results of the study suggest that demographic factors were independently associated with outcomes in COPD patients.

PRS44

AN EVALUATION OF SMOKERS' PREFERENCE FOR CHARACTERISTICS OF TOBACCO CESSATION MEDICATIONS: A WILLINGNESS TO PAY APPROACH

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OBJECTIVES: Tobacco smoking is the leading cause of preventable morbidity and mortality in the United States, and smoking cessation has multiple health benefits. The purpose of this study was to assess cigarette smokers' preference towards characteristics of tobacco cessation medications using a Willingness-to-Pay approach. **METHODS:** Data from the 2008 HealthStyles Survey, a mail-based probability sample of 5,399 adult aged ≥ 18 years, were used to assess three primary outcomes among current cigarette smokers (n=914): 1) interest in quitting; 2) interest in using cessation medications; and 3) willingness to pay for six types of cessation medications. Point estimates and 95% confidence intervals were calculated overall and by sociodemographic and smoking behavior characteristics. Multivariate Probit regression analysis was used to evaluate smokers' willingness to pay in relation to perceived importance of three cessation medication characteristics: convenience of use, over-the-counter availability, and efficiency to help quit. All models controlled for sociodemographic characteristics, smoking behavior characteristics, and U.S. region fixed effects. **RESULTS:** Approximately 68.4% of current cigarette smokers were interested in quitting. Among these individuals, 45.6% indicated that they were interested in using cessation medications, and of these, 47.3% indicated that they were willing to pay \$150 or more out-of-pocket for these medications. Convenience of use and the effectiveness of these medications to help quit were positively associated with current smokers' willingness to pay for \$300 or more (p≤5%); however, no association was observed for over-the-counter availability. Self-reported exposure to telephone quitline advertisements was also positively associated with the willingness-to-pay. **CONCLUSIONS:** Approximately 68% of current smokers are interested in quitting and about half of those smokers interested in quitting are also interested in using cessation medications. Convenience of use and the medication's effectiveness are important to smokers with quit intentions. Understanding these preferences may help inform efforts to increase access and utilization of cessation medications.

RESPIRATORY-RELATED DISORDERS - HEALTH CARE USE & POLICY STUDIES

PRS45

DESCRIBING TREATMENT PATTERNS IN ADOLESCENTS AND ADULTS WITH ALLERGIC ASTHMA

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OBJECTIVES: Allergic asthma (AA) patients comprise over 93% of severe/difficult to treat cases in the US and patients face a lifelong treatment course. A dearth of real world information exists on the use of effective and approved treatments, particularly among adolescents. This study examined medication treatments for AA patients and incorporated treatment intensity (HighTx), consistent with NHLBI treatment guidance (steps 5-6), as a severity proxy. **METHODS:** This retrospective, observational study used MarketScan claims to identify newly diagnosed AA patients (10/2009 – 9/2012). Two cohorts were established: adolescents (12-17); adults (18-64). Index was the date of first AA diagnosis. Continuous enrollment was required for 12 months before and after index. Demographics and comorbidities were measured at baseline. Asthma medication use was observed in the 12 months after index. HighTx was characterized for patients with high dose inhaled corticosteroid/long-acting beta agonist (ICS/LABA) combination treatment and having > 30 days supply in any continuous treatment period in 12 months after index. **RESULTS:** Gender distribution differed across age cohorts (adolescents: >50% female; adults: >65% male). Acute illness drove comorbidity burden: more adolescents experienced acute respiratory infections (37.9% vs. 24.5% adult); more adults reflected acute sinusitis (20.6% vs. 25.2% adult). Treatment patterns (full sample): more adolescents received short-acting beta agonist (35.5% vs. 30.2% adults); fewer received ICS/LABA (22.6% vs. 34.5% adults) and monoclonal antibodies (0.3% vs. 1.1% adults). Treatment pattern (HighTx): more patients received ICS/LABA (adolescents 98.9%; adults 99.3%); days on therapy did not exceed 160 (ICS/LABA) for either HighTx age cohort. Twice as many HighTx adults received monoclonal antibodies as adolescents (2.5% vs. 5.1% adults). **CONCLUSIONS:** In light of similar disease burden, AA diagnosis, and availability of effective treatments, fewer AA adolescents received targeted therapies than adults. This disparity highlights the opportunity to incorporate targeted therapies as a treatment option, particularly for adolescent AA patients.

PRS46

IMPROVED HEALTH CARE OUTCOMES AND COST SAVINGS FOR ASTHMA THROUGH TARGETED HOME INTERVENTIONS

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OBJECTIVES: Studies have demonstrated the importance of the environment both on the development of asthma and on exacerbation of asthma symptoms in those who have been diagnosed with the disease. The goal of this project was to provide in-home asthma services that covered both self-management education and home environmental interventions for children diagnosed with asthma living in Section 8 Multi-family Housing. **METHODS:** This HUD-funded project consisted of 3-4 home visits by a public health nurse over a one year period—an in-home baseline visit; a visit to deliver allergen-reducing products if needed; and 6 and 12-month follow-ups by phone or in-home visit. Data was collected on asthma status (health-related quality of life and asthma control), health service utilization (hospitalizations, ED and office visits) and school and/or work absences due to asthma. Data analysis was completed using SAS v9.3. **RESULTS:** 219 children from 161 low income families were enrolled from five participating local public health agencies in a large metropolitan area. The low cost interventions provided, resulted in significant increases in the proportion of enrollees experiencing minimal to no daytime and nighttime symptom burden and functional limitations at the 12-month follow-up (p < 0.05). Overall health care service use declined. There was a significant reduction in school days missed (p < 0.05), the equivalent of 5 school days per child per year. The average cost per family of interventions, was \$424 (e.g. mattress and pillow encasements, HEPA vacuum cleaners, air purifiers). Program administrative costs per family were \$585 (e.g. enrollment costs, travel time, visit time and documentation). **CONCLUSIONS:** This study provided additional support for the usefulness and success of providing home interventions for low income children who have been diagnosed with asthma. Low cost, targeted interventions led to improvements in HRQoL, decreased health service utilization, increased school attendance and a positive return on investment.

PRS47

THE EFFECT OF INTRODUCTION OF GENERIC DRUGS ON PATIENTS' ACCESS TO PHARMACEUTICALS IN HUNGARY

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OBJECTIVES: The aim of our study was to analyze the generic competition of medications containing the active substance montelukast sodium and to examine the cost-containment methods of the Hungarian National Health Insurance Fund Administration. **METHODS:** Data derived from the nationwide pharmaceutical database of Hungarian National Health Insurance Fund Administration (2007-2013). We analyzed the turnover and price of the medicaments containing the active substance montelukast sodium. Accordingly our indicators were: consumer price, social insurance subsidy, patients' co-payment and defined daily dose (DOT). **RESULTS:** The price of Singulair 10 mg tablets was 32 USD in October 2011, when the generics appeared, and it was reduced to 10 USD by the end of 2013. The generics started with a price 40% lower (for example Montelukast Teva 10 mg tablets: 19 USD, Eonic 10 mg tablets: 17 USD, Montelukast Sandoz 10 mg tablets: 19 USD), their price was diminished below 7.4 by the end of 2013 (for example: Montelukast Teva 10 mg tablets: 5.2 USD, Eonic 10 mg tablets: 5.8 USD, Montelukast Sandoz 10 mg tablets: 5.5 USD). The DOT increased gradually: In 2007 it was 1.7 million days, in 2010 6.3 million days and in 2013 it increased over 10 million days. The amount of the health insurance subsidy was 9.2 million USD in 2010. It reached its peak in 2011 (10.5 million USD), in 2012 it was reduced to 7 million USD, in 2013 to 4.1 million USD, in all it is a setback of 61%. **CONCLUSIONS:** Following the introduction of generic drugs, the price of the medicaments containing montelukast sodium was significantly reduced. The annual health insurance subsidy was significantly reduced as well, while the DOT increased. The patients' access to drugs containing montelukast sodium increased significantly.

PRS48

ADHERENCE TO CHRONIC OBSTRUCTIVE PULMONARY DISEASE MAINTENANCE MEDICATION AMONG PATIENTS WITH COPD

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OBJECTIVES: Chronic obstructive pulmonary disease (COPD) is one of the most common lung diseases. COPD prevalence among US adults was estimated to be 15 million or 6.3 percent of the total population in 2011. Nonadherence to COPD maintenance medications has been reported to be associated with more hospitalizations, higher mortality and lower quality of life. This study examined COPD maintenance medication adherence among Medicare beneficiaries with COPD. **METHODS:** An observational, retrospective cohort study was conducted using 2007 and 2008 Medicare Current Beneficiary Survey (MCBS) data. Sample inclusion criteria were being diagnosed with COPD and having at least two Medicare Part D claims. Medication adherence was measured by calculating proportion of days covered (PDC). PDC was calculated as the number of days with COPD maintenance medications available divided by total number of days in a six-month period following index dates, which were defined as the date of first COPD maintenance medication fill in 2007. A dichotomous variable was used to determine adherence status. Individuals with PDCs of 0.80 or greater were considered adherent and individuals with PDCs less than 0.80 were considered nonadherent. Logistic regressions were used to examine associations between demographic variables and medication adherence. **RESULTS:** A total of 292 beneficiaries fulfilled sample selection criteria and were included in the analysis. The mean age was 72 years, 54 percent were ≤ 75 years old and 11 percent were 85 years or older. The sample was predominantly female (60%) and white (85%). The mean±standard deviation PDC was 0.69±0.24. More than half (59%) of the Medicare beneficiaries had PDC of less than 0.80 and were classified as nonadherent to their COPD maintenance medications. No sig-