144

Abstracts

trends in the excessive use of β-agonist medications. RE-SULTS: Data from 13,481 patients covered by Pharmacare PlanC (social assistance-first dollar coverage) or PlanE (individuals or families exceeding deductible) were analyzed. In 1996, 1898 patients (14.1%) were high users of β -agonists (>12 canisters/yr) compared to 1686 (12.5%) in 1998 (P = 0.001). 1119 patients (59%) who were high users in 1996 remained high users in 1998, 38.7% of which continued to use >20 canisters/yr. Of those patients using = 12 canisters in 1996, only 4.9% increased their use to >12 canisters/yr in 1998. 116 patients prescribed = 4 canisters in 1996 substantially increased their use to >12 canisters in 1998. Age was positively associated with the number of canisters prescribed (r = 0.21; P = 0.001); only 4% of patients <19 years used >12 canisters in 1998 compared to 16% of patients = 19 yrs. Age was also associated with increasing use over the 3 years (P =0.001). CONCLUSIONS: This analysis suggests a trend in asthma management towards decreasing B-agonist use. However, >10% of β -agonist users in this population continued to use excessive or increasing amounts of β-agonists despite current treatment guidelines, putting them at greater risk for β -agonist related morbidity and mortality, and increased health care utilization.

IDENTIFYING PREDICTORS OF THE ASTHMA-SPECIFIC QUALITY OF LIFE QUESTIONNAIRE FOR NATIVE-AMERICAN ADULTS (AQLQ-NAA) Gupchup GV¹, Kumar RN¹, Tonrey L², Riley K²

PRS4

¹University of New Mexico College of Pharmacy, Albuquerque, NM, USA; ²PHS Albuquerque Indian Hospital, Albuquerque, NM, USA

The Asthma-specific quality of life questionnaire (AQLQ-NAA) is a 19-item questionnaire and has emphasis on restrictions in social, community and cultural activities. Three domains of the AQLQ-NAA, community and social restrictions (CSR, 10 items), psychological and impact (PIM, 4 items) and symptoms (SYM, 5 items) have been identified using principal component analysis. OB-JECTIVES: The purpose of this study was to identify significant predictors of the AQLQ-NAA and each of its domains. METHODS: The AQLQ-NAA was administered to a sample of 51 adult volunteers with a diagnosis of asthma at the Albuquerque Indian Hospital and three affiliated clinics. Four forward stepwise regression models were analyzed using total AQLQ-NAA scores and each domain score separately as the criterion variable. Six predictors (emergency care visits in the past 6 months, hospitalizations in the past six months, physician visits in the past six months, corticosteroids used in the past six months, asthma medications used in the past six months, and patient gender) were used in the regression models. **RESULTS:** Physician visits, hospitalizations and gender were significant predictors of total AQLQ-NAA scores $(F = 10.493, P < 0.05, Adjusted R^2 = 0.388)$ and the CSR domain scores (F = 10.537, P < 0.05, Adjusted

 $R^2 = 0.389$). Physician visits and hospitalizations were significant predictors of the PIM domain scores (F = 13.368, P < 0.05, Adjusted $R^2 = 0.355$). Number of asthma medications and gender were significant predictors of the SYM domain scores (F = 7.107, P < 0.05, Adjusted $R^2 = 0.213$). CONCLUSIONS: Based on the predictors for each of the three domains, inherent differences between the domains were observed. This study helps further establish evidence of construct validity of the AQLQ-NAA and its domains.

PRS5

IMPACT OF INHALED CORTICOSTEROIDS (FLUTICASONE PROPIONATE) ON ECONOMIC OUTCOMES IN A MANAGED CARE ENVIRONMENT

Oates V¹, Vaziri B¹, Ober J², Gothard L²

¹Advance Paradigm, Hunt Valley, MD, USA, ²Glaxo Wellcome, Inc., Research Triangle Park, NC, USA

OBJECTIVES: The purpose of this study is to evaluate differences in asthma-related health care resource utilization between six months preceding and following the initiation of fluticasone propionate. METHODS: Adult asthmatics were identified through administrative medical and pharmacy claims from an IPA model Health Maintenance Organization. The study population was defined as any identified asthmatic with continuous enrollment who had a prescription for fluticasone propionate. Asthmarelated resource utilization was evaluated for differences in services based on the introduction of fluticasone propionate. RESULTS: A total of 199 asthmatic members were identified with an average age of 44.7 (\pm 12.7) years old. The majority of patients (60%) were female. There was an inverse relationship of pharmacy costs to medical costs from the pre- to post-fluticasone propionate period. Pharmacy costs increased 61%, while medical costs decreased 71 percent. Paired-sample t-tests showed a significant decrease in the number of hospitalizations, emergency room visits, and diagnostic procedures. Although pharmacy utilization increased, it resulted in an improved inhaled corticosteroid to beta-2 agonist ratio of 0.51 to 1.41. The net asthma-related costs declined 35%, representing a reduction of \$296 per asthma study member for the six-month period. CONCLUSIONS: In summary, the introduction of fluticasone propionate appeared to have a substantial impact on resource utilization and cost. Results support current literature that the use of inhaled corticosteroids reduces the number of asthma-related emergency room visits and hospitalizations.

PRS6

CLASSIFYING ASTHMA SEVERITY BASED ON PRESCRIPTION DRUG CLAIMS

Leahy MJ¹, Klingman D², Bell CF²

¹Leahy & Associates, LLC, Old Lyme, CT, USA; ²PAREXEL International, Outcomes Research Group, Alexandria, VA, USA