of adults in TENOR do not achieve asthma control and that a considerable proportion of patients transition from one level of asthma control to another over six months. This and additional research that quantifies the relationship between control and utilities and costs could aid in the development of an asthma policy model for severe or difficult-to-treat asthma.

PAA14

PRESCRIPTION DRUG INSURANCE COVERAGE: RISK FACTOR FOR EMERGENCY DEPARTMENT VISITS AND OVER UTILIZATION OF SHORT ACTING BRONCHODILATORS IN ASTHMA PATIENTS OF THE UNITED STATES

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OBJECTIVES: Excessive use of short acting bronchodilators worsens asthma control. This study hypothesizes that people with no prescription drug insurance coverage tend to rely more on short acting bronchodilators (SAB) than controller drugs and consequently have higher number of Emergency Department (ED) visits. METHODS: This study utilized 2004 Medical Expenditure Panel Survey (MEPS)data. Asthma patients (ICD code: 493) were identified from the "medical conditions file." Prescription drug insurance coverage and ED visits were identified from the "house hold component of MEPS." Multiple logistic regression analysis was used to estimate associative risks of ED visits and SAB use among asthmatic patients with no prescription drug insurance coverage. RESULTS: A total of 14 million individuals were estimated to have asthma in U.S. in the year 2004. Amongst them 6.21 million (44.2%) did not have prescription drug coverage. A total of 3.06 million ED visits were reported by people without prescription drug coverage compared to 2.53 million ED visits by individuals having prescription drug coverage. The people with no prescription drug coverage had a noticeably higher risk of ED visit. (Odds Ratio (OR) = 1.498; 95% CI: 1.494 to 1.502). The people with no prescription drug coverage are more likely to use SAB (filled at least 10 prescriptions during the year) compared to those who had prescription drug coverage. (OR = 2.544; 95% CI: 2.534 to 2.554) CONCLUSION: Asthma patients without prescription drug insurance coverage have higher number of ED visits compared to patients with insurance coverage. There is a significant association of prescription drug non-coverage and overuse of short acting bronchodilators. We conclude that the policy changes to improve access to controller drugs will reduce number of ED visits and over utilization of short acting bronchodilators.

PAA15

AGREEMENT BETWEEN PARENT REPORTS AND MEDICAL CHARTS FOR PEDIATRIC ASTHMA MEDICATION UTILIZATION

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OBJECTIVES: Although parents are often asked to report their children's medication use for epidemiological and health economic evaluations, the accuracy of medication reports from parental proxies is unknown. The objective was to assess agreement between parent report and medical record for pediatric asthma medications. METHODS: A retrospective analysis compared parent and medical chart data for reports of current asthma medication names and strengths in 99 asthmatic children recruited from outpatient practices of a pediatric respirologist and an allergist. RESULTS: A total of 279 asthma medications were reported with an average of 2.8 ± 1.2 asthma medications per child. Perfect agreement between reported and charted asthma medication names and strengths was found in 4% of the medical charts and occurred for 33% of reported medications. Medication names were found in the medical chart for 85% (238/279) of reported medications and a medication strength was located in the medical chart for 52% (123/238) of these. Parents reported a medication strength that did not match the chart for 24% (29/123) of the asthma medications for which strengths were found in the chart. Significantly more medication strengths were found in the medical chart for inhaled corticosteroids (90/100) than for short-acting beta agonists (9/95) (p < 0.03). Of the 90 inhaled corticosteroids for which strengths were recorded in the medical chart, 70 (78%) matched the parent report. Of the 9 short-acting beta agonists for which strengths were recorded in the medical chart, 4 matched the parent report. This difference in agreement was significant (p < 0.03). CONCLUSION: Parents may be able to provide more detailed information about their child's current asthma medications than the medical chart as many asthma medication strengths were not recorded in the medical chart.

PAA16

PREDICTORS OF THE PRESCRIBING OF ASTHMA PHARMACOTHERAPY IN THE AMBULATORY PATIENT POPULATION OF THE UNITED STATES

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OBJECTIVES: This study attempted to determine if select patient and physician demographic variables are predictors of the prescribing of asthma pharmacotherapy in the ambulatory patient population of the United States. Another aim of this study was to evaluate if physician prescribing behavior of asthma pharmacotherapy was in compliance with the recommendations of the National Heart, Lung & Blood Institute's National Asthma Education and Prevention Program Expert Panel 2 national asthma guidelines. METHODS: This study was a retrospective cross-sectional study that used data from the National Ambulatory Medical Care Survey (NAMCS) from 1998 through 2004. The weighted population sample size of the study was 82,020,318 patients. Specific patient demographic variables, physician demographic variables and asthma medications prescribed were extracted from the dataset and analyzed using logistic regression procedures. RESULTS: The major finding from the study was that physicians did not seem to be adhering to the EPR-2 pharmacotherapy guidelines. Another major finding from this study was the fact that there were vulnerable sub-populations of asthma patients that were receiving sub-optimal asthma pharmacotherapy. It was also found that patients who were non-white and non-African American were also less likely to receive optimal asthma pharmacotherapy (all p < 0.05). The majority of these patients were of Asian origin. These individuals were less likely to be prescribed controller medications and more likely to be prescribed SABA agents when compared to whites. Patient status, physician specialty, ownership status and physician employment status were important variables in certain aspects of asthma pharmacotherapy. CONCLUSION: It appears that a more concerted effort needs to be undertaken to improve physician adherence to the EPR-2 guidelines, especially in the prescribing of asthma pharmacotherapy. There is also a need to address the disparities observed in the prescribing of asthma pharmacotherapy in vulnerable, underserved populations.