

served for adjunctive therapy for patients not well-controlled on antiinflammatories alone. **OBJECTIVE:** To estimate the association between type of asthma maintenance therapy (anti-inflammatory versus bronchodilator) and total costs of asthma treatment. **METHODS:** Patients were selected from the Asthma Outcomes Registry cohort if they had received either antiinflammatories (inhaled steroids or cromones) or long-acting bronchodilators (theophylline, long-acting beta-agonists, or ipratropium), but not both, for at least one year prior to study entry. Oral steroid dependent patients and those with incomplete cost data during the baseline and follow-up intervals (365 days before and after their enrollment in the Registry, respectively) were excluded from the analysis. The effect of anti-inflammatory versus bronchodilator therapy was assessed by comparing the change (follow-up minus baseline) in the logarithm of total costs of asthma care. **RESULTS:** 446 patient met criteria for study inclusion, including 351 treated with anti-inflammatories and 95 treated with bronchodilators. Geometric mean costs during the baseline year were similar in the anti-inflammatory and bronchodilator groups (\$358 and \$351, respectively). In the follow-up year, geometric mean costs declined by \$149 (to \$209) in the anti-inflammatory group compared to an increase of \$19 (to \$340) in the bronchodilator group ($P < 0.0001$). This treatment effect was essentially unaltered after adjustment for study site, age, sex, smoking, and comorbidity. **CONCLUSION:** These findings add support to current guidelines recommending reliance on anti-inflammatory therapy to control asthma. The emergence of new therapeutic agents to control inflammation may continue to reduce the costs of treating this important disease.

CAN2

SHORTER HOSPITAL LENGTH OF STAY FOR CORONARY ANGIOPLASTY PATIENTS WHO RECEIVE ABCIXIMAB VERSUS EPTIFIBATIDE OR TIROFIBAN

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OBJECTIVES: The purpose of this study is to examine the effect of treatment with abciximab versus eptifibatide or tirofiban during angioplasty on hospital length of stay (LOS). **METHODS:** Hospital billing data for PTCAs performed over a one year period (July 1998 to June 1999) was obtained from HCIA's Clinical Pathways Database. Data was collected for all patient discharges whose records indicated use of abciximab, eptifibatide, or tirofiban. Results are reported for 6,637 patients. Multivariate analysis was used to control for a wide range of factors (patient demographics, insurance, health conditions, admission and discharge information, as well as hospital characteristics) which may influence LOS. Estimation was conducted via a two-stage sample selection model. The first stage of the analysis utilizes a probit re-

gression to determine the factors associated with the likelihood of receiving abciximab. In the second stage of the analysis a negative binomial model is estimated for patient's LOS, while controlling for unobserved factors that are correlated with the patient's likelihood of receiving abciximab. **RESULTS:** The average LOS for PTCA patients was 3.48 days. After controlling for high risk indications and selection bias, PTCA patients who were given abciximab had a significantly shorter LOS than patients who were administered eptifibatide (0.981 fewer days ± 0.243) or patients who were administered tirofiban (0.934 fewer days ± 0.251). **CONCLUSIONS:** Results of this study indicate that there are potential cost off-sets for hospitals that administer abciximab versus eptifibatide or tirofiban, given the significantly shorter LOS associated with patients who received abciximab.

CAN3

BASELINE COST OF ILLNESS OF PARKINSON'S DISEASE IN A LARGE HEALTHCARE PLAN

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Parkinson's Disease is a chronic neurodegenerative illness, which affects a significant number of elderly individuals. Typically, the process onset is between 45 to 65 years old individuals. The prevalence of Parkinson's in a managed care environment is unknown. **OBJECTIVES:** After controlling for appropriate case mix variables (e.g. age, gender, presence of selected comorbidities etc.) what is the epidemiology and what is the cost of illness of Parkinson's disease in a large healthcare plan? **METHODS:** This was a retrospective database cost of illness study consisting of all members with Parkinson's (ICD-9 332.0) from 7/1/95 to 6/30/98. Members were screened for continuous enrollment, medical, and drug coverage. Members diagnosed prior to 7/1/95 were stratified as prevalent cases. Medicare patients were excluded. The database consisted of all pharmaceutical, professional, laboratory, radiology, and institutional claims for approximately 1.38 million individuals from 1993 to the present. The risk of contracting Parkinson's, and healthcare consumption, were analyzed by patient residence. **RESULTS:** Parkinson's risk was highest in urban areas, 3.69 cases per 1,000, compared to 2.24 for rural, and 1.80 for suburban. Mean cost per patient per year (pppy) for the disease was \$2,161. Medical costs were higher at diagnosis and decreased with escalating drug therapy. Medical costs began at \$3,120 pppy, dropped to \$124 pppy after 12 months, but rose to \$1192 pppy after 3 years. Pharmacy costs began at \$220 pppy, rose to \$520 pppy after 12 months, and were \$1796 pppy after 3 years. **CONCLUSIONS:** The incidence and prevalence of Parkinson's in this study matched nationally reported rates. Treatment patterns and cost followed a logical progression towards more drug therapy as the disease apparently worsened.