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#### PRP16

## **RESOURCE UTILIZATION (HOSPITAL AND** PHYSICIAN COST/VISITS) AFTER INTRODUCTION OF THE NEW TREATMENT **GUIDELINES IN ASTHMA (1997)**

Mehta R<sup>1</sup>, Cady P<sup>2</sup>

Idaho State University, Salt Lake City, UT, USA; 2Idaho State University, Pocatello, ID, USA

OBJECTIVE: To evaluate the resource utilization after introduction of new treatment guidelines in Asthma (1997). METHODS: Paid claims for inpatient, outpatient and pharmacy services during the period 1994 through 2000 were collected. New treatment guidelines solicited use of anti-inflammatory medications for patients using more than 1 canister of beta-inhaler /month. Chronic users (CUs): using more than 10 canisters of betainhaler/year. Patients were further categorized: CHBYAi (CUs, using some anti-inflammatory medication; "appropriate therapy") and CHBNAi (CUs not using any antiinflammatory medication). Univariate analyses for continuous variables was performed using Wilcoxon-Rank Sum test and multivariate logistic regression was performed to predict the probability of being on appropriate therapy. RESULTS: A total of 1293 patients were using more than 10 canisters of beta-inhalers, of which 923 (71%) were on appropriate therapy. The CHBNAi, for year 1998, had significantly fewer asthma-related physician visits (52.6 Vs 81.0) and costs (59.9 Vs 111.8); asthma-related hospital visits (78.0 Vs 90.0) and costs (90.5 Vs 112.3) compared to CHBYAi (p < 0.001); statistically significant and consistent across the years. Adjusted r-square for multivariate logistic regression across the years: 15.1% to 28.9%. Total asthma-related physician visits and age (1998) were significantly associated with the odds of being on appropriate therapy across all the years. For example, in 1998, each patient, with asthma-related physician visit was twice as likely (90% CI: 1.410–2.843), and each unit increase in age was 0.981 times likely (90% CI: 0.965-0.998); to be on appropriate therapy. CONCLUSION: Per the guidelines, we would have expected a higher health care utilization (visits & cost) for the CHBNAi group but we could not conclude this and it could be related to factors such as severity of illness.

### PRP17

## THE AVERAGE COSTS OF THE TREATMENT OF **ASTHMA EXACERBATIONS IN IN-PATIENT** CARE AND HOSPITAL EMERGENCY ROOM IN **POLAND**

Plisko R<sup>1</sup>, Wcislo J<sup>1</sup>, Landa K<sup>1</sup>, Glogowski CA<sup>2</sup>, Gierczynski JM<sup>2</sup>

<sup>1</sup>HTA Consulting, Krakow, Malopolska, Poland; <sup>2</sup>GlaxoSmithKline Pharmaceuticals S.A, Warszawa, Poland

OBJECTIVES: The objective of this analysis was to investigate direct cost of asthma exacerbations in Poland from

the perspective of the payer and the service provider. METHODS: To examine the current practice of asthma exacerbations treatment a survey in 4 hospitals was performed. The hospitals were chosen on the basis of different fixed cost class. In those hospitals data concerning the cost of asthma exacerbations treatment were collected. According to current practice severe asthma exacerbations were treated in-patiently and mild or moderate asthma exacerbations were treated in hospital emergency rooms (usual stay for one day). The following costs were calculated for inpatient care (severe exacerbations): hospital stay, pharmaceuticals, personnel, and diagnostic procedures. An assumption that average hospital admission took 10 days was made. On the basis of collected data the pharmaceuticals utilization per 10-day hospital stay was assessed. For the purpose of this assessment the decision tree was formulated: the proportions expressing probabilities of patients receiving specific drug therapy, duration of drug therapy and route of the drug administration were calculated. For asthma exacerbations treated in hospital emergency room similar cost groups were included. Sensitivity analysis was performed. RESULTS: The average costs per patient care were estimated: hospital stay 200 PLN (€50) 1 day; drug utilization 435.3 PLN (€110); 10 day personnel 66.39 PLN (€17); 1 day diagnostic procedures 91.4 PLN (€23) per hospital admission. The average cost of inpatient treated (10 days) asthma exacerbation was estimated at 3190.61 (€798) per one patient. The average cost of asthma hospital emergency room care was estimated at 172.60 PLN (€40) per patient/day. CONCLUSION: This cost analysis of asthma exacerbations treatment is one of the first performed in Poland. Further analysis should include more centers to allow confidence interval estimation.

PRP18

# PHARMACOECONOMIC COMPARISON **BETWEEN TWO DRUG STRATEGIES OF** TREATMENT OF RECURRENT ACUTE **RHINOPHARYNGITIS IN 18-MONTH-OLD TO** 4-YEAR-OLD CHILDREN: HOMEOPATHY AND **ANTIBIOTICS**

Trichard M<sup>1</sup>, Chaufferin G<sup>1</sup>, Nicoloyannis N<sup>2</sup> Laboratoires BOIRON, Sainte-Foy-Lès-Lyon, France; <sup>2</sup>Université Lumière Lyon 2, Bron, France

OBJECTIVES: To compare "homeopathic drugs" strategy (H) with "antibiotic drugs" strategy (A) for treating recurrent acute rhinopharyngitis in France, in terms of effectiveness, quality of life, and costs. METHODS: Effectiveness, quality of life, and costs were derived from a 6-month pragmatic prospective study including 499 "children aged between 18 months and 4 years, who experienced at least 5 bouts of rhinopharyngitis in 1999, and who consulted a homeopathic or non-homeopathic GP for the first time in 2000 either for preventive treatment or for a current bout". Strategy H included 241 chil-