

adjusted rates (direct method), the overall low back disorder rates were compared. Also age, gender, and diagnosis-specific low back disorder rates were compared between two databases.

RESULTS: The overall adjusted prevalence rates of low back disorders were 1.49 and 1.88 per 100 admissions for HCUP and MarketScan, respectively. Significant difference was observed in the age, gender-adjusted rates for diagnosis of displacement of lumbar intervertebral disc without myelopathy, with MarketScan showing a higher rate as compared to HCUP (1.06 vs. 0.78/100 admissions). The adjusted average LOS and age, gender, and diagnosis-specific LOS were higher for HCUP than MarketScan. The specific and adjusted payments (based on MarketScan) were, however, higher than the charges reported in HCUP.

CONCLUSIONS: The prevalence rate of low back disorders is higher in the MarketScan database than in HCUP. The differences in the length of stay and associated costs might be attributable to other variables such as geographical variations.

PGD9

OUTCOMES AND COST-BENEFIT OF INHALED CORTICOSTEROID THERAPY INTRODUCTION IN MEDICAID-ENROLLED ASTHMATIC CHILDREN

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OBJECTIVE: The purpose of this study was to assess the clinical and economic impact of the introduction of inhaled corticosteroid therapy for asthma in a cohort of children 12 years and younger who were North Carolina Medicaid enrollees.

METHODS: The North Carolina Medicaid claims database was used to retrieve clinical and economic variables for the purpose of this study. The case group, which was comprised of 84 children who started corticosteroid inhaler therapy between March 1994 and March 1995, was followed up for 1 year before and 1 year after the start of the therapy. The control group was comprised of 72 children with similar severity of asthma who remained on any other therapy other than corticosteroids for a continuous 2-year period. Paired t-tests were used to compare differences, and multiple regression analysis was used to adjust for potential confounders.

RESULTS: There was a 58% reduction in hospital visits, and a 19% reduction in physician visits in the case group after initiation of inhaled corticosteroids. In the control group, an increase of 34% in the number of outpatient visits occurred in the second year. All the decreases and increases were statistically significant. Children with regular patterns of inhaled corticosteroid refills were found to be significantly lower costing for Medicaid. However, after adjusting for potential confounders, no significant change

in health care costs per asthmatic child occurred as a result of the introduction of inhaled corticosteroid therapy.

CONCLUSION: Overall, the study found that introduction of inhaled corticosteroids in a cohort of asthmatic children enrolled in Medicaid was beneficial to Medicaid because it brought about dramatic decreases in health care utilization without additionally increasing costs.

PGD10

BAMBUTEROL IS A MORE COST-EFFECTIVE TREATMENT THAN SALMETEROL IN ASTHMA PATIENTS WITH NOCTURNAL SYMPTOMS

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OBJECTIVE: To compare the cost-effectiveness of oral bambuterol (B) 20 mg once daily with that of salmeterol (S) pMDI 50 mg twice daily for treatment of asthma patients with nocturnal symptoms.

METHODS: 126 patients, aged 18–70 years and using inhaled corticosteroids at a constant daily dose and with an FEV1 40–85% of predicted normal value, were included in this double-blind, randomized, parallel-group study (2 weeks of run-in and 6 weeks of treatment) in the UK, Italy, and Norway. During run-in, they had to show a nocturnal awakening or early awakening due to asthma symptoms that required rescue medication at least once, and a 15% fall in overnight PEF on 3 out of the last 7 days. Morning and evening PEF were measured and tremor was scored. The effectiveness variables in the cost-effectiveness analysis were symptom-free days and number of nights with no awakenings. Costs for both study and rescue medication were calculated.

RESULTS: There were no statistically significant differences between B and S regarding morning and evening PEF (change from baseline), tremor, and the effectiveness variables. Mean number of symptom-free days were 20–25%, and mean number of nights with no awakenings were 69–77%. Costs (study + rescue medication) were lower during bambuterol treatment in all three countries.

Daily cost US \$	UK		Italy		Norway	
	Bamb	Salm	Bamb	Salm	Bamb	Salm
	0.71	1.35	0.67	0.92	0.74	1.19

CONCLUSION: Treatment with bambuterol is more cost-effective than treatment with salmeterol in asthma patients with nocturnal symptoms.