AN EVALUATION OF PHARMACEUTICAL PRICES UNDER THE PHARMACEUTICAL FEDERAL SUPPLY SCHEDULE

Bhandary D[1], Malone DC[2]
[1]University of Arizona, Tucson, AZ, USA; [2]University of Arizona College of Pharmacy, Tucson, AZ, USA

OBJECTIVES: To evaluate the impact of the Veterans Health Care Act in limiting the price of pharmaceutical drugs to 76% of the non-federal average manufacturer price for the Big 4 federal agencies (VA, Department of Defense, Coast Guard, and Public Health Services). **METHODS:** Estimated wholesale acquisition cost (WAC), used as a surrogate for the non-federal average manufacturer price, was obtained from First DataBank, while FSS price for the Big 4 federal agencies was obtained from the VA pharmaceutical benefit management. The federal discount was calculated as the ratio, Big 4/WAC. Sub-analyses were also conducted for therapeutic classes consisting of only single-source products and for brand-name manufacturers with more than 100 products in the combined database. **RESULTS:** A total of 8877 unique products met the inclusion criteria for the study. The products belonged to 529 unique medication classes and were manufactured by 225 unique manufacturers. Nearly 94% of all the products had a Big 4 price less than 76% of the estimated WAC (mean ± SD = 50% ± 21%). Therapeutic categories with only one product on average had a 39% federal discount while therapeutic categories with more than 6 products received on average 51% federal discount. Discounts for single source products were lower than the entire basket of products. None of the manufacturers had a mean Big 4 price across all products more than the 76% of the estimated WAC, with the lowest being 47% and the highest at 63%. **CONCLUSION:** The results suggest that the Veterans Health Care Act was successful in limiting the price of pharmaceuticals to 76% of the estimated WAC. Further, it is also evident that firms had discounts larger than the mandated level.

FINANCIAL IMPACT OF A PRIOR-AUTHORIZATION RESTRICTION FOR PIMECROLIMUS 1% CREAM IN THE TREATMENT OF ATOPIC DERMATITIS

Mahajan S[1], Chang J[1], Sung J[2]
[1]Duke Clinical Research Institute, Durham, NC, USA; [2]Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

Health plans impose drug prior-authorization (PA) programs as a way to control budget which may lead to adverse health-consequences by restricting patients' medication access. Additionally, it increases plan administrative costs. **OBJECTIVE:** This study examines the 1-year financial impact of PA restriction on pimecrolimus use among atopic dermatitis (AD) patients from a plan's perspective. **METHODS:** PA's financial impact was calculated by estimating annual cost differences with and without PA. Total plan costs with PA included PA administration and medication costs, while costs without PA comprised medication costs alone. Model-inputs included estimates of AD prevalence and pimecrolimus utilization from MarketScan database, 2003; PA acceptance rate and coinsurance/copayment from Pharmacy Benefit Report 2004; PA costs from published literature and pimecrolimus costs from 2004 wholesale acquisition costs. Annual medication costs included costs and utilization of pimecrolimus minus tier-specific co-payment/coinsurance, assuming second- and third-tier placements for pimecrolimus with and without PA, respectively. A 20% increase in pimecrolimus users and migration towards larger tube sizes was assumed after lifting PA. Sensitivity analyses were performed on AD prevalence, costs

of PA administration, medications. **RESULTS:** Estimated AD prevalence was 2.89%, of which 8.36% were pimecrolimus users. Assuming a 1,000,000-member plan, this resulted in 2416 PA requests at a cost of $20 each. The PA acceptance rate was 73.9% (or 1785 approved users). Total costs with PA were $178,840 (PA administration, $48,321; medication costs, $130,519) or $0.0149 per member per month (PMPM). After lifting PA, despite 20% increase in pimecrolimus utilization, total costs were $128,029 ($0.0107 PMPM) generating savings of $50,811 ($0.0042 PMPM). In sensitivity analyses, savings (losses) from lifting PA ranged from $0.0083 PMPM to ($0.0030) PMPM. **CONCLUSIONS:** Based on PA administrative costs and pimecrolimus utilization, PA restriction is not cost-efficient for health plans. These analyses provide a reference for decision-makers to project expected spending for their population.

Infection

COMPARISON OF RISK FACTORS FOR BLOOD STREAM CANDIDEMIA AND BACTEREMIA IN HOSPITALIZED PATIENTS

Amrutkar PP, Rege M, Kumar N, Kachroo S, Garey KW
University of Houston, College of Pharmacy, Houston, TX, USA

OBJECTIVE: Antifungal therapy is often not given as empiric therapy in patients with suspected nosocomial blood stream infections (BSI). This is likely due to the fact that identification of risk factors for specific pathogens (candida vs. bacteria) is difficult. The purpose of this study was to identify risk factors that would predict those patients most at risk for candidemia compared to bacteremia. **METHODS:** Retrospective cohort study to distinguish risk factors for BSI due to candida or bacteria in hospitalized patients. Clinical data was collected from the medical charts of patients hospitalized between 2002–2004 with their first documented episode of bloodstream candidemia or bacteremia. Univariate analysis was conducted to evaluate individual effects of variables. All variables having a significance level of less than 0.2 were then added to the multivariate logistic regression model to determine risk factors for candidemia and bacteremia. **RESULTS:** A total of 164 patients were evaluated for the study. In univariate analysis, risk factors for candidemia included Total Parental Nutrition (TPN) use (OR = 5.92, p = 0.001), corticosteroids (OR = 2.60, p = 0.0109), or ICU location (OR = 3.44, p = 0.0002). Risk factors for bacteremia included renal disease (OR = 0.498, p = 0.028), non-abdominal surgery (OR = 0.369, p = 0.0936), pulmonary disease (OR = 0.242, p = 0.0001), and cardiovascular disease (OR = 0.187, p = 0.0001). In the multivariate model, ICU location, pulmonary disease, cardio-vascular disease, and TPN use (p < 0.01 for all variables) were independent predictors of risk factors associated with bacteremia or candidemia. **CONCLUSION:** ICU location, TPN use, and types of medical disorders were able to help distinguish patients with candidemia compared to bacteremia. The results of this study can help to choose appropriate empiric therapy in patients with BSI.

SIMULATION OF A PROPOSED TRIAL TO EVALUATE THE COST-EFFECTIVENESS OF USING A COMBINATION REGIMEN FOR THE TREATMENT OF ACUTE SINUSITIS

Pezzullo JC, Marfatia AA, Nguyen B, Goehring E, Jones JK
The Degge Group, Ltd, Arlington, VA, USA