A COST-BENEFIT ANALYSIS OF AN INPATIENT, PHARMACY-MANAGED MEDICATION ASSISTANCE PROGRAM FOR INDIGENT PATIENTS: A 3-MONTH PILOT STUDY
Coleman CI', Reddy P', Quercia RA', Gousse G'
'University of Connecticut, Storrs, CT, USA; 2Hartford Hospital, Hartford, CT, USA

OBJECTIVES: Pharmacy-managed medication assistance programs coordinate the supply of free drugs from pharmaceutical manufacturers to indigent patients. These programs have the potential to recoup losses incurred by the pharmacy department but whether this offsets the personnel cost of the program has not been well established. The purpose of this study was to conduct a cost-benefit analysis of a pharmacy-managed medication assistance program for indigent inpatients.

METHODS: Patients were enrolled into a pharmacy-managed medication assistance program at Hartford Hospital by healthcare professional referral or identification through uninsured patient administrative reports. Patients were assisted in identifying pharmaceutical manufacturers’ providing free drug and completing applications. The benefit was defined as value of drugs procured using hospital cost. Costs to the pharmacy consisted of personnel cost (time administering program x wage rate $14.52/hour + 25% employee benefits). Net benefit was calculated as the value of drug procured minus personnel costs. A threshold sensitivity analysis was performed by varying the value of the drugs procured, personnel time and wage rate.

RESULTS: From October through December 2001, 20 patients were enrolled into the program with 49 applications filed (approval rate = 92%). Cardiovascular and oncology/hematology comprised 63% and 18% of the drugs provided in the program with a benefit of $4,686 and $12,966, respectively. The total benefit for all drugs was $18,730. An average of 2.25 hours/day was spent administering the program, resulting in personnel costs of $2,205. The net benefit of the program was $16,525. Upon sensitivity analysis, the break even point was reached when drug value was reduced to $2,205, per-sonnel time increased to 1,032 hours, and the wage rate increased to $116/hour.

CONCLUSION: This pilot study illustrates that a pharmacy-managed, medication assistance program for indigent inpatients was cost-beneficial. Based on these findings the inpatient program will be continued. An outpatient program will be initiated and subsequently evaluated.

CHILDREN IN NEED OF PHARMACARE: ANALYSIS OF MEDICATION FUNDING REQUESTS AT THE TORONTO HOSPITAL FOR SICK CHILDREN
Ungar W1, Daniels C2, McNeill T2, Seyed M1
1The Hospital for Sick Children Research Institute, Toronto, ON, Canada; 2The Hospital for Sick Children, Toronto, ON, Canada

OBJECTIVES: The Hospital for Sick Children (HSC) Patient Amenities Fund (PAF) covers out-of-pocket medication expenses for needy families that are not provided by private or government health plans. Recently, a significant increase in PAF expenditures for medications has been observed. The study objective was to examine PAF medication expenditure trends, the reasons for fund requests and the demographics of requesting families to reveal limitations of existing pharmaceutical policies in Ontario.

METHODS: The study was a retrospective descriptive analysis of medication requests in 1998–99. Family demographics and socio-economic status, medications and amount requested, reasons for request, duration of benefit, type of drug plans available and government plan process issues were extracted from PAF request forms, social work reports, discharge planning reports and patient charts. Descriptive statistics were used to analyze categorical and continuous variables. Percent change over time in the number and dollar amount of requests was determined.

RESULTS: Eighty-six applicants submitted 112 requests over the two-year period. Most requests were for children with cancer, neurological disorders and children undergoing organ transplants. The number of medication requests increased by 67% from 1998 to 1999. Medication expenditures were $22,404 in 1999, a 39% increase over 1998. The majority of requests (83%) came from two-parent nuclear families. The father, mother, or both were employed in 70% of the requests. Eighty-nine percent of requests came from families with no private drug plan. High deductibles, waiting time, application form complexity and request denials were cited as problems encountered with government drug plans.

CONCLUSIONS: Whereas Ontario drug plan programs may meet the needs of seniors and families receiving social assistance, the need for funds to pay for medications for children persists. The current patchwork of government drug plans and community agencies may not be effective in ensuring easy and timely access to necessary medications.

COST SENSITIVENESS AND PHYSICIAN TREATMENT CHOICES
Huttin CC
Evaluation Network of Drug European Policy (Virtual Think Tank), Brussels, Belgium
OBJECTIVE: This research contributes to the influence of cost on clinical decision-making. It analyses the impact of cost to the patient rather than knowledge of drug prices/costs on physicians’ decisions. It is based on findings from a physicians’ cost sensitiveness analysis from the BIOMED/ENDEP project called patient charges and decision making behaviors of consumers and physicians.

METHODS: A “reversed” conjoint value analysis (CVA) is run on four patient attributes rather than product attributes. The four attributes are patient affordability, patient demand for cheaper drugs, severity of disease and risk factors and patient expenses on other diseases. The design allows a large number of levels for analyzing potential shifts with complex cost-sharing arrangements. Randomization of cases is ensured through a stepwise procedure and 39 clinical cases out of 54 are discarded. High levels of orthogonality are achieved (over 90% of D efficiency) and only main effects are calculated. The questionnaire is administered on four randomized samples of 100 physicians in France, the UK, Finland and Italy. The statistical analysis is run with a linear regression better suited for a rate-scale dependent variable.

RESULTS: Average physician’s utilities and an outcome measure of drug prescribing are presented. Patient demand for cheaper drugs and patient expenses on other diseases are the most important attributes to influence physicians’ cost sensitivity. Cost sensitive physicians shift from top selling drugs to cheaper drugs under patient needs. Some links with drug appropriateness issues are also highlighted.

CONCLUSIONS: The analysis is useful for policy makers interested in prescription drug policy, especially in the USA, where direct health care outspendings increase at a fast rate. It provides evidence for educational policies and behavioral changes towards physicians and patients, and a potential decision tool to drug benefit managers in order to predict prescribing cost in response to different cost-sharing policies.

HEALTH POLICY—Quality of Life Presentations

HEALTH-RELATED QUALITY OF LIFE IN HEMOPHILIA AND VON WILLEBRAND’S DISEASE: MEASUREMENT PROPERTIES OF THE HEALTH UTILITIES INDEX
Horsman JR, Furlong W, Barr RD, Sek J, Pai M, Walker I
McMaster University, Hamilton, ON, Canada

OBJECTIVES: To test the hypotheses that increasing severity of factor VIII/IX deficiency in hemophiliacs and severity in von Willebrand’s Disease (VWD) patients would be associated with lower health-related quality of life (HRQL), and that hepatitis and HIV positivity would further impair HRQL.

METHODS: A cross-sectional mail survey of a population-based cohort from a regional hemophilia program in Ontario Canada was conducted of mild, moderate and severe hemophiliacs and T1, T2 and T3 VWD patients over 13 years of age. Patients reported their health status “during the past 4 weeks” using a standard Health Utilities Index (HUI) 15-item questionnaire. Responses were mapped to the generic HUI Mark 3 (HUI3) health-status classification system. Eight single-attribute morbidity scores and one HRQL score were determined using published utility functions.

RESULTS: The response rate was > 85% (101 of 115 hemophiliacs, 28 of 36 VWD patients). Morbidity was greater in hemophiliacs and VWD than in the general population (p < 0.001). For hemophiliacs the burden correlated with the category of disease, mild < moderate < severe (p < 0.05). Hepatitis and HIV positivity imposed additional burdens, mainly in ambulation and pain (p < 0.005). VWD female patients reported important burdens in emotion, cognition and pain with a mean HRQL score lower than for severe hemophiliacs (0.55 vs. 0.65). The differences in mean HUI3 scores between males and females were large (> 0.14) for HRQL (p < 0.05) as well as for emotion (p < 0.05), cognition (p = 0.01) and pain (p = 0.01).

CONCLUSIONS: Despite improvements in the effectiveness and utilization of clotting factor concentrates, hemophiliacs continue to suffer a serious burden of morbidity providing a basis for future economic evaluation of the costs and consequences of health care interventions. The heavy burden of morbidity reported by females with VWD provides direction for support and therapeutic intervention given little consideration to date. Evidence supports the construct validity of the HUI3.

WITHDRAWN