Abstracts

PUK13
PREDICTORS OF MEDICATION ADHERENCE AND ASSOCIATED HEALTH CARE COSTS IN AN OLDER POPULATION WITH DETERUS OR OVERACTIVITY: A LONGITUDINAL COHORT STUDY
Balkrishan R1, Bhosle M1, Camacho F1, Anderson RT2
1Ohio State University, Columbus, OH, USA; 2Wake Forest University School of Medicine, Winston Salem, NC, USA
OBJECTIVE: The cost of treating detrusor overactivity (overactive bladder) is high (12.0 billion dollars in the United States in 2000). It is important to understand predictors of adherence to therapy with detrusor control medications and to determine the relationships between adherence and health care service utilization in older adults (aged 65 years or older) with detrusor overactivity. This study examined the relationship between self-reported health status data, subsequent antidiabetic medication adherence, and health care service utilization in older adults with detrusor overactivity in a managed care setting. METHODS: This was a longitudinal cohort study of older adults in the southeastern United States with detrusor overactivity who completed a health status assessment, used muscarinic antagonist medications, and were enrolled in a health maintenance organization (HMO) continuously for one to five years. Demographic, clinical, and utilization-related economic variables were also retrieved from the administrative claims data of the patients’ HMO. Prescription refill patterns were used to measure adherence. Associations were examined with a sequential, mixed-model, regression approach. RESULTS: A total of 176 patients were included. Increased age and lower number of prescribed medications during the year prior to enrollment in a Medicare HMO were independently associated with decreased muscarinic antagonist medication possession ratios (MPRs) after enrollment. After controlling for type of medication therapy and other variables, increased muscarinic antagonist MPR remained the strongest predictor of decreased total annual health care costs (6.7% decrease in annual costs with every 10% increase in MPR; P < 0.0001). CONCLUSIONS: These findings provide evidence of decreased muscarinic antagonist medication adherence and increased health care service utilization in older adults with detrusor overactivity in a managed care setting. Health status assessments completed at time of enrollment had the potential to identify enrollees with higher risk for both non-adherent behaviors and poor health-related outcomes.

PUK14
FACTORS INFLUENCING THE ROUTE OF ADMINISTRATION FOR EPOETIN TREATMENT AMONG U.S. HEMODIALYSIS PATIENTS
Thamer M1, Zhang Y1, StefaniK K1, Kaufman J2, Cotter DJ1
1MTPPI, Bethesda, MD, USA; 2VA Boston Healthcare System, Boston, MA, USA
OBJECTIVES: Few studies have examined the factors associated with the choice of route of administration of epoetin therapy among anemic hemodialysis patients. We conducted a cross-sectional study using data from the Centers for Medicare & Medicaid Services’ End-Stage Renal Disease (ESRD) Clinical Performance Measures Project (CPM) to examine route of administration and anemia management strategies associated with receiving subcutaneous (SC) or intravenous (IV) epoetin.
METHODS: Information was collected from 7630 patients receiving hemodialysis in October to December, 2000. Unadjusted associations were examined using t- and chi-square tests. Adjusted associations were estimated using logistic regression analyses.
RESULTS: Use of SC route of administration varies widely across the United States. White, wealthier, incident to dialysis patients residing in the Midwest and West, and receiving dialysis in larger, hospital-based, not-for-profit independent facilities were more likely to receive SC epoetin. After controlling for patient sociodemographics and clinical history in a multivariate analysis, geography, profit status, and chain membership were the most significant predictors of route of administration. Hemodialysis patients in the Midwest and West were five and more than four times as likely compared to those in the Northeast (OR = 4.94, CI 3.80, 6.42 and OR = 4.34, CI 3.30, 5.70, respectively), and patients receiving dialysis from the only large not-for-profit chain were almost 6 times as likely compared to the largest for-profit chain (OR = 5.88, CI 3.90, 8.85) to receive SC epoetin. CONCLUSIONS: Study findings indicate that clinical decision-making regarding route of administration for epoetin therapy appears to be influenced strongly by facility ownership and ESRD network in which a patient resides. Given the similar efficacy but significantly reduced epoetin dose associated with SC administration, these findings suggest an enormous lost opportunity for more efficient use of resources in the Medicare program.

PUK15
IMPACTS OF IMPLEMENTING CASE PAYMENT SYSTEM TO HEMODIALYSIS OF MEDICAL AID PATIENTS ON DIALYSIS FREQUENCIES AND EXPENDITURE IN KOREA
Kang HY1, Kim HJ2, Lee SH3, Shin SH1, Cho WH1
1Yonsei University, Seoul, South Korea; 2Health Insurance Review Agency, Seoul, South Korea; 3Pochon CHA University, Seoungnam, Kyonggi-do, South Korea
OBJECTIVE: To assess the impacts of implementing case payment system (CPS) to Medical Aid (MA) hemodialysis patients on dialysis frequencies and expenditure. METHODS: Fifty-eight clinics and 35 tertiary care hospitals were identified as having a minimum of 10 hemodialysis patients for each of MA and Medical Insurance (MI) programs, who received hemodialysis from the same dialysis facilities for both of July, 2001 and July, 2002. From these facilities, 2167 MA and 2928 MI patients were identified as study subjects. Using electronic claims data, changes in the total number of monthly treatments and charges for outpatient hemodialysis treatments to each patient after the introduction of the CPS were compared between MA and MI patients. Multiple regression analyses were performed to examine the independent impact of the CPS on the utilization and expenditure of dialysis treatments among MA patients.
RESULTS: There was significant decrease in total charges of hemodialysis treatments for MA patients by 3.4% (p < 0.05), whereas significant increase was observed for MI patients by 2.5% (p < 0.05). For both MA and MI patients, the frequency of monthly hemodialysis treatments were significantly increased, 5.5% (from 12.1 to 12.7) and 7.8% (from 11.6 to 12.3) increase for MA and MI patients, respectively. However, a multivariate regression analysis results showed that there was no significant difference in the changes in the total number of hemodialysis treatments between MA and MI patients after implementing CPS. Another regression model, regressing on the changes in the monthly claims of dialysis treatments, showed a significant negative coefficients for the MA (beta = -70,725, p < 0.05). CONCLUSION: The result of significant decrease in total charges for hemodialysis treatments among MA patients as compared to MI patients suggest that there was cost reduction in MA program after the CPS.