Abstracts

Safety was characterized by ADR reporting and discontinuation of treatment. Medication effectiveness was determined by persistence on the subsequent alternative alpha1-antagonist. RESULTS: Of 226 patient requests submitted, 55 (24.3%) were denied. Patients averaged 17.9 months (±12.4) on tamsulosin prior to denial. After 90-days, 67.3% remained on the recommended alternative alpha1-antagonist, 14.5% had no alternative ordered and no tamsulosin dispensed, 9.1% remained on tamsulosin from VASDHS, 5.5% continued tamsulosin from non-VASDHS sources, 3.6% required changing to a second non-tamsulosin alternative, and adverse events occurred in 9.1%. The cost of a prescriber entering a reauthorization request was \$8.19/patient while adjudication by a pharmacist was \$11.61/patient. Few telephone contacts(10), unscheduled clinic visits(1), and urgent care visits(0) occurred adding \$5.29 per patient per month (PPPM). Prescription costs were \$9.82 PPPM for patients denied versus an estimated \$43.87 for those approved. The total cost of 226 requests, excluding scheduled clinic visits, was \$128.94/patient versus an estimated \$131.58/patient if the program had not been implemented. CONCLUSION: Overall outcomes and associated costs incurred in a tamsulosin reauthorization program eliminated much of the anticipated cost savings in the 90-days following a denial.

FACTORS INFLUENCING EARLY NEPHROLOGY CARE PRIOR TO HEMODIALYSIS INITIATION AMONG ELDERLY PATIENTS WITH END-STAGE RENAL DISEASE

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OBJECTIVE: Early care provided by nephrologists before initiating dialysis may improve treatment outcomes for patients who later progress to end-stage renal disease (ESRD) and start hemodialysis. The objective is to identify factors influencing early nephrology care, defined as visiting a nephrologist from 4 to 12 months prior to hemodialysis initiation among elderly ESRD patients. METHODS: The study population consists of patients initiating hemodialysis in the years 1996–1999, aged 67+ years and having Medicare Part B coverage in the fee-for-service system in the 2nd year prior to dialysis initiation. Patients' characteristics were obtained from Centers for Medicare & Medicaid Services form 2728 files. Comorbidities and hospital utilization were generated from Medicare Part A and/or Part B claims. Physician visits including early nephrology care and access to non-nephrologist physicians and nephrologists practicing in a local area, defined as an area 30 miles within a patient's residence ZIP code, were computed with Medicare Part B physician/supplier files and US 2000 Census data. RESULTS: About 33.79% of 91,189 elderly patients received early nephrology care before starting hemodialysis. Logistic regressions indicated that patients who were male, had hypertension, anemia, more hospital admissions in the year before initiating dialysis, lived in an area with more nephrologists per 1000 prevalent elderly ESRD patients were more likely to obtain early nephrology care. Patients older than 76 years, having diabetes, living in an area with more non-nephrologist physicians per 10,000 population had a lower likelihood of getting early nephrology care. Patients residing in areas 12 miles or more away from the nearest nephrologist had a smaller odds ratio of receiving early nephrology care compared to patients living in an area less than 4 miles away. CONCLUSIONS: Elderly ESRD patients' characteristics and access to local non-nephrologist physicians and nephrologists affect the use of early nephrology care prior to hemodialysis initiation.

PUK8

URINARY/KIDNEY—Methods and Concepts

ONE SOLUTION TO THREE PROBLEMS

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OBJECTIVES: Zero-mass cost values, heteroskedasticity and retransformation are three common problems in health care expenditure models. In this paper, we applied recently proposed methodology which deals with these three common problems simultaneously. METHODS: Two parts models are suitable for estimating right-skewed cost data. The main complication in this case is the retransformation where smearing estimation fails when there is evidence of heteroskedasticity which is very common in analyzing health care expenditures. Recently proposed "internal" and "external" estimators remove the bias in log-transformed two part model with heteroskedasticity. First, we estimate probability of having zero cost by logit (h), and then create internal weight which is equal to (1-h)/(1-m) where m is the average of the estimated probabilities and external weight which is equal to (1-h). The retransformed cost for the non-zero cost sample is multiplied by internal weight to get internal transformed cost. External transformed cost can be calculated by averaging external weighted cost over the no-zero cost sample. **RESULTS:** The method is applied to Market Scan Data which based upon patients with chronic kidney disease. Total inpatient cost is estimated using log transformed two part model. Fifty-six percent of the patient sample had zero cost. White Test proved heteroskedasticity. Internal and External estimators yield similar results (p = 0.852) but they were statistically different from the standard estimator which ignores heteroskedasticity in re-transformation (p = 0.000). CONCLUSIONS: Retransformation bias in two part models can be eliminated using internal and external weighted estimators.

PUK9

ESTIMATING A PREFERENCE-BASED INDEX FROM A CONDITION SPECIFIC MEASURE-THE KING'S HEALTH QUESTIONNAIRE Reeves P¹, <u>Brazier JE²</u>

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PUK7

OBJECTIVES: Health outcome measurement in patients with Overactive Bladder (OAB) is largely based on condition specific measures such as the OAB-q and King's Health Questionnaire (KHQ). Generic preference-based measures of health (e.g. SF-36 and EQ-5D) have not shown to be sensitive in OAB patients. The condition specific measures are not preference based; a requirement for QALY estimation. To date, cost-effectiveness studies of treatments for OAB have relied upon treatment persistency as a proxy for health outcome. However, recent research has shown it is possible to estimate a preference-based single index using the KHQ. The purpose of this study was to test the application of such an index by estimating and comparing changes in quality adjusted life years (QALYs) in a population of OAB patients either receiving pharmacologic treatment for OAB or not. METHODS: Patients' KHQ scores were transformed into a 5 dimensional health state classification amenable to valuation (role limitation, physical limitation, social limitation, emotions and sleep). Patient level data, including KHQ scores were taken from a sample of patients with OAB in the UK and Germany. The modelled beta coefficients associated with each level of each dimension was applied to the health state classifications. Changes in utility were then estimated by measuring the difference between results at 2 different time points, baseline, and 12 weeks after treatment. RESULTS: Data from 175 patients