CONCLUSIONS: In influence of gender and work disability were also analyzed. Psychometric performance, evaluated with Cronbach’s alpha index of internal consistency reliability, of the SF-36/TOPS scales in this elderly population was consistent with published validation standards. SF-36 Physical Component Summary (PCS), Mental Component Summary (MCS) and the TOPS Total Pain Experience scales (TPE, a composite of 7 TOPS scales), for chronic pain patients, were significantly different (p < 0.05) when patients <65 were compared with older patients. Top 5 ICD9 diagnoses in each age group accounted for 52–60% of diagnoses reported, with myalgia and myositis (729.1) and lumbago (724.2) being first and second ranked in each age group. Neuralgia, neuritis and radiculitis incidence was in the top five reported ICD9 diagnoses for both older age groups, while herpes zoster complications was reported only in the 75+ age group. Influence of gender and work disability were also analyzed and will be presented. CONCLUSIONS: Older chronic pain patients have a higher PCS, lower MCS, similar TPE, and different diagnoses, as compared with younger patients.

URINARY & KIDNEY DISEASES/DISORDERS—Clinical Outcomes/Healthcare Policy

PRK 1

COMPARISON OF DIRECT HEALTH-CARE COST, HOSPITAL UTILIZATION AND MEDICATION PERSISTENCE BETWEEN EXTENDED RELEASE FORMS (ER) OF TOLTERODINE AND OXYBUTYNIN IN OVERACTIVE BLADDER/URINARY INCONTINENCE PATIENTS

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OBJECTIVES: Tolterodine-ER is a newly-released medication for Overactive Bladder/Urinary Incontinence (OAB/UI). This retrospective study investigated the difference in direct health-care cost, hospital utilization, and medication persistence between OAB/UI patients initiated with tolterodine-ER or oxybutynin-ER. METHODS: Newly started adult patients (age >= 18) on either tolterodine-ER or oxybutynin-ER from October 2001 to May 2002 with 1-year washout period, were included and followed up until the end of study period or disenrollment. The log-transformed direct healthcare cost (excluding OAB-related pharmacy cost per member per month) was analyzed by ANCOVA. Control variables include demographics, previous hospital utilizations, medication pattern, prior OAB diagnosis and comorbidities. A Cox Proportional Hazard model was applied to examine the effect of different initial treatments on persistence described by time to switch and time to discontinuation. Logistic regression was used to test the risk of hospitalization associated with the first prescription. RESULTS: Of 1811 patients, 1021 patients started with tolterodine-ER, and 790 with oxybutynin-ER. The average follow-up period for both groups was five months. No significant difference was found in the converted adjusted costs PMPM between tolterodine-ER group (US$602) and oxybutynin-ER group (US$648) with P = 0.324. Two groups had similar physician encounter frequency (one visit PMPM) and emergency room visit rate (2%), but tolterodine-ER initiated patients were less frequently hospitalized (9.11% vs. 13.16%, P = 0.006). A higher proportion of oxybutynin-ER initiated patients discontinued (56.6% vs. 52.5%, P = 0.08) and switched (7.85% vs. 7.54%, P = 0.808). The type of initial therapy did not significantly affect time to discontinuation or time to switch, but initiating tolterodine-ER could reduce the probability of hospitalization by 32% (OR: 0.677, P = 0.037). CONCLUSIONS: Initial drug selection did not significantly change direct healthcare cost, medical utilization, and medication persistence in OAB/UI patients. However, patients initiating with oxybutynin-ER were exposed to a higher risk of hospitalization than those initiating with tolterodine-ER.

FACTORs ASSOCIATED WITH DIALYSIS TREATMENT COSTS AMONG MEDICARE ENROLEES

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OBJECTIVES: Kidney failure affects approximately 300,000 people within the United States who require dialysis therapy. Health care for affected patients is mainly provided through the Medicare program. The literature has shown that kidney failure has a significant emotional, psychological and financial impact on affected patients and society. There could be several factors that determine patient utilization costs. Our objective is to identify the demographic, clinical, and treatment facility factors that significantly explain the costs associated with kidney failure treatment. METHODS: The study sample consisted of 47,285 Medicare eligible dialysis patients. Data were extracted for a 1-year period (1999). Predictor variables included patient demographics, treatment facility, and several other kidney related laboratory test values (such as creatinine clearance rates, comorbidities, BUN, and hematocrit at baseline). Outcome variables included the dialysis treatment costs for epoetin and iron injec-
tions. Two separate linear regression models were created and analyzed. RESULTS: The chosen predictor variables identified 9%, 4%, and 5% of the variance in treatment costs for epoetin and iron injections, respectively. Significant predictors (p < 0.05) common to both models included demographics, treatment facility, albumin levels, body mass index, presence of heart conditions, end stage renal disease (ESRD) for 2–3 year, ESRD for greater than 3 years, hypertension, BUN, and skilled nursing facility wage index. Females, whites, increased body mass index, and treatment at skilled nursing facilities were associated with higher treatment costs. However, the relationship of certain laboratory tests showed opposing relationships with the outcome variable. CONCLUSIONS: Through this study we found further evidence to reinforce findings from the literature that dialysis related treatment costs are influenced by a wide variety of variables. However, the relationships vary with respect to the treatment chosen. Future research should focus on employing additional factors, which may help increase the explanation of dialysis related treatment costs.

US MEDICAL VISITS WITH DIAGNOSES PATHOGENOMONIC OF OVERACTIVE BLADDER Kim S., Boye M.E., Bhattacharyya S.K., Coyne K., Dhawan R.
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Several published studies have reported on the estimated costs associated with overactive bladder (OAB)—a condition characterized by the symptom of urinary urgency, not necessarily accompanied by incontinence, and often associated with urinary frequency and nocturia. Although OAB has been ranked among the 10 most common chronic conditions in the United States, no known published research has rigorously analyzed a key cost component—the number of medical visits associated with this condition. OBJECTIVES: This study was designed to explore US national data sets to recover component estimates of resource use (c.f., office visits, emergency visits, hospitalizations) associated with symptoms of OAB. METHODS: We examined US national databases to estimate the number of annual OAB-associated medical visits among patients at least 18 years of age. Three datasets were used and included the National Ambulatory Medical Care Survey (NAMCS), National Hospital Ambulatory Medical Care Survey (NHAMCS), and the National Hospital Discharge Survey (NHDS). Design based statistical analyses were used to fully account for the complex survey designs. Diagnostic codes identifying patients with OAB symptomatology included ICD-9-CM 788.31, 788.41, and 788.33. RESULTS: During year 2000, there were an estimated 1.4 million (95% CI: 1.1–1.8 million) US ambulatory visits, with symptoms characteristic of OAB, made to nonfederal office-based physicians. Even accounting for ER and outpatient department visits as well as nonfederal short-stay hospital discharges, the estimated number of medical visits with OAB-associated symptoms was less than 1.5 million. CONCLUSIONS: Based on data derived from the NOBLE program, a telephone and postal survey designed to evaluate the prevalence of OAB, there are as many as 34 million adult Americans with OAB. Thus, conservatively assuming one annual medical encounter per patient, as few as 4% of these individuals sought medical treatment during the year 2000. These statistics, therefore, suggest a large unmet medical need.

URINARY & KIDNEY DISEASES/DISORDERS—Economic Outcomes

COST ANALYSIS OF NON-DIALYSIS RENAL INSUFFICIENCY (NDRI): AN EMPLOYER’S PERSPECTIVE
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OBJECTIVE: Renal insufficiency, a chronic condition, can adversely affect workforce productivity and increase the economic burden on employers. This analysis quantifies the incremental direct (medical, drugs) and indirect (absenteeism, disability) costs of NDRI from an employer’s perspective. METHODS: Based on eligibility, medical, pharmacy and disability claims data from 7 large US employers covering January 1, 1998 through June 30, 2001, 1278 NDRI patients with at least 2 claims carrying a renal insufficiency (RI) ICD-9 diagnosis code less than 90 days apart were identified. These patients were observed from the month of the first RI diagnosis to the month preceding the first renal dialysis claim. A 10% random sample of 154,171 individuals without NDRI was selected as controls. Employer costs were measured based on direct medical costs and employee productivity loss. A tobit regression, which corrects for non-normality of costs, included controls for age, gender, health plan, location, diabetes, heart failure, any transplantation, and liver cirrhosis. RESULTS: The unadjusted ratio of mean direct and indirect costs for NDRI patients compared to non-NDRI patients was 17.73:1 ($1779.90 vs. $100.37 per patient-month, p < .01) and 5.91:1 ($583.16 vs. $98.74 per patient-month, p < .01), respectively. After controlling for confounding factors, the ratios were 5.50:1 (95% CI: 5.47–5.53) for direct costs, and 2.10:1 (95% CI: 2.02–2.17) for indirect costs. Regressions on sub-categories yielded costs ratios for inpatient care, outpatient care, prescription drugs, absenteeism, and disability (short and long-term) of 5.29:1 (95% CI: 5.23–5.35), 4.05:1 (95% CI: 4.01–4.08), 3.57:1 (95% CI: 3.53–3.59), 1.96:1 (95% CI: 1.80–2.12), and 1.79:1 (95% CI: 1.75–1.83), respectively. CONCLUSION: Both the unadjusted and adjusted cost ratios for NDRI