determine adherence to treatment guidelines. **METHODS:** In a retrospective database study, continuously enrolled patients aged 18 years and older with COPD (COPD only or COPD+asthma), who initiated therapy during year 2002 with either an inhaled corticosteroid or an anticholinergic (first fill date identified as index date) were included in the analyses. The severity of identified subjects was determined using two **METHODS:** respiratory disease-related health care utilization; and charlson comorbid score during the one-year baseline period. Presence of comorbid conditions was also determined. **RESULTS:** Of the 8392 patients identified as having COPD, 467 (5.56%) initiated an inhaled corticosteroid and 495 (5.90%) initiated an anticholinergic. Using respiratory related healthcare utilization in the baseline period as a proxy for disease severity, 82% of inhaled corticosteroid users were low utilizers, 14% were moderate utilizers and 4% were high utilizers whereas 53% of anticholinergic users were low utilizers, 31% were moderate utilizers and 16% were high utilizers. At baseline, mean Charlson comorbidity score was significantly lower among inhaled corticosteroid users (0.88) as compared to anticholinergic users (1.32). Also, at baseline anticholinergic users had a significantly higher percentage of patients with comorbid diagnosis of congestive heart failure, atherosclerosis, coronary heart disease, hypertension, mental illness and other lung disease. Results were also consistent in the COPD only group. All differences were significant at p < 0.05. **CONCLUSIONS:** Patients initiating an inhaled corticosteroid appeared to be less severe as indicated by lower health care utilization, lower Charlson comorbid score and fewer comorbid conditions than those patients initiated on anticholinergics.

URINARY/KIDNEY—Clinical Outcomes Studies

PUK1

PREVALENCE OF NEUROGENIC BLADDER IN PATIENTS WITH VARIOUS NEUROLOGIC DISORDERS IN THE UNITED STATES

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OBJECTIVE: Neurogenic bladder is a condition that involves bladder dysfunction caused due to damage to any part of the nervous system. Patients with neurogenic bladder encounter difficulties such as bladder overactivity, urinary incontinence, and urge incontinence. The objective of this study was to assess the prevalence of neurogenic bladder in patients with different neurological conditions. **METHODS:** A thorough literature search was performed using MEDLINE and other databases such as HAPI, OVID, and ScienceDirect. Information related to neurogenic bladder, specifically estimates of proportion of patients suffering from neurogenic bladder was obtained from this search. Articles that were published between the years 1995–2004 were included. Percentages obtained from the literature were combined with prevalence data of various neurologic disorders available on National Center for Health Statistics website to obtain estimated number of patients with different neurologic conditions suffering from neurogenic bladder. **RESULTS:** Neurogenic bladder is found to be most prevalent in patients with Stroke, Parkinson's disease, Traumatic Brain injury, Dementia, Spinal Cord injury, Multiple Sclerosis, Spina Bifida and paralysis. It is found to be prevalent in more than half of patients suffering from Stroke which is estimated to be more than two million. Its prevalence in Parkinson's patients varies widely between 0.2–0.7 million (27–70%). Occurrence of urinary incontinence due to neurogenic bladder in patients with Dementia was 11–90%, an estimate of approximately 0.2–1.5 million, depending on the

setting in which the patients are treated. Bladder overactivity has been detected in 50–90% of patients with Multiple Sclerosis and in 95% of patients with Spina Bifida, together accounting for an estimated half million patients. **CONCLUSIONS:** There is a high prevalence of bladder dysfunction in patients suffering with nervous system disorder in the US. Further research should focus on obtaining more precise estimates using a national level data to determine trends of neurogenic bladder.

PUK2

ASSOCIATION BETWEEN IN-HOSPITAL FALLS, COMORBIDITIES, AND DRUG USE IN ADULT CHRONIC KIDNEY DISEASE PATIENTS: A CASE-CONTROL STUDY

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OBJECTIVES: To evaluate the association between comorbidities and drug use with the risk of in-hospital fall in adult Chronic Kidney Disease (CKD) patients. **METHODS:** A retrospective case-control study was conducted at a University medical center between January 1, 1998 and June 30, 2003. To be included as a case, patients had to experience an in-hospital fall, ≥18 years of age and, hospitalized for >24 hours. All patients had CKD defined as a glomerular filtration rate less than 60 ml/min on admission. For every case, a matched control was identified in a 1:2 ratio. Cases and controls were matched on CKD, age and gender. Comorbidities were identified using ICD-9 CM diagnosis codes. Drug utilization was identified two days before the fall date for cases and the reference fall date for controls. Statistics performed were T-tests, chi-square, and conditional logistic regression using "fall" as the dependent variable and race, comorbidities and drug groups as covariates. **RESULTS:** There were 635 fall cases that met study criteria. The mean age was 68 ± 15 years, 54% were female, and 82% were Caucasian. Cases were more likely to have congestive heart failure (33% vs. 27%), diabetes (39% vs. 32%), dementia (6% vs. 2%) and pneumonia (14% vs. 8%) and be receiving antidepressants (29% vs 19%), antipsychotics (16% vs 13%) and anticonvulsants (15% vs 10%). Compared to controls, cases have multiple comorbidities (54% vs 43%, p < 0.001) and received multiple drug groups (48% vs. 40%, p < 0.002) prior to the fall. Regression analysis showed that CKD patients with dementia (OR 2.4, p = 0.001) and those receiving antidepressants (OR 1.5, p = 0.001) and anticonvulsants (OR 1.5, p = 0.008) were more likely to experience an in-hospital fall. **CONCLUSION:** The largest health status risk factor for falling in CKD patients was dementia. Drugs associated with falling were antidepressants and anticonvulsants.

URINARY/KIDNEY—Cost Studies

PUK3

ECONOMIC IMPACT OF PHARMACOTHERAPY VERSUS NON-PHARMACOLOGIC MANAGEMENT AMONG COMMERCIALLY-INSURED PERSONS ≥65 YEARS OF AGE WITH OVERACTIVE BLADDER

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OBJECTIVE: To examine the economic impact of pharmacotherapy (PT) versus non-pharmacologic management (NPM) among elderly patients with overactive bladder (OAB). **METHODS:** Data were obtained from the PharMetrics Patient-Centric Database on continuously benefit-eligible patients ≥65 years of age diagnosed with OAB between January 2002 and