external agents, lung involvement in non-pulmonary conditions, or miscellaneous diseases of the lung/respiratory system. Study measures were assessed over four time periods: 0–12 months pre- and post-index, 13–24 months post-index, and 25+ months post-index. Costs of IPF, pulmonary disease (ICD-9-CM 480–519), and all healthcare services were estimated by category of resource use. **RESULTS:** A total of 896 met all patient selection criteria. They had a mean (SD) age of 48.1 (22.2) years, about 60% were female, and about 44% were white. Approximately 14% of patients died within 12 months of their index date. Mean monthly costs of IPF-related care varied from $148–$314 depending on the follow-up period. Mean monthly costs of all patient care were more than $4000 higher among IPF versus non-IPF patients in Florida Medicaid ($4360 vs. $315). **CONCLUSIONS:** Per-patient costs of IPF appear to be considerable in this population.

**PRS6**

**TOBACCO SMOKING AND DIRECT COSTS OF TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE EXACERBATIONS**

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**OBJECTIVES:** The study evaluated the influence of tobacco smoking on direct costs of treatment of chronic obstructive pulmonary disease (COPD) exacerbations. **METHODS:** A total of 112 men who underwent treatment of COPD exacerbation in the Military Institute of Health Service from November 2001 to October 2002 were included in the study. The patients were qualified into one of three groups: I—never-smoking patients (n = 40), II—former smokers (n = 42); III—active smokers (n = 30).

**RESULTS:** The mean direct cost of exacerbation treatment was USD 686.2 (SD 292.3) [group I—642.9 (SD 216.2); group II—USD 595.4 (SD 193.2); group III—USD 871.1 (SD 401.9)]. No significant differences in treatment costs were found between the group I and group II. The costs of inhospital treatment of COPD were significantly higher in the group III than in the groups I and II. A linear correlation was found between each consecutive pack year of addiction and the costs of exacerbation treatment in the group III (R = 0.39, R2 = 0.13; p < 0.03). No similar relationship was found in the former smokers’ group. **CONCLUSION:** Active tobacco smoking by COPD patients is related to significantly higher direct costs of hospitalization due to COPD exacerbations.

**PRS7**

**TREATING DOCTOR AND DIRECT COSTS OF HOSPITALIZATION DUE TO CHRONIC OBSTRUCTIVE PULMONARY DISEASE EXACERBATIONS**

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**OBJECTIVES:** Assessment of the influence that a doctor taking care of a patient has on direct costs of inhospital treatment of chronic obstructive pulmonary disease (COPD) exacerbation. **METHODS:** Medical documentation of patients who had undergone treatment of COPD exacerbation in the Military Institute of Health Service from November 2001 to October 2002 was studied retrospectively. Direct costs of hospitalization in 8 groups of patients treated by different doctors (8 specialists, with a similar length of experience), were compared. **RESULTS:** A total of 182 patients were qualified into 8 study groups, each treated by a different doctor. The mean hospitalization period was 7.6 (SD 3.1) days. The mean (discounted for 2005) cost of COPD exacerbation treatment was USD 841.7 (SD 371.0). No statistically significant differences between the groups were found in the mean age of the patients, strength of nicotine addiction (expressed in pack years), severity of the disease and pulmonary function indices. Differences between the mean direct costs of treatment by individual doctors amounted to as much as 87% [USD 690.6 (SD 401.5) vs. USD 1 291.8 (SD 438.6), p < 0.05], and they resulted mainly from different length of hospitalization and costs of additional examinations. **CONCLUSION:** A way of taking care of a patient by a doctor significantly influences direct costs of inhospital treatment of COPD exacerbations.
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 percent of 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 (48% vs. 40%, p < 0.001) and those receiving antidepressants (OR 1.5, p = 0.008) were more likely 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—Clinical Outcomes Studies

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 neurologic 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.

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 PharmMetrics Patient-Centric Database on continuously benefit-eligible patients ≥65 years of age diagnosed with OAB between January 2002 and