disorders (26.5% vs. 13.6%; p<0.001). In the follow-up period, high-cost patients continued to have higher rates of non-opioid substance abuse diagnoses (53.0% vs. 47.2%; p<0.001) and psychotic disorders (67.1% vs. 47.5%; p<0.001). The mean follow-up period health care costs of high-cost patients was $89,177 (vs. $11,653 for low-cost patients (p<0.001)), of which 38.8% was attributed to inpatient, 21.9% to outpatient, 18.6% to emergency department , 4.9% to rehabilitation facility, and 11.0% to prescription drugs costs. **CONCLUSIONS:** High-cost patients diagnosed with opioid abuse are complicated patients with high rates of pre-existing and concurrent chronic comorbidities and mental health conditions.

PMH37

COST OF CARE ATTRIBUTABLE TO ALZHEIMER'S DISEASE FOR MEDICARE ENROLLEES

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OBJECTIVES: In the US, over 5 million people suffer from Alzheimer's Disease (AD). The objective of this study is to estimate direct medical costs attributable to AD for Medicare enrollees in 2008 and 2010 according to cost category. **METHODS:** Data were from the Centers for Medicare & Medicaid Services (CMS) chronic conditions public use files in which each record is a profile defined by all combinations of age category, gender, chronic conditions, and dual-eligibility status. For each profile, cost measures generated from claims data are provided in the form of averages by cost category. Our study population (n=23.7m) included Medicare enrollees in years 2008 and 2010 who: 1) had 12 months enrollment; 2) did not have dual eligibility; 3) were age 65 and over. We examined costs of hospital admissions, skilled nursing facility, physician and other provider visits, outpatient visits, and prescriptions medications. To determine the cost associated with AD, we estimated multivariable OLS linear regression models with cost as the dependent variable and a dichotomous AD indicator as the primary independent variable, adjusted for age, gender and other chronic conditions and weighted using frequency counts. **RESULTS:** Adjusted costs associated with AD were highest for skilled nursing facility use, medications, and inpatient services, at $1680, $1280 and $1114, respectively, in 2010. Of the 11 chronic conditions examined, AD was the most costly in terms of added medication expenditures, with added annual costs $300 more than the next closest condition, chronic obstructive pulmonary disorder (COPD, Table). It was also the second most costly condition in terms of skilled nursing facility costs, surpassed only by stroke in adjusted analyses. **CONCLUSIONS:** Interventions, including treatment for reversible causes, lifestyle modification, and use of cost-effective treatments, may be needed to stem cost increases attributable to AD, particularly as the population ages.

PMH38

HOSPITALIZATION COSTS IN SCHIZOPHRENIA (SC) AND PROJECTION OF COSTS WITH THE ADOPTION OF A LONG-TERM RELEASE FORMULATION OF PALIPERIDONE PALMITATE (LRPP): REAL WORLD DATA ANALYSIS

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OBJECTIVES: Schizophrenia is a mental disease of chronic nature that may often require long time hospitalizations to be controlled. One of the major issues in controlling Sc is adherence to treatment. Long-term release paliperidone palmitate administered intramuscularly once a month improved treatment compliance and diminished hospitalization rates. Our goal was to estimate the costs of hospitalization for schizophrenic patients in Brazil (private setting) and to calculate the monetary impact of adopting LRPP in an outpatient scenario. **METHODS:** We searched a database of claims of five health plans in order to identify patients with schizophrenia. Then, we retrieved all hospitals bills for each patient and determined the final cost of admissions. Only direct costs were considered: medication, medical visits, ancillary fees, etc. To project the impact of the adoption of LRPP, we estimated that hospitalization rates would be reduced by 31.5% for patients admitted for less than one year and 35.9% for those hospitalized for up to two years, according to data from randomized trials. **RESULTS:** We identified 18 admissions due to schizophrenia. Patients had a mean age of 43.4 years. Mean length of hospitalization was 126.4 days, corresponding to a total of 2275 days for all patients. Total hospitalization cost was R$ 604 889 (US$ 252 037), mean of R$ 33 604 (US$ 14 000) per hospitalization. If LRPP was adopted, the cost to treat these patients would be cut down to R$ 130 974 (US$ 54 572), a reduction of 21,65%. **CONCLUSIONS:** Based on real world data, Sc hospitalization costs may be reduced by 21% if outpatient treatment with LRPP is adopted.

PMH39

EXAMINING THE BURDEN OF ILLNESS OF UNITED STATES VETERAN PATIENTS DIAGNOSED WITH BIPOLAR DISORDER

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OBJECTIVES: To examine the economic burden and health care utilizations of bipolar disorder patients in the U.S. veteran population. **METHODS:** A retrospective database analysis was performed using the Veterans Health Administration Medical SAS datasets from October 1, 2007 through September 30, 2012. Adult patients diagnosed with bipolar disorder were identified using International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) diagnosis codes 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7x and 296.8x. The first diagnosis date was defined as the index date for the bipolar disorder cohort. A comparator cohort of patients without a bipolar disorder diagnosis was created using 1:1 propensity score matching to adjust for demographic characteristics and baseline Charlson Comorbidity Index scores. The index date for the comparator cohort was randomly chosen to reduce selection bias. One-year continuous enrollment was required before and after the index date for both cohorts. Study outcomes, including health care costs and utilizations, were compared between the disease and comparator cohorts. **RESULTS:** After 1:1 matching, a total of 187,530 patients with proportionate baseline characteristics were matched from each cohort. The bipolar cohort had higher percentages of inpatient stays (18.72% vs. 2.56%, p<0.0001) and emergency room (ER) (22.51% vs. 7.82%, p<0.0001), physician office (99.40% vs. 55.89%, p<0.0001), outpatient (99.55% vs. 56.73%, p<0.0001) and pharmacy visits (91.83% vs. 54.65%, p<0.0001). Bipolar disorder patients also incurred higher inpatient ($6,126 vs. $775, p<0.0001), ER visit ($265 vs. $72, p<0.0001), physician office visit ($4,149 vs. $1,365, p<0.0001), outpatient visit ($4,566 vs. $1,538), pharmacy ($952 vs. $414, p<0.0001) and total costs ($11,645 vs. $2,728, p<0.0001) compared to patients without the disorder. **CONCLUSIONS:** In this study, bipolar disorder was associated with higher health care resource utilization and a significantly higher economic burden.

PMH40

RESOURCE USE AND ASSOCIATED COSTS OF LONG ACTING INJECTABLE ANTIPSYCHOTICS: A RAMQ DATABASE ANALYSIS

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OBJECTIVES: The purpose of this study was to describe the resource use before, and after, initiation of long-acting injectable antipsychotics (LAI-AP) using the provincial public drug reimbursement program database of the *Régie de l'assurance maladie du Québec* (RAMQ). **METHODS:** Patients who were incident users (no use in the previous 12 months) of a LAI-AP prescribed between January 1st 2008 and March 31st 2012, at least 20 years old, with a diagnosis of schizophrenia/schizoaffective disorder and with continuous enrollment during the study period were selected. Resource utilization and associated costs were analyzed both during the year before LAI-AP initiation (pre-initiation period) and the year after (post-initiation period). **RESULTS:** A total of 1,992 patients met the inclusion criteria. The average age was 43.5 years (SD=14.3). In pre-initiation period, 1,484 patients had at least one hospitalization, compared to 958 in post-initiation period (p<0.001), and the number of days hospitalized was reduced by half (40.5 days [SD=39.6] vs. 21.2 days [SD=29.9]; p<0.001). The number of patients having at least one emergency room visit decreased from 1,372 to 813 patients (p<0.001), but the number of patients with at least one outpatient clinic visit increased from 1,572 to 1,726 patients (p<0.001). The pre-initiation inpatient costs were CDN$21,312 (SD=27,303), compared to CDN$7,199 (SD=16,419) in post-initiation period (p<0.001). The outpatient costs were CDN$1,209 (SD=1,173) during the pre-initiation period, and CDN$1,296 (SD=1,284) in the post-initiation period (p=0.002), while cost of medication were CDN$1,861 (SD=2,515) vs. CDN$4,595 (SD=3,910) (p<0.001). Total cost of health care resource, including LAI-AP, were CDN$24,382 (SD=27,234) in the pre-initiation period, compared to CDN$13,090 (SD=16,987) in the post-initiation period (p<0.001). **CONCLUSIONS:** The initiation of LAI-AP resulted in significantly lower health care resource and cost reduction, with the primary driver being a reduction in number of hospitalizations, days of hospitalization and visits to the emergency room.

PMH41

RECENT TRENDS IN POST-TRAUMATIC STRESS DISORDER-RELATED HOSPITALIZATIONS IN THE UNITED STATES

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OBJECTIVES: Even with increasing attention given to post-traumatic stress disorder (PTSD), limited data exist documenting PTSD-related economic burden. This study documents annual rates of PTSD-related hospitalizations in the US (2000-2010), along with associated costs and length of stay [LOS]. **METHODS:** Adult (18+ years old) PTSD-related hospitalizations (those with an ICD-9-CM diagnosis code of 309.81 [primary or secondary]) from the 2000 through 2010 HCUP Nationwide Inpatient Samples (NIS) were analyzed. Annual rates of PTSD hospitalization per 100,000 adults (adjusted to 2010 US population) were estimated using NIS sampling weights and US Census population denominators. Additionally, cost (in 2013 $) and LOS estimates were calculated. **RESULTS:** Rates of hospitalizations with a primary diagnosis of PTSD have increased over time, from 2.5/100,000 adults (5,139 hospitalizations) in 2000 to 4.1/100,000 (9,175 hospitalizations) in 2010, a 61.6% increase, and by over 200% for hospitalizations with any diagnosis of PTSD, from 28.6/100,000 to 87.7/100,000. For hospitalizations with PTSD as the primary diagnosis, the mean (standard deviation [SD]) LOS increased slightly, from 5.7 (7.6) days in 2000 to 6.0 (6.9) days in 2010, while mean (SD) costs increased by 23.2%, from $5,138 ($6,440) in 2000 to $6,330 ($7,281) in 2010. Finally, from 2000 to 2010, the estimated total (aggregate) cost of PTSD-related hospitalizations increased by 129% ($26.3 million to $60.3 million) for primary PTSD diagnosis hospitalizations and 471% ($435 million to $2.49 billion) for any PTSD diagnosis. **CONCLUSIONS:** PTSD-related hospitalization rates in the US have increased during the first decade of the 2000s, with the total inpatient cost burden increasing at an even greater rate. Further research to better understand factors which may be influencing the observed growth in rates of PTSD-related hospitalization in the US (e.g., changing diagnostic criteria; increasing numbers of servicemen and women returning from military combat settings, which is an established PTSD risk factor) is warranted.

PMH42

THE IMPACT OF TREATMENT DURATION ON RELAPSE RATES AND HEALTH CARE COSTS AMONG MEDICAID PATIENTS WITH OPIOID DEPENDENCE TREATED WITH BUPRENORPHINE/NALOXONE

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OBJECTIVES: Buprenorphine/naloxone (BUP/NAL) combination is a treatment for the opioid dependence. Earlier studies showed that some patients, here, alternated between periods on and off treatment. The aim of this study was to compare health care resource utilization and costs between these patients and patients treated continuously. **METHODS:** Statistical analyses were conducted on a Medicaid insur-