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 (52% vs. 47.2%, p < 0.001) and psychiatric 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 outpatients, 18% to emergency department visits, 13% to lab and radiology exams, and 11.0% to prescription drugs. 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 ENROLLED PATIENTS

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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 extracted from the Medicare claims database (January 1, 2010 to December 31, 2012) and enrollees were identified through ICD-9-CM diagnostic codes. Costs associated with all inpatient and outpatient visits were included. Costs were categorized as physician care, hospital care, ancillary fees, etc. To project the impact of the adoption of LRPP, we estimated that a total of 3,910 (p < 0.001) and pharmac costs were reduced (99.55% vs. 91.8% p < 0.0001). Inpatient hospitalizations increased from 3,910 to 9,173 in post-iniation period (p = 0.001). The pre-initiation costs of the 12,732 (SD = 27,303), compared to CDN$7,199 (SD = 16,419) in post-iniation period (p < 0.001). The outpatients were CDN$1,261,209 (SD = 1,173) during the pre-iniation period, and CDN$1,296,286 (SD = 1,284) in the post-iniation period (p = 0.001), while cost of recruited patients was CDN$2,861,257 (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 cost and reduction, with the primary driver being a reduction in number of hospitalizations, days of hospitalization and visits to the emergency room.

PMH40

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

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OBJECTIVES: This study was designed to describe the resource use before, and after, initiation of long-acting injectable antipsychotics (LAI-AP) using the provincial public health insurance 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 3,910 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 independent of years (SD = 27.39 vs. 21.2 days (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 outpati ent hospitalization (958 vs. 975 days (p < 0.001)), and the number of patients with 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 outpatients hospitalization (958 vs. 907 days (p < 0.001)). CONCLUSIONS: The introduction of LAI-AP resulted in significantly lower health care resource use 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 HOSPITALIZATION AND VISITS IN THE UNITED STATES

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OBJECTIVES: Even with increasing attention given to post-traumatic stress disorder (PTSD) and 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 of age and older), incident users of PTSD (ICD-9-CM diagnosis code of 309.81 or 309.81), from the 2000 to 2009 HCUP Nationwide Inpatient Samples (NIS) were analyzed. Annual rates of PTSD hospitalization per 100,000 residents were adjusted to 2010 US Census population using age and sex 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 (1000 adults, 5,139 hospitalizations) in 2000 to 4.1 (1000 adults, 9,173 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. Hospitalizations were also the primary diagnosis, the mean (standard deviation (SD)) LOS increased slightly, from 5.7 (7.6) days in 2000 to 6.9 days in 2010, while mean (SD) costs increased by 23.2%, from $5,138 ($4,640) 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 $69.3 million) for primary PTSD diagnosis hospitalizations and 47% ($465 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-
acne claims database (TruvenHealth MarketScan® Medicaid) from January 2007 to June 2012. Patients with at least two treatment episodes in the first year after the initial filled prescription were identified. The end of a treatment episode was defined as a period of 60 days with no filled BUP/NAL prescriptions following the theoretical end of the last filled prescription. An ordered logistic regression model was used to examine the impact of health rehospitalization episodes on the number of new episodes in the year following the end of the first episode. Health care resource utilization and related costs during the first year after initiation were compared between the two groups. RESULTS: 2,223 patients were included in the analysis. During the first year, 86% of patients had only one treatment episode, 13% had two and 1% had three. Compared to patients treated continuously over 12 months, the multiple treatment episode groups had lower medication costs ($42,877) but higher psychiatric inpatient costs ($7,937) and non-psychiatric inpatient costs ($2001) and emergency room costs over 12 months. Total health care costs over 12 months were higher among multiple treatment episode patients ($12,496 for OLZ-LAI, $11,516 for PMH44, $15,305 for PMH47, $20,014 for Lurasidone, and $21,887 for Quetiapine XR). CONCLUSIONS: Total costs of hospital care resources over 12 months were higher among patients with multiple treatment episodes compared to patients treated continuously.

**PMH43**

**HEALTH CARE COST SAVINGS ASSOCIATED WITH ARIPIPRAZOLE ONCE-MONTHLY (AOM) TREATMENT AMONG SCHIZOPHRENIA PATIENTS WITH PSYCHIATRIC HOSPITALIZATIONS PRIOR TO AOM TREATMENT INITIATION**

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OBJECTIVES: Preliminary data from a multicenter, open-label mirror study of patients with schizophrenia aged 18–65 years treated with aripiprazole once-monthly (AOM) demonstrated that switching from oral standard of care (SOC) antipsychotics to aripiprazole once-monthly (AOM) reduced total psychiatric hospitalization rates by 31.4% in the 6-month retrospective period to 14.2% in the AOM 6-month prospective period (p < 0.0001). A subgroup of patients with at least 1 psychiatric hospitalization while receiving oral SOC in the retrospective period was analyzed to estimate health care cost savings associated with AOM treatment initiation. METHODS: A decision economic model was developed to examine the impact on costs and outcomes of switching to AOM. Cost for hospitalizations, hospita- tional length of stay, and cost of drug therapy were estimated for a subgroup of 76 patients who were schizophrenic who entered the ongoing mirror study (NCT01432444) and had at least 1 psychiatric hospitalization during the retrospective period. Cost estimates were obtained from HealthCare Costs and Utilization Project, published literature, and US Bureau of Labor Statistics. Adjustments were made to establish a baseline for patient care and to model the transition from the SOC to AOM. The model used a 6-month time horizon of the AOM, 52.0% of lurasidone patients achieved remission versus 43.2% of quetiapine XR patients. Mean emergency room visits, inpatient days, and office visits were lower for lurasidone patients (0.5, 2.9, 9.3) than quetiapine XR patients (0.5, 2.2, 9.6), respectively. Total costs were lower for lurasidone patients ($4,457) than quetiapine XR patients ($4,546). Cost-effectiveness results showed that lurasidone was dominant over quetiapine XR. Model testing showed that the results were robust to changes in other parameters. One-way sensitivity analysis showed that the model may be sensitive to the drug cost/remission rate, or hospital cost/probability of being cost-effective and hospitalization. Probabilistic sensitivity analysis showed lurasidone has a 97.4% probability of being cost-effective at a willingness-to-pay threshold of $5,000 per remission.

**PMH46**

**ECONOMIC ANALYSIS OF ESCITALOPRAM VERSUS PAROXETINE IN TREATMENT OF GENERALIZED ANXIETY DISORDER (GAD) IN THE UNITED STATES**

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OBJECTIVES: Paroxetine and Escitalopram are the only SSRI approved by US FDA for the treatment of GAD. The economic analysis was performed to compare lurasidone to quetiapine XR over a 3-month time horizon from a US payer perspective. Effectiveness inputs were based on indirect comparison of results obtained from lurasidone and quetiapine XR pivotal trials versus placebo. Resource utilization and associated costs were estimated from a retrospective database study of 29,000 patients who have been treated for GAD. Model testing showed that the results were robust to changes in other parameters. One-way sensitivity analysis showed that the model may be sensitive to the drug cost/remission rate, or hospital cost/probability of being cost-effective and hospitalization. Probabilistic sensitivity analysis showed lurasidone has a 97.4% probability of being cost-effective at a willingness-to-pay threshold of $5,000 per remission.

**PMH47**

**PHARMACOECONOMIC ANALYSIS OF PALIPERIDONE PALMATE FOR CHRONIC RELAPSING SCHIZOPHRENIA IN FINLAND**

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OBJECTIVES: Management of patients with chronic relapsing schizophrenia is dif- ficult and costly. We assessed the cost-effectiveness of paliperidone palmitate in- acting injectable (PP-LAI) versus risperidone depot (RIS-LAI), olanzapine pamoate (OLZ-LAI), oral olanzapine (oral-OLZ) and oral clozapine (CLOZ) from the viewpoint of the Finnish National Health Service. METHODS: We expanded and adapted a 1-year decision tree model that had been previously validated for Finland, with assistance from an expert panel. Patients started in a stable state and were treated as per standard procedures in Finland. Drug doses, success and relapse rates were determined from published clinical studies. Patient management was guided by expert opinion. Health state utilities were derived from the literature. Only direct costs were considered, including hospitalization and other institutional care, medi- cal and nursing care, and drugs. Prices were obtained from standard lists. Outcomes included quality-adjusted life-years (QALYs), rates of rehospitalization and days with stable disease. The primary economic outcome was the incremental cost/QALY. One-way sensitivity analyses were performed on all pertinent costs and clinical inputs. Model results were compared to other non-stimulant ADHD medications. RESULTS: Escitalopram appears to be cost-effective compared to Paroxetine in treatment of GAD in the U.S. from a third party payer’s perspective.