visits and inpatient care. The pattern was observed in each cohort. In two diseases: sleep apnea: 29.6, no sleep apnea: 21.6. In three diseases: sleep apnea: 35.4, no sleep apnea: 25.8.

CONCLUSIONS: The more metabolic syndrome diseases the higher risk for having OSA. The OSA burden is increasing the more metabolic syndrome components exist.

PND1 LOWER DAILY AVERAGE CONSUMPTION AND GREATER PRESCRIPTION COST
SAVINGS OF ARMODAFINIL COMPARED WITH MODAFINIL: A 12-MONTH
RETROSPECTIVE DATABASE ANALYSIS
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OBJECTIVES: Armodafinil and modafinil are indicated to improve wakefulness in patients with excessive sleepiness associated with treated obstructive sleep apnea, shift work disorder, and narcolepsy. Because both medications are approved for on- and off-dosing with different tablet strengths, their real-world utilization may differ. This analysis examined utilization of armodafinil and modafinil based on daily average consumption (DACON) and determined the impact of armodafinil and modafinil on pharmacy budgets using an economic modeling technique.

METHODS: DACON was examined in a retrospective analysis of Volters Kluwer Source LX pharmacy analytic data collected from March 1, 2009 to May 31, 2010. DACON was calculated by dividing the total tablets dispensed by the total days supplied. An economic model was used to evaluate the financial impact of changes in prescription share from modafinil to armodafinil.

RESULTS: The DACON for armodafinil and modafinil were 1.03 (70,976 prescriptions) and 1.40 (653,216 prescriptions), respectively. Among patients with 2 to 8 prescription fills for armodafinil, the DACON remained between 1.03 and 1.05. A total of 309,889 patients switched to armodafinil. Based on economic modeling, and assuming a 10% increase in armodafinil’s share of prescriptions, the projected annual cost savings with armodafinil would be $3,018,781 (1-month savings of $0.07). Assuming a 20% increase in armodafinil’s share, the projected annual savings would be $1,834,897 (per-patient-per-month savings of $0.15).

CONCLUSIONS: By using pharmaceutical claims data in tandem with well-designed economic models, payers can better estimate current and future pharmaceutical spending. Based on this analysis, the utilization of armodafinil has a real-world advantage over modafinil that can significantly affect pharmacy budgets. This research was sponsored by and conducted in collaboration with Cephalon, Inc., Frazer, PA.

PND13 BURDEN OF ILLNESS IN THE UNITED STATES FOR PEDIATRIC EPILEPSY
PATIENTS WITH PARTIAL ONSET SEIZURES RECEIVING ANTI-EPILEPTIC DRUGS
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OBJECTIVES: The objective of this retrospective claims database study was to better understand the burden of illness for pediatric patients in the US who have epilepsy with partial onset seizures and who are being treated with anti-epileptic drugs (AEDs). METHODS: Data were administrative claims from a large national US health plan. Patients were commercial enrollees ≥2 years and ≤17 years of age with at least one AED prescription claim from an oral AED from 01/01/2006 to 11/30/2008 as the index date was defined as the first AED claim. Patients had at least one AD diagnosis. A 20% random sample of non-AD patients was selected and a matched control group was identified using propensity score methods.

RESULTS: The matched control group was 612,666 patients. The incidence of epilepsy was significantly higher in the AD group. The mean age of the AD group was 14.8 (8%). Of 17 AED medications examined, the most prescribed overall were: levetiracetam (LEV) (21%), lamotrigine (LTG) (17%), gabapentin (GBP) (16%), and valproate (VPA) (15%). The overall post-index mean annual pharmacy costs were $2,914, and the mean annual total costs were $6,573, median: $2,251, IQR: $722, respectively (P < 0.0001 for all estimates). The incremental cost of AD relative to non-AD patients increased from $7,217 in 2004 to $15,563 in 2006, totaling $34,745 over 3 years. The risk ratio of the cost burden was 1.23[5.23] (P < 0.0001). The incremental cost of AD was significantly higher for children with higher health care costs (≥ $9,146) and prescription drugs ($3,938). The incremental cost of AD on other medications [including out-of-pocket costs] were $2,814 and $1,842, respectively (P < 0.0001 for all estimates).

CONCLUSIONS: The incremental impact on health care costs is significant and can be attributed to AD in this analysis are due primarily to higher costs for nursing home care and home health services. New AD medications currently under development, if effective, will benefit Medicare programs but can be paid for largely by Medicare under Part D. This study provides useful information on the potential benefits that could accrue due to an effective AD treatment and documents how these benefits will be distributed by payer.

PND16 CHARACTERIZING DIRECT COSTS ASSOCIATED WITH HEMOPHILIA A: A
RESOURCE-BASED COST ANALYSIS
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OBJECTIVES: To examine hemophilia-related healthcare costs among persons with hemophilia A at six US Hemophilia Treatment Centers (HTCs). METHODS: Data on 315 persons aged 2-65 years from seven states enrolled in Hemophilia Utilization Group Study (HUGS-Va, 2005-2007) were obtained prospectively from interviews and chart reviews. One-year healthcare utilization data (HTC visits, laboratory tests, outpatient visits, emergency room (ER) visits, hospitalizations) and units of clotting factor dispensed were used to impute costs. HTC visit and laboratory test expenditures were obtained from Medicare payment schedules. Inpatient costs were estimated using ICD-9 codes and HCUP National Inpatient Sample charges adjusted for cost-to-charge ratio from MedPAR. ER costs were estimated using Meps data. Factor costs were estimated using Medicare Part B reim-

bursement rates. Per-unit prices for non-factor medications were estimated using wholesale acquisition costs. All costs were converted to 2010 US dollars. Socio-demographic and clinical characteristics associated with higher costs were analyzed. RESULTS: Fifty-six percent were mild, 23% were moderate, 9% were severe hemophilia A. Annual healthcare costs were estimated at $9,146 (median: $7,217 in 2004) to $15,563 (median: $34,745 over 3 years). The incremental cost of AD on other medications [including out-of-pocket costs] were $2,814 and $1,842, respectively (P < 0.0001 for all estimates). The incremental impact on health care costs is significant and can be attributed to AD in this analysis are due primarily to higher costs for nursing home care and home health services. New AD medications currently under development, if effective, will benefit Medicare programs but can be paid for largely by Medicare under Part D. This study provides useful information on the potential benefits that could accrue due to an effective AD treatment and documents how these benefits will be distributed by payer.

PND1 BURDEN OF ILLNESS IN THE UNITED STATES FOR ADULT EPILEPSY
PATIENTS WITH PARTIAL ONSET SEIZURES RECEIVING ANTI-EPILEPTIC DRUGS
Copher R1, Angelakuti M2
1Memorial Hermann, Dallas, TX, USA, 2Inova, Woodbridge, VA, USA
OBJECTIVES: The objective of this retrospective claims database study was to better understand the burden of illness for pediatric patients in the US who have epilepsy with partial onset seizures and who are being treated with anti-epileptic drugs (AEDs). METHODS: Data were administrative claims from a large national US health plan. Patients were commercial enrollees ≥2 years and ≤17 years of age with at least one AED prescription claim from an oral AED from 01/01/2006 to 11/30/2008 as the index date was defined as the first AED claim. Patients had at least one AD diagnosis. A 20% random sample of non-AD patients was selected and a matched control group was identified using propensity score methods. Health care cost and resource utilization were measured annually during the 2004-2006 period broken down by type of service and payer. Multivariate statistical models were estimated to determine the incremental advantage of armodafinil over modafinil on the basis of baseline characteristics of the matched AD and non-AD patients.

RESULTS: The incremental cost of AD relative to non-AD patients increased from $7,217 in 2004 to $15,563 in 2005, totaling $34,745 over 3 years. The risk ratio of the cost burden was 1.23[5.23] (P < 0.0001). The incremental cost of AD on other medications [including out-of-pocket costs] were $2,814 and $1,842, respectively (P < 0.0001 for all estimates).

CONCLUSIONS: The incremental impact on health care costs is significant and can be attributed to AD in this analysis are due primarily to higher costs for nursing home care and home health services. New AD medications currently under development, if effective, will benefit Medicare programs but can be paid for largely by Medicare under Part D. This study provides useful information on the potential benefits that could accrue due to an effective AD treatment and documents how these benefits will be distributed by payer.