PHS25 IMPACTS OF NON-MEDICAL SWITCHING ON HEALTHCARE COSTS: A CLAIMS DATABASE ANALYSIS
Liu V1, Skup M2, Lin L1, Chao J2
1University of Missouri; Kansas City, Kansas City, MO, USA, 2Ave/ive Inc., North Chicago, IL, USA, 3Ave/ive Health, Trenton, NJ, USA
OBJECTIVES: This analysis evaluated the impact of non-medical switching (switching for a reason that is not medically related such as due to costs) from adalimumab (ADA) to another injectable biologic (cimolizumab, golimumab, etanercept or ustekinumab) on healthcare costs in patients with rheumatoid arthritis, psoriasis, psoriatic arthropathy, ankylosing spondylitis, or Crohn’s disease following a formulary management change by large national payor. METHODS: Medically stable adults with ≥90 days continuous ADA use were identified in OptumInsight database (07/01/2012-06/30/2013). Patients who subsequently switched to another biologic (index date) following a payer formulary change and for no apparent medical reasons were considered non-medical switchers. RESULTS: 2,531 patients were classified as non-medical switchers. Patients who remained on ADA therapy during this period were defined as maintainers and their index dates were chosen randomly. Patients with hospitalizations, emergency department (ED) visits, or substantial increases in ADA dose 6 months post-index (baseline) were excluded to ensure medical stability. Outcomes included all-cause and indication-related medical (hospitalizations, ED visits, and outpatient visits) and total (medical and pharmacy) costs. T-tests and multivariate regression analyses were used to compare costs incurred in both groups during the 6 months post-index (follow-up) and in costs difference from baseline to follow-up. RESULTS: Mean age was 46 and 48 years, respectively, for maintainers (n=2,693) and switchers (n=885). Switchers incurred significantly higher all-cause medical costs ($12,438; p<0.0001) and total costs ($19,357, p<0.0001) during follow-up vs maintainers. Differences from baseline to follow-up were significantly greater for non-medical switchers compared to maintainers in all-cause medical costs ($2,476; p<0.0001) and total costs ($6,355, p<0.0001). Adjusted regression analyses and indication-specific results yielded consistent findings. CONCLUSIONS: These real-world analyses of patients stabilized on ADA demonstrated that maintaining them on ADA is associated with significantly lower healthcare expenditures compared to switching to another anti-TNF for a non-medical reason.

PHS27 INCREASED HEALTHCARE UTILIZATION ASSOCIATED WITH OBESITY
Heshen MB, Balicer R1
Cedars Health Services, Tel Aviv, Israel
OBJECTIVES: The obesity pandemic is driving an increase in healthcare utilization. However, the specific breakdown of increased morbidity and associated usage requires linked primary care, chronic disease and hospitalization registries. Cedars Health Services (CHS), with its comprehensive stable database of 4 million members, provides a unique opportunity to study the increasing morbidity and utilization of obesity and non-obese patients, thus laying the groundwork for informed health care policy. METHODS: We selected two random samples, 10,000 obese (BMI ≥ 30) and 10,000 non-obese (BMI < 30) from the CHS database aged 25-74, matching CHS population age standard. We linked both datasets to the chronic disease registry, identifying the following diagnoses: diabetes, ischemic heart disease (IHD), congestive heart failure (CHF), hypertension (HTN), s/p cerebral vascular accident (CVA), chronic renal failure (CKF), and rheumatoid arthritis (RA). We compared cohort impacts disease prevalence, hospital admission rates and total cost for the groups. RESULTS: The prevalence of all chronic disease The greatest effect was seen for diabetes (RR 1.34; 95% CI 1.28-1.42), CVA (1.20; 1.14-1.27), CHF (1.29; 1.23-1.35), and CKF (1.32; 1.26-1.38). We also found impacts disease prevalence, hospital admission rates and total cost for the groups. The risk of hospitalization over three years was increased (1.34 1.28-1.42) and, on average, there were 58% increase in the average costs between the two cohorts were explained by the independent variables included in the model. Enabling resources (6.85%), healthcare use (7.53%) explained the variance. CONCLUSIONS: The results from the on-going internal and external survey of the indirect and direct costs care were lower in a rural state compared to the national estimates. The costs in the were not explained by the patient-level factors included in the model.

PHS28 COST OF IMPLEMENTING A PEDIATRIC NEUROCRITICAL CARE CENTER
Buchanan P1, Howes S1, Zhang Z1, Buell P2, Perlman L1, Huetcht M2, Gill J1, Pineda J1
1Saint Louis University, Saint Louis, MO, USA, 2Washington University, Saint Louis, MO, USA
OBJECTIVES: This prospective cohort study included 63 patients in the pre-PNCC group, and 59 post-PNCC patients. We merged demographic and clinical data with cost data from the hospital finance office for the same patient hospitalization. Outcomes included total cost percentage (direct + overhead/median total cost pre-PNCC*100%), and overall length of stay (LOS) and PICU LOS. MANOVA multiple linear regression, T-tests, and chi-squares were used to compare pre-PNCC and post-PNCC patients. RESULTS: Gender, race, injury mechanism, age at admission, and time of injury were not statistically different between the two groups. The median (IQR) of total (1.34 1.28-1.42) and, on average, there were 58% increase in the average costs between the two cohorts were explained by the independent variables included in the model. Enabling resources (6.85%), healthcare use (7.53%) explained the variance. CONCLUSIONS: The results from the on-going internal and external survey of the indirect and direct costs care were lower in a rural state compared to the national estimates. The costs in the were not explained by the patient-level factors included in the model.

PHS29 IMPACTS OF THE TOTAL HEALTHCARE COSTS DURING THE YEAR OF DIAGNOSIS BETWEEN APACHTHOLIAN AND A NATIONAL COHORT OF ELDERLY WOMEN WITH BREAST CANCER: AN APPLICATION OF DECOMPOSITION TECHNIQUE
Vera A1, Mahdavian SS2, Sambamoorthi U3, Pan X4, Regier M4, Hazard H4
1Eugene University, Piocatruau, NJ, USA, 2West Virginia University, Morgantown, WV, USA, 3Evidera LLC, Lexington, MA, USA
OBJECTIVES: The primary objectives of this study were to estimate the average costs during the initial phase of care (year of diagnosis) among West Virginia (WV)-Medicare beneficiaries with breast cancer (BC) and compare it with the national estimates from the Surveillance, Epidemiology, and End Results (SEER) Medicare database using a linear decomposition technique. METHODS: A retrospective observational study was conducted where the study cohorts consisted of elderly women age > 66 with incident BC between 2003 and 2006 in WV-Medicare and SEER-Medicare. Total costs were the actual medical payments for all services derived from Medicare files. Generalized linear regressions with log link and gamma distribution were performed. Blinder-Oaxaca decomposition was conducted to examine the extent to which predisposing, enabling, need-related, healthcare use and external healthcare environmental factors contributed to the differences in the average costs. RESULTS: Total average costs for WV-Medicare cohort during the initial phase of care were lower ($19,875) as compared to the SEER-Medicare cohort ($22,881), a difference of $3,006. After adjusting for other factors, the difference was maintained significant. Only 16% of the difference in the average costs between the two cohorts were explained by the independent variables included in the model. Enabling resources (6.85%), healthcare use (7.53%) explained the variance. CONCLUSIONS: Total average costs of BC care were lower in a rural state compared to the national estimates. The costs in the were not explained by the patient-level factors included in the model.

PHS30 ASSESSING THE TOTAL BURDEN OF CARE IN PATIENTS WITH SCHIZOPHRENIA AND BIPOLAR I DISORDER
Meyers J1, Rapat B1, Blume R1, Pineda J1
1Evidera, Bethesda, MD, USA, 2Evidera, Lexington, MA, USA, 3TEVA Pharmaceuticals, Frazer, PA, USA
OBJECTIVES: Patient care burden to health professionals (HPs) and health care institutions for many disorders, including agitation in schizophrenia or bipolar I disorder, may not be fully captured through claims data and/or medical records. The study objective was to assess this burden, specifically for agitated patients with schizophrenia or bipolar I disorder using health plan emergency service units. METHODS: This study consists of one-on-one qualitative telephone interviews followed by a web-based survey. Interviews are conducted with 10 emergency setting-based HPs (physicians, nurses, aides, ED/hospital administrato, and social workers). Interviews follow a semi-structured guide with specific probes/prompts to capture the intangible impacts that drive indirect and direct costs of care. The guide includes general open-ended questions and specific questions on specific areas of impact, including physical, psychological, and emotional impacts on the HP, as well as impacts on job performance and satisfaction. The interview findings inform a web-based survey (administered to a similar mix of 200 treating HPV) which includes choice questions, rating questions, ranking exercises, and open-ended questions. The survey collects data such as characteristics of HPs, burden of treating patients including use of restraints, isolation, boarding, length of stay, staff absences and injuries, and indirect costs. RESULTS: The results from the on-going internal and external survey of the indirect and direct costs of treating patients with agitation will be reported. CONCLUSIONS: This interview and survey methodology comprehensively assess the full burden of treating agitation in schizophrenia or bipolar I disorder patients from the point of view of various HPs. This study will help bridge the gap on the indirect burden of treating patients with agitation, and can be used to complement direct burden of care data. This methodology can be applied to other disease areas to comprehensively assess the burden of patient treatment.