PHS25 IMPACT OF NON-MEDICAL SWITCHING ON HEALTHCARE COSTS: A CLAIMS DATABASE ANALYSIS
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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 (cyclosporine, golimumab, etanercept, or ustekinumab) on healthcare costs in patients with rheumatoid arthritis, psoriasis, psoriatic arthritis, ankylosing spondylitis, or Crohn’s disease following a formulary management change by large national payor. METHODS: Medically stable adult patients 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 reason were included. RESULTS: Of 3,090 patients, 319 (10.3%) had +1 changes (N=288), +2 changes (N=22), and +3 changes (N=9). 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 pre-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 changes in costs incurred 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=397). Switchers incurred significantly higher all-cause medical costs ($1,476, P=0.0001) and total costs ($4,557, P<0.0001) compared to maintainers. Differences from baseline to follow-up were significantly greater for non-medical switchers compared to maintainers in all-cause medical costs ($1,417, 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 therapy with ADA is associated with significantly less healthcare expenditures compared to switching to another anti-TNF for a non-medical reason.

PHS27 INCREASED HEALTHCARE UTILIZATION ASSOCIATED WITH OBESITY
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OBJECTIVES: The obesity epidemic 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. Clalit Health Services (CHS), with its comprehensive stable database of over 4 million members, provides a unique opportunity to examine the increasing morbidity and cost associated with 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 patients. We merged demographic and clinical data with cost data from the hospital and physician billing office for the same patient hospitalization. Outcome variables included total hospitalizations and total costs of hospital care to children with TBI before and after indexing. This study analyzes the costs of hospital care to children with TBI before and after the implementation of a pediatric neurocritical care programme on outcomes after severe traumatic brain injury: a retrospective cohort study. The Lancet Neurology, Volume 12, Issue 1, pp 45 – 53. January 2013.

PHS28 COST OF IMPLEMENTING A PEDIATRIC NEUROCRITICAL CARE CENTER
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OBJECTIVES: This study analyzes the costs of hospital care to children with TBI before and after a pediatric neurocritical care center (PNC) implementation. A prospective study1 with this sample showed improved clinical outcomes. METHODS: This retrospective cohort study includes 63 patients in the pre-PNC group, and 59 post-PNC patients. We merged demographic and clinical data with cost data from the hospital finance office for the same patient hospitalization. Outcome variables included total cost percentage (direct + overhead/median total cost pre-PNC100%), and overall length of stay (LOS) and PICU LOS. Mess-Whiteney U’s, chi-squares, and multiple linear regression were used. RESULTS: In the pre-PNC group, median (IQR) of patients post (15 (7-22), p = 0.03), the overall hospital LOS did not change (pre: 12 (14.55) vs. post 17 (5-78), p = 0.42. Total cost percentage increased from a median(IQR) of 100% (61-181%) to 143% (95-218%), p < 0.001 after adjusting for covariates. Total hospitalizations increased from 5 (4-7) to 7 (5-9), p = 0.003. CONCLUSIONS: The increase in hospitalizations and associated usage requires linked primary care, chronic disease and hospitalization registries. Clalit Health Services, with its comprehensive stable database of over 4 million members, provides a unique opportunity to examine the increasing morbidity and cost associated with obesity and non-obese patients.

PHS29 DIFFERENCES IN THE TOTAL HEALTHCARE COSTS DURING THE YEAR OF DIAGNOSIS BETWEEN APPALACHIAN AND A NATIONAL COHORT OF ELDERLY WOMEN WITH BREAST CANCER: AN APPLICATION OF DECOMPOSITION TECHNIQUE
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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 SEER-Medicare cohort. METHODS: We merged two registries: WV-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 total 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 estimated difference was 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 (7.35%) explained most of the differences of the different costs. 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 FULL BURDEN OF CARE FOR AGITATION IN PATIENTS WITH SCHIZOPHRENIA AND BIPOLAR I DISORDER
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OBJECTIVES: Patient care burden to health professionals (HP) 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 and bipolar I disorder. We compared measures of medical resource use and costs among emergency and institutional 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 administrators, 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 HPs (doctors, nurses, aides, PAs, NPs, pharmacists, social workers, etc.) for patients with schizophrenia and bipolar I disorder. RESULTS: The results from the on-going interviews and web survey of the indirect burden of treating these patients with agitation will be reported. CONCLUSIONS: This interview and survey methodology comprehensively assesses the full burden of treating agitation in schizophrenia or bipolar I disorder patients from the point of view of care providers to 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.

PHS31 COMMON REASONS FOR AND ASSOCIATED COSTS OF PEDIATRIC INPATIENT ADMISSIONS IN THE UNITED STATES
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OBJECTIVES: The objective of this retrospective database analysis was to examine the most common reasons for hospitalization and the associated burden of these hospitalizations among children in the United States. METHODS: Data from the 2012 Healthcare Cost and Utilization Project’s (HCUP) Kids’ Inpatient Database (KID) were assessed for this analysis. Top 5 common primary discharge diagnoses (ICD-9-CM) were obtained for children aged 1-4, 5-9, and 10-14 years. The length of stay (LOS) and costs for each of these admissions were reported. Costs were estimated using HCUP Kids’ Inpatient Database cost-to-charge ratio (CCR) data. RESULTS: The most common primary discharge diagnoses were children 1-4 years (N=481,859), pneumonia (N=41,716) and acute asthma exacerbation (N=27,453); children 5-9 years (N=36,136), asthma (N=16,359), pneumonia (N=14,067), and autism spectrum disorder; children 10-14 (N=359,000), years acute appendicitis (N=18,487) and affective psychoses (N=13,221). Across all age groups, pneumonia, asthma, and chemotherapy administration were included in the top-10 most common diagnoses. For children 1-4 years, the top-5 most common diagnoses included pneumonia (26.5%), asthma (26.4%), and acute bronchiolitis (1.9%). Among children 5-9 years, pneumonia (5.1%), acute bronchiolitis (3.3%), and affective psychoses (2.6%) were the most common. Among children 10-14 years, pneumonia (5.0%), acute appendicitis (4.8%) and asthma (4.8%) were the most common.