Based Measure-SMB) and Malignant index with Clearances. The sum of these two items represents the total expenditure in a given year. The output is defined as the number of renal transplants performed by every Brazilian State. RESULTS: Examining the decomposition of the Malignant index, that has 18 States increased the index of pure change of efficiency (Pairing) with values greater than 1. Thus, the 18 States were identified and the results show an index greater than 1, indicating an offset of the boundary of production to a lower level. The analysis of efficiency of Brazilian States proposed in this study indicates a need for a better characterization of the health care system of each State. The results obtained were compared by the alternative of using the SUE in an area of kidney transplants. CONCLUSIONS: The results of this survey suggest that the process of kidney transplants has presented an activity with great variability between States. The offer of the kidney organ becomes insufficient in these places to meet the demand for transplants. The results confirm the creation of kidney transplant systems in other countries.

BPH71 HIGH COST PATIENTS AND COST PATTERNS FROM PEDIATRIC TO ADULT CARE IN A MEDICALLY INSURED POPULATION WITH SICKLE CELL DISEASE (SCD) 2

OBJECTIVES: The aim of this study was to identify high cost sickle cell disease (SCD) patients and analyze their cost patterns throughout lifetime and as they transition from pediatric to adult care. METHODS: Medicaid data from 1997 to 2010 were analyzed. Patients with ≥2 SCD diagnoses and ≥1 blood transfusion were included. HCSOs were defined as the fraction of most expensive patients accounting for ≥50% of the total yearly costs. Periodic events associated with high costs are likely to be responsible for high total costs. High cost HCEs (HCEs), defined as quartiles with costs ≥$33,095, corresponding to the amount separating the top 5% most expensive quartiles in the sample, were analyzed. A longitudinal logistic regression model was used to identify factors associated with HCSOs. RESULTS: From a cohort of 3,208 eligible SCD patients, 449 (14%) were identified as HCSOs. The average yearly total cost of HCSOs was significantly higher at $108,524/year compared to $17,683/year for other patients. The share of the total yearly costs of HCSOs increased from 34% for between age groups 11–15 and 16–20, reaching its maximum at 65.2% in the 26–30 age group. The frequency of HCSOs increased by 123% in the transitioning group from 0.10 HCS/year among patients aged 11–15 to 0.244 HCS/year among patients aged 16–20. Patients were more likely to have a HCE during the post-transition period (adjusted odds ratio [OR]: 1.41, p = 0.046) and when experiencing an SCNAl complication (OR: 3.79, p < 0.001). Blood transfusions received during the previous quarter were associated with a lower likelihood of HCSOs (OR: 0.87, p < 0.05). CONCLUSIONS: In this population of Medicaid SCD patients, 14% were responsible for over 50% of total yearly health care costs. Directing appropriate and targeted interventions can help assist providers improve outcomes and lower health care costs in this patient population.

BPH72 THE COST OF MULTIPLE LYMPH NODE BIOPSY PROCEDURES TO THE UNITED STATES HEALTH CARE SYSTEM AMONG PATIENTS DIAGNOSED WITH LYMPHOMA: A COMMERCIAL HEALTH CARE DATABASE ANALYSIS 3

OBJECTIVES: Diagnosis and monitoring of lymphoma includes lymph node assessment and utilization of multiple biopsies and health care resource use among lymphoma patients. METHODS: Patients with ≥2 claims for Hodgkin lymphoma (HL) or non-Hodgkin’s (NHL) lymphoma from 1/0-12/31/12 were identified from a large US claims database, the index date was the first date of claims indicating CL, and cases were retained on the health plan for ≥12 months before and after the index date, were not diagnosed with lymphoma during the pre-index period or diagnosed with cancer other than lymphoma at any time during the 2-year study period. Indication of receipt of biopsy included ≥1 claim for a lymph node biopsy (core needle, fine needle, surgical, other), pathology, or tumor excision (bone marrow biopsy not included). Health care cost and utilization was examined among patients with ≥2 biopsies. The costs of claims indicating biopsy were identified for each biopsy type. RESULTS: 20,813 newly diagnosed lymphoma patients met all inclusion criteria. 16,557 (80%) had ≥1 claim indicating biopsy, 12,920 (62%) had ≥2 and 8,785 (43%) had ≥3. The percentage increased with an inpatient stay and biopsy count ≥3. Biopsies with ≥3 biopsies (52%, 53%) compared to patients with 2 (33%, 41%), 1 (25%, 34%), or 0 biopsies (26%, 42%). Total health care cost was greatest among patients with ≥3 biopsies ($102,465) compared to $85,565, $125,614, or $0 biopsies ($35,151, $32,496 for a complex surgical biopsy and $12,353 for other biopsies. Biopsies involving the mid-cost statistic $10,554 on average. CONCLUSIONS: Lymphoma patients incur significant health care cost and utilization. Increasing the efficiency of lymph node diagnosis could avoid the need for repeat biopsies and reduce health care costs.

BPH73 COSTS OF PILOR PROGRAMS IN CHICAGO-BASED CENTERS FOR POPULATION HEALTH AND HEALTH DISPARITIES: A CASE FOR TEAM-CARE? 1

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OBJECTIVES: To measure the costs of two team-care based pilot interventions. These interventions were part of the Chicago-based Behavioral and Population Health Disparities Centers for Population Health and Health Disparities (CPHD) designed to improve health outcomes in medically underserved communities. METHODS: The data come from two Chicago-based CPHD randomized controlled trials. Use of a virtual team-care model on lymphoma patients in one (BRIGHTEN Heart) and cardio-metabolic syndrome and use of a patient navigator to improve diagnostic follow-up of mammography screening for breast cancer in the programs collected detailed data regarding service delivery and resource use. Costs were measured from a provider perspective. Actual time spent with patients was estimated in the navigator program using details on activities performed and previous time usage data for activities in similar programs. Time was converted to cost using average hourly rates and use in 31% of patients, respectively. Cost of claims indicating biopsy was identified for each occupation and service. RESULTS: There were 483 patients that received patient navigator services and 16 patients in the virtual team-based BRIGHTEN Heart intervention. The patients were almost all minorities and were below average in terms of income and education. The operating cost for the program was $19,140 following diagnostic screening. The operating cost for the year of virtual team care in BRIGHTEN Heart was $753,183. CONCLUSIONS: Costs are an important consideration for evaluating team-care based interventions to improve patient health in the underserved. The two programs evaluated here provide insight into the cost-intervention relationship of team-based care strategies employing allied health workers. Given the low cost of care, the programs offer promise of being cost effective. Future work will examine these costs in comparison to the effectiveness of the program.

BPH74 TREATMENT PATTERNS AND HEALTH CARE RESOURCE UTILIZATION OF PATIENTS WITH NEUROENDOCRINE TUMORS IN THE UNITED STATES 4

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OBJECTIVES: To examine patient characteristics, treatment patterns, and health care resource utilization of patients with neuroendocrine tumors (NETs) in the US. METHODS: Using a US administrative claims database, commercially-insured adults newly diagnosed with carcinoid tumors (ICD-9-CM: 157.4 and 211.7) between 07/01/2007 and 12/31/2010 were identified (the date of the first observed diagnosis as the index date). Patients were required to have 6-month pre-index and 12-month post-index continuous enrollment. Descriptive analysis was performed to describe demographic and clinical characteristics, treatment patterns for NETs, and health care resource utilization during the 12-month post-index period. Similar analysis was conducted for Medicare-eligible individuals with the supplemental private insurance. RESULTS: This study included 3,940 commercially-insured individuals (mean age: 53.3 years; 55.4% female) and 1,658 Medicare-eligible individuals (mean age: 74.9 years; 49.0% female) with NETs. In the commercial population, carcinoid syndrome (33.2%, liver metastasis 47.4%), and carcinoid crisis (18.2%) were among the comorbidities evaluated. While 19.5% of individuals received surgical therapy and 17.5% received medical therapy (somatostatin analogue treatment) as the first-line treatment, nearly two-thirds received neither of those treatments. During the 12-month post-index period, about half of individuals had inpatient hospitalization and 35.4% had emergency room visits; the mean physician office visit was 19.9. In the Medicare population, carcinoid syndrome (27.4%), liver metastasis (20.7%), and carcinoid crisis (16.1%) were the most prevalent comorbidities. While 13.2% received surgical therapy and 19.8% received medical therapy, nearly two-thirds received neither of those treatments. RESULTS: This study included 3,940 commercially-insured individuals (mean age: 53.3 years; 55.4% female) and 1,658 Medicare-eligible individuals (mean age: 74.9 years; 49.0% female) with NETs. In the commercial population, carcinoid syndrome (33.2%, liver metastasis 47.4%), and carcinoid crisis (18.2%) were among the comorbidities evaluated. While 19.5% of individuals received surgical therapy and 17.5% received medical therapy (somatostatin analogue treatment) as the first-line treatment, nearly two-thirds received neither of those treatments. During the 12-month post-index period, about half of individuals had inpatient hospitalization and 35.4% had emergency room visits; the mean physician office visit was 19.9. In the Medicare population, carcinoid syndrome (27.4%), liver metastasis (20.7%), and carcinoid crisis (16.1%) were the most prevalent comorbidities. While 13.2% received surgical therapy and 19.8% received medical therapy, nearly two-thirds received neither of those treatments. RESULTS: This study included 3,940 commercially-insured individuals (mean age: 53.3 years; 55.4% female) and 1,658 Medicare-eligible individuals (mean age: 74.9 years; 49.0% female) with NETs. In the commercial population, carcinoid syndrome (33.2%, liver metastasis 47.4%), and carcinoid crisis (18.2%) were among the comorbidities evaluated. While 19.5% of individuals received surgical therapy and 17.5% received medical therapy (somatostatin analogue treatment) as the first-line treatment, nearly two-thirds received neither of those treatments. During the 12-month post-index period, about half of individuals had inpatient hospitalization and 35.4% had emergency room visits; the mean physician office visit was 19.9. In the Medicare population, carcinoid syndrome (27.4%), liver metastasis (20.7%), and carcinoid crisis (16.1%) were the most prevalent comorbidities. While 13.2% received surgical therapy and 19.8% received medical therapy, nearly two-thirds received neither of those treatments.