PHS9
ECONOMIC IMPACT OF PATIENTS WITH TUBEROSITY SCLEOROSIS COMPLEX (TSC) IN THE UK: A RETROSPECTIVE DATABASE ANALYSIS IN THE CLINICAL PRACTICE
RESEARCH DATALINK (CPRD)
Demuth D1, Nasuti P1, Lucchese L1, Gray L1, Pinnegar A1, Magesto M1
1Oms Health, London, UK, 2Novartis Pharmaceuticals UK Limited, Finsbury, UK, 3Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA
OBJECTIVES: TSC is a multi-system genetic disorder that affects up to 8,000 patients in the UK. It is associated with non-malignant lesions throughout the body, neurological manifestations, and impaired cognition. Consequently, the burden on patients, their families, and the health care system is thought to be substantial. This study assesses the real-world economic impact of TSC in the UK.
METHODS: TSC patients were retrospectively identified between April, 1997 to March, 2012 in the CPRD (Read: PKS.00, PKS.12) and linked Hospital Episodes Statistics (HES, ICD-10, Q8.1) databases. Health care encounters in the following settings were analysed: general practitioner (GP), inpatient, emergency room (ER) admissions and outpatient. Analyses were stratified by age at time of incidence for pregnancies (<18 years) and adults (≥18 years).
RESULTS: A total of 341 TSC patients were identified (52% female; median age 14.4 years at first event). The annual rate (mean[SD]) of hospital care resource utilization of patients ≥18 years was 13.0[5.4] encounters per patient per year.
OBJECTIVES: To examine patient characteristics, treatment patterns, and health care resource utilization of patients with neuroendocrine tumors (NETs) in the United States.
METHODS: State Medicaid data from 1997 to 2010 were analyzed. Patients with ≥2 SD diagnoses and ≥1 blood transfusion were included. HCSPs 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 HCSPs, defined as quintiles with costs ≥$33,095, corresponding to the amount separating the top 5% most expensive quintiles observed in the sample, were analyzed. A longitudinal logistic regression model was used to identify factors associated with HCSPs. RESULTS: From a cohort of 3,309 eligible SCD patients, 449 (14%) were identified as HCSPs. The average yearly total cost of HCSPs was significantly higher at $108,524/year compared to $17,683/year for other patients. The share of the total yearly costs of HCSPs increased from 34.4% to 46.3% between age groups 11-15 and 16-20, reaching its maximum at 65.2% in the 26-30 age group. The frequency of HCSPs increased by 123% in the transitioning group from 0.101 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 SCD complication (OR 1.39, p<0.001). Blood transfusions received during the previous quarter were associated with a lower likelihood of HCSs (OR 0.87, p=0.080).
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.
PHS72
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
Charles B1, Byfield S1, Boyd SK1
1Oncoright, Eden Prairie, MN, USA, 2HersMed, Skffield, UK
OBJECTIVES: Diagnosis and monitoring of lymphomas includes lymph node assessment. We examined the association of multiple lymph node biopsy procedures and health care resource use among lymphoma patients.
METHODS: Patients with ≥2 claims for Hodgkin lymphoma (HL) or non-Hodgkin’s (NHL) lymphoma from 1/01-12/31/12 were identified from a large US claims database, the index date was the first diagnostic date for HL, NHL or NHL. Health care resource use was measured over 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).
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 8,783 (42%) had ≥3 biopsies. The percentage with an inpatient stay and inpatient costs increased with ≥3 biopsies (52%, 53% compared to patients with 2 (33%, 41%), 1 (25%, 34%), or 0 biopsies (24%, 42%). Total health care cost was greatest among patients with ≥3 biopsies ($102,469) compared to $251,165, $1,265,014 or $0 biopsies ($451). The cost of a single surgical biopsy was $2,304 and for a complex surgical biopsy $12,353 for other biopsies. Biopsies involving the mediastinum cost $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.
PHS73
COSTS OF PILOT PROGRAMS IN CHICAGO-BASED CENTERS FOR POPULATION HEALTH AND HEALTH DISPARITIES: A CASE FOR TEAM-CARE?
Waltenberg TP1, Johnson TF2, Powell LH1, Emery KE1, Rothschild SK1, Joyce BJ3, LC
1University of Illinois at Chicago, Chicago, IL, USA, 2Rush, Chicago, IL, USA, 3University of Illinois Chicago, Chicago, IL, USA
OBJECTIVES: To measure the costs of two team-care based pilot interventions. These interventions were part of the National Neighborhoods for Health (NNH) Coalition and the Communities for Population Health and Health Disparities (CPhHD) designed to improve health outcomes in medically underserved communities. METHODS: The data come from two Chicago-based CPhHD randomized controlled trials. Use of a virtual biennial survey was used to identify chronic conditions and comorbidities (BRIGHTEN Heart) and cardio-metabolic syndrome and use of a patient navigator to improve diagnostic follow-up of mammography screening for breast cancer (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 those activities in similar programs. Time was converted to cost using average cost per hour paid by the Blue Cross Blue Shield (BCBS) by occupational title. BRIGHTEN Heart involved multiple services along with time and travel cost estimates for each occupation and service. RESULTS: There were 485 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 budget of the Navigator program was $14,292 following diagnostic screening. The operating cost for the year of virtual team care in BRIGHTEN Heart was $753.18.
CONCLUSIONS: Costs are an important consideration for evaluating team-care based interventions to improve patient health in the underserved. The two programs evaluated here offer unique insights into the costs and costs-effectiveness of team-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.