

of care for different categories of patients including cost of health care provider time per visit, lab tests, ARV drugs and non ARV drugs. **RESULTS:** The cost of treatment for an HIV positive patient with a CD4 count > 350 cells/ uL who has not started ART was \$51/year. The cost of treating a patient on first line therapy in the first year of ART was \$218, and thereafter \$284/yr. The cost of a patient on second line ART was \$1393/year. The cost of treatment of pregnant and patients co-infected with *M. tuberculosis* was \$229/year and \$413/year respectively. The costs are driven predominantly by ARV costs. **CONCLUSIONS:** This analysis shows the actual costs of HIV care at a larger urban HIV clinic in SSA. The increasing number of patients on second line ARVs is likely to dramatically increase the financial burden on health services in SSA in the future.

PHS45 PREDICTING HIGH COST ACCUMULATION: APPLICATION OF A GROUPING ALGORITHM FOR SURVIVAL DATA

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OBJECTIVES: Approaches for predicting cost accumulation for heterogeneous samples are limited. We employ the Grouping Algorithm for Cancer Cost Data (GACCD) to investigate cost accumulation over time and identify 'high cost' patients. **METHODS:** Two-fold cross validation was used to evaluate survival and cost accumulation using linked prostate cancer (PCa) registry and Medicare claims data from 1999-2009. Patients were grouped according to a refined similarity metric using five patient characteristics (cancer stage, age, Charlson Comorbidity Index (CCI), performance proxy indicator, race). Cost accumulation was evaluated in the test dataset for the GACCD groups identified in the training data. Curves using the test data plotted inverse probability weighted cumulative average total monthly costs (CATMC) for the post-diagnosis period and the proportion of people who were deemed to be 'high cost'. **RESULTS:** Application of the inclusion criteria resulted in 110,824 patients. Median (mean) follow up was 48 (51) months and the mortality rate was 27.3%. The five GACCD groups had distinguishing characteristics e.g., group2 patients were typically older, with CCI above 2 and/or diagnosed with either later stage or unstaged PCa; group3 patients were typically younger, with CCI=0 and diagnosed with early stage PCa. Cost accumulation within the first three years varied across the groups, with the lowest (highest) rate in group3 (group2) in the training dataset. Using the test data: at a threshold of \$10,000 in CATMC, the proportion of patients that was high cost within three years following diagnosis ranged from 82% in group3 to 90% in group2; proportions ranged from 45% in group3 to over 60% in group2 at a threshold of \$25,000; proportions ranged from 15% in group3 to over 30% in group2 at a threshold of \$50,000. **CONCLUSIONS:** A grouping algorithm with a refined similarity metric can identify patient subgroups that will accumulate higher costs over time.

PHS46 MONTHLY COST OF THERAPY FOR PALLIATIVE TYPE II DIABETES IN MUMBAI: A SURVEY

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OBJECTIVES: (1)Survey to estimate the monthly expenditure of a Type II Diabetes patient in Mumbai. (2)To project the fact that even in absence of health insurance policies by government for its citizens, patients receive free or cost subsidized treatment in the government hospitals. (3)Explore government initiatives in regulating the price of the Diabetes II drugs. **METHODS:** Three sets of structured questionnaires were designed which captured the patient demographics, prescription trends of type II Diabetes patients in Mumbai, India. The survey through questionnaires targeted three government secondary hospitals, two government tertiary hospitals, 35 General Practitioners, 50 Drug stores. **RESULTS:** (1) 46% of the patients detected with type II Diabetes lie in the age group of 50-60 years. (2) Amongst them the population of males affected is little more than females i.e. 51% males vs 46% females. (3) The trend of drugs as prescribed by the General Practitioners is same as that of drug prescriptions received by drug stores. The Metformin containing generic brands which fall under The Drug Price Control Order (DPCO) 2013 (cap price removed) is majorly prescribed followed by glipizides, acarbose and pioglitazone containing generic brands. **CONCLUSIONS:** (1) The monthly expenditure of a Type II Diabetes patient in Mumbai is Rs.300 (USD 4.8) when the patient is treated by GP and purchases the drug from the drug stores. (2) The patients are either treated free or in subsidized rates in government hospitals. i.e. in 2.4USD per month. (3) The metformin category drugs coming under DPCO 2013 are the majorly prescribed drugs. Thus it is very easy and convenient for type II Diabetes patients in Mumbai to suffice their medical needs in the most reasonable and affordable price and also get free treatment from tertiary government hospitals. Although a federal/government health insurance policy does not exist in India the government through its subsidies or free treatments rightly makes this therapy accessible to the common man of the city.

PHS47 UTILIZATION, COSTS AND REIMBURSEMENT OF INPATIENT AND AMBULATORY TREATMENT OF ACUTE BACTERIAL SKIN AND SKIN STRUCTURE INFECTIONS AMONG THE MEDICARE FEE-FOR-SERVICE POPULATION

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OBJECTIVES: Recent clinical trials of antibiotics targeted to ABSSSI have included large proportions of patients treated in the ambulatory setting. An objective of this study of real-world patient transaction data was to analyze differences between Medicare patients treated in the inpatient versus the ambulatory setting. **METHODS:** Analysis used Medicare 5% Limited Data Set (LDS) files containing claims for 27,607 patients age ≥18 with a principal diagnosis of ABSSSI between Q4, 2007 - Q3, 2010 from a 5% sample of Medicare beneficiaries, including patients

hospitalized for ≥2 days (hospitalized patients; HPs), or using emergency room (ER) or observation for 1 day (emergency room patients; ERPs). Reimbursements were based on claims and inflated to 2010 USD; costs were derived from 2010 Premier data. Net reimbursement was analyzed by MS-DRG and length of stay (LOS). The risk of all-cause hospitalization and factors correlated with LOS were determined using regression modeling. **RESULTS:** Across all study years, the median age was 71 for HPs, 65 for ERPs. Median Charlson Comorbidity Index (CCI) was 4 for HPs and 2 for ERPs. HPs had more cellulitis on the leg or surgical infection; ERPs had more cellulitis on the face, trunk, or arm. Median HP LOS was 4 days; 33% of patients had LOS >6 days. Age, race, and history of bacterial infection were correlated with LOS. Median all-cause, ABSSSI-related and index event costs during the index quarter for patients with a principle ABSSSI diagnosis were \$9,930, \$6,123 and \$5,604 for HPs and \$1,127, \$108 and \$100 for ERPs respectively. **CONCLUSIONS:** HPs were older and sicker than ERPs, with more cellulitis on the leg and post-operative infections. Further research and analysis may help determine whether treating some hospitalized patients with less comorbidity in the ambulatory setting might result in lower costs per patient after controlling for these factors.

PHS49 COSTS AND CONSEQUENCES OF ORAL ANTICOAGULATION IN ATRIAL FIBRILLATION AT THE SOCIAL SECURITY IN PERU

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OBJECTIVES: The aims of this study were to determine the clinical consequences and non-pharmacological costs of the usage of oral anticoagulation (OAC) therapy for the treatment of atrial fibrillation (AF) at EsSalud in Peru. **METHODS:** A markov model was adapted to evaluate the clinical and economic impact of OAC on a cohort of 1,000 patients among the AF vitamin K antagonists (VKA) suitable population at EsSalud in Peru. Comparators for the analysis are: apixaban 5mg BID, warfarin 5mg and aspirin 150mg. A lifetime horizon and EsSalud's perspective were used. A discount rate of 3.5% was applied to both costs and outcomes. Efficacy data was taken from the clinical trials for apixaban, ARISTOTLE and AVERROES, which directly compared apixaban with warfarin and apixaban with aspirin, respectively. Resource utilization for each event was collected from a clinical chart review at a specialized care center of EsSalud. All costs were taken from EsSalud's 2013 tariffs and are expressed in 2013 US dollars. Results were validated by an expert panel of clinicians from EsSalud. **RESULTS:** The number of events associated with each anticoagulant therapy (apixaban, warfarin and aspirin respectively) were: stroke (ischemic and hemorrhagic) and systemic embolism 309, 352, 352, major bleedings 116, 149, 102; and event related deaths 401, 447, 445, respectively. Apixaban was associated with a reduction of the non-pharmacological costs when compared with warfarin and aspirin in the range of \$245 - \$1,282. **CONCLUSIONS:** Over a lifetime horizon apixaban demonstrates a reduction in the number of AF complication events and reduction in non-pharmacological costs at EsSalud.

PHS50 ECONOMIC BURDEN OF EPIDEMIOLOGICAL CHANGES IN CHRONIC DISEASES IN MIDDLE INCOME COUNTRIES: THE MEXICAN CASE

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OBJECTIVES: To assess the costs and financial consequences of epidemiological changes for chronic diseases (HYPERTENSION AND DIABETES) in a middle-income country. **METHODS:** An evaluative approach based on a longitudinal design was used. Direct costs were determined for the functions of production, standards of quality and the estimation of inputs costs. Indirect costs were determined by using a human capital model for Latin America which uses indicators of premature mortality and disability (temporary or permanent). Probabilistic models were developed to estimate epidemiological changes during 2010-2012 by using the Box-jenkins technique. Finally, the economic burden was obtained for disease by applying an econometric adjustment factor. **RESULTS:** Taking hypertension results, comparing the economic impact in 2010 versus 2012 ($p < 0.05$), there is a 24% increase in financial requirements. The total amount for hypertension in 2011 (US dollars) was \$ 5733,350,291. It includes \$ 2718,280,941 in direct costs and \$ 3015,069,350. Costs for hypertension are permanently increasing in regards to economic burden, showing an increase of 33%. This average has differences for insured and uninsured populations. **CONCLUSIONS:** Health care systems and society in middle income countries will face important challenges on health financing, universal effective coverage and financial protection for the uninsured, if the risk factors and the health care model remain as currently are. The major economic impact of chronic diseases will be in users out of pocket expenditures because of indirect costs. We suggest an important reorganization of the planning process, the health care model and the allocation of resources mechanisms, in order to strengthen health care and access to hospital and outpatient services for patients suffering a chronic disease.

PHS51 COST-EFFECTIVENESS ANALYSIS OF GOVERNMENT INSURED ROUTINE EYE EXAMINATION: EVIDENCE FROM PRINCE EDWARDS ISLAND, CANADA

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OBJECTIVES: Visual loss is significantly associated with increased risk of mortality and decreased quality of life. In Prince Edward Island (PEI), Canada, eye examination and cost of eyeglasses are not covered by provincial health insurance. This study aimed to assess the cost-effectiveness of insured eye examination compared to non-insured eye examination for PEI residents. **METHODS:** A cost-effectiveness analysis was conducted from a perspective of Canada's health care system. A target population was a PEI resident aged 42 years or older. Risk of vision loss and utility data were