diagnosis and treatment of hospitalized patients with infections carries a significant cost and suggests potential benefits in reducing time to diagnosis.

PIN47 TREATMENT COSTS FOR UNCOMPlicated MALARIA AT A SECONDARY HEALTH CARE FACILITY IN NIGERIA

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OBJECTIVES: Malaria treatment in health care facility represents a standard practice in malaria case management. The study estimated the costs of treatment for uncomplicated malaria from a healthcare facility, to generate current information for appropriate decision making in resource allocation for malaria control in Nigeria. METHODS: Based on a comprehensive cost and illness approach, hospital associated costs of uncomplicated malaria episodes were estimated from a provider perspective, applying a standard costing procedure for outpatient services. Length of hospital and recurrent expenditures were estimated using ingredient approach combined with step-down methodology to calculate the final costs. Costs attributable to malaria treatment were calculated based on the proportion of uncomplicated malaria cases treated within the period. Non-hospital costs including the financial and economic costs were estimated for uncomplicated malaria. All costs were calculated in local currency, converted to the US Dollars at the 2013 exchange rate.

RESULTS: The hospital spent a total annual economic cost of N31,612 million ($US1,352.30) for the treatment of uncomplicated malaria, at US$34.66 per case. This represents about 20% of the hospital total expenditure within the year. Personnel accounted for over 81% of the expenditure as the dominant cost driver, followed by antimicrobial drugs, 7.8%. Over 20% of outpatient visits were treated for malaria in the facility, leading to increased utilization of hospital resources. Changes in personnel costs, drug prices and malaria prevalence significantly impacted on the study results, indicating the need for improved efficiency in the hospital resource utilization. CONCLUSIONS: Malaria treatment at the medical center constitutes a considerable amount of hospital expenditure, arising mainly from the cost of personnel and high proportion of uncomplicated malaria cases. For a more effective healthcare system, there is need for more efficient use of hospital resources to prevent wastages and reduce costs to the provider and consumer.

PIN48 ASSESSMENT OF THE COSTS AND OUTCOMES OF ANTIRETROVIRAL TREATMENT IN ADULT OUTPATIENTS AT A TERTIARY HOSPITAL IN HARARE, ZIMBABWE

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OBJECTIVES: This study sought to estimate the average outpatient cost of providing antiretroviral treatment (ART) at an urban hospital setting in Zimbabwe. Subjects were assigned to any one of the following outcome categories based on their status at the end of the study period: in care and responding (IC), in care but not responding (NR), or no longer in care at study site (N). Average cost per outcome category was estimated based on resource utilization, in 2013 US$. RESULTS: The overall annual retention in care was 93.3%. At the end of the first 12 months of ART care, 109 (90.8%) of the patients were IC, 7 (6.7%) patients were NR, and 3 (2.5%) patients were N. The average cost per patient initiated was US$461. The average cost per patient in care and responding to ART represented 49.2% of the country’s GDP per capita for 2013. This estimate excludes building and utility costs because they were unavailability, hence the actual average cost may be higher. CONCLUSIONS: This study provides estimates for all liver stages but does not include subcategories for decompensated disease. The estimates from the different sources were not directly comparable, for example, for cirrhosis and hepatocellular carcinoma Gellad estimated US$745 and $45,728 per year while McAdam-Marx estimated US$2,584 and $50,658 per year, respectively. CONCLUSIONS: There are many estimates of costs of HCV liver disease and these estimates can vary widely due to differences in study methodology. This underscores the differences in these estimates can aid in the selection of the most appropriate inputs for use in economic models.

PIN51 COST-EFFECTIVENESS ANALYSIS OF SOFOBuvIR BASED COMBINATION THERAPIES AMONG TREATMENT-NAIVE AND PRE-TREATED PATIENTS WITH HEPATITIS C INFECTION

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OBJECTIVES: AASLD/IDSA have recently updated their treatment guidelines to include sofosbuvir-based therapy as recommended regimen for treatment-naive and previously treated patients with hepatitis C (HCV) genotype 1 infection. The purpose of this study was to compare the cost-effectiveness of these therapies vs. peg-IFN and ribavirin (PEGIFN) among treatment-naive patients and compare PEGIFN based combination with and without interferon among patients previously treated with PEGIFN. METHODS: Costs per sustained viral response (SVR) was performed using a decision tree. It was assumed that patients were equally likely to receive either treatment. The model contained clinical data from Phase III clinical trials for PEGIFN (T1), sofosbuvir triple therapy (T2) (NEUTRINO study), and sofosbuvir plus simeprevir and/or ribavirin (T3) (COSMOS study). Drug and medical costs were obtained from the National Average Drug Acquisition Costs Database (Medicare) and literature. Time horizon was 48 weeks for both analyses. RESULTS: Average cost among the treatment-naive was US$7,479 for T1 arm (25% SVR), $101,317 for T2 (91% SVR), and $147,386 for T3 (94% SVR). Among the pre-treated, the average cost was US$142,862 for T2 (72% SVR) and $187,664 for T3 (94% SVR). Among the treatment-naive, an ICER of $553 and $719 per 1%SVR gain was obtained for T1 vs. T3 and T2 vs. T3. Respectively Among the pre-treated, an ICER of $302 per 1%SVR was obtained for T3 vs. T2. In sensitivity analysis, no other factor but %SVR impacted incremental costs per responder. CONCLUSIONS: Although sofosbuvir-based combination without interferon was found to be the most expensive treatment it achieved the highest SVR rates among treatment-naive and pre-treated patients. The presented results can be used to make decisions by individual payers’ based on their willingness to pay through direct and indirect costs. This study helped to examine the cost-effectiveness of new therapies in relevant HCV patient subgroups.

PIN52 A COST-EFFECTIVENESS ANALYSIS OF PRE-EXPOSURE PROPHYLAXIS FOR HIV: A US PAYER PERSPECTIVE

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OBJECTIVES: A 2010 randomized controlled trial, the first in the United States (US), was carried out to study the clinical effectiveness of pre-exposure prophylaxis (PrEP) among men who have sex with men (MSM) population over a follow up of