

ratio = £60,197), MICA dominates L-AMB. The results of the MC simulation and the sensitivity analyses showed that MICA remained the most cost-effective option. **CONCLUSION:** The lower costs and higher effectiveness reported for MICA versus L-AMB in this analysis indicate MICA is the more cost-effective therapy in the treatment of SCIs in the UK when compared to L-AMB.

PIN28

A REALISTIC-AGE-STRUCTURED, DETERMINISTIC, COMPARTMENTAL, TRANSMISSION MODEL TO ESTIMATE THE COST-EFFECTIVENESS OF VACCINATION AGAINST SEASONAL INFLUENZA

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OBJECTIVE: To estimate the cost-effectiveness of a national immunization program against seasonal influenza targeting children aged one to five years and adults aged 65+ years. **METHODS:** Dynamic models simulate the indirect effect of vaccination conferred by herd protection, therefore, in order to estimate the population effect of vaccination against influenza, a transmission model comprising annual age classes was developed to model the effects of age-specific infection, morbidity, and mortality due to seasonal influenza. The structure of the model followed the susceptible-latent-infected/morbid-recovered schema for each age class. Transition between age classes was modelled by either jumps to the next age class between influenza seasons, or at a continuous rate. Assumptions concerning antigenic drift of the influenza strain were incorporated in the model as the waning of vaccine-acquired immunity between successive influenza seasons. Health benefits were estimated using person-years with influenza. Further developments are intended to extend the outcome measures to include Quality-Adjusted Life Years. Cost analysis was from a societal perspective in the UK, however extension to other settings can be performed. **RESULTS:** Assuming 60% vaccination coverage of the target population in an influenza season, the ratio of person-years with influenza to the initial population size is 0.99% for no vaccination and 0.85% with vaccination. This indicates that in the UK, vaccination could prevent approximately 84,000 person-years of influenza, which corresponds to 2,184,000 influenza episodes per season, assuming infection lasts 2 weeks. The incremental cost per person-year with influenza, with vaccination versus no vaccination was ≤149. **CONCLUSION:** Initial results indicated that the national immunization program targeting children aged 1–5 years and 65+ adults could be highly cost effective.

PIN29

COST-EFFECTIVENESS EVALUATION OF THREE HEALTH CARE DELIVERY MODELS FOR HIV POSITIVE PATIENTS IN COLOMBIA

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OBJECTIVE: To estimate the CER of three health care delivery models (HCDM) for HIV+ patients in Colombia. **METHODS:** A review of 356 medical records from patients affiliated to institutions under the Contributive Regimen in the Colombian Health System was performed. The review incorporates data from 2002 to 2005, including disease status, treatment efficacy, and costs of care. VL and CD4 count data from the three-year analysis were

used as clinical outcomes. Direct costs included medications, hospital expenses, doctor visits, laboratory tests, and other health care providers costs. Description of the three models and analyses of the services provided, team members, negotiations by plan were described for each model. **RESULTS:** After controlling by disease status and services utilization increase of CD4 count over the time of the study was significantly lower for patients in Model 3 (mean + 238 cells/mm³) than Model 1 (mean + 649 cells/mm³) and Model 2 (mean + 676 cells/mm³). When VL was analyzed patients in Model 1 had a higher decrease in VL levels –118,290 RNA copies vs. Model 2: –33,693 RNA copies and Model 3 = –33,504 RNA copies. Cost related to hospitalizations were comparable in the three models and high differences were found in the utilization and cost of outpatient services. However the overall cost including antiretrovirals for patients in Model 1 was \$10,399.00, \$11,617 for Model 2 and \$11,002 for Model 3. After a sensitivity analyses was performed CER were calculated. The lower CER was \$16.7 per CD4 cell/mm³ increased and \$0.20 per RNA copies decreased in Model 2 compared to \$19 and \$0.30 for Model 1 and \$26 and \$0.58 for Model 3. **CONCLUSIONS:** Due to differences in the plan characteristics and services utilization of the Health Care Delivery Models, Model 2 appears to be a highly cost-effective program relative to Model 1 and 3 health care programs for HIV patients in Colombia.

PIN30

COST-MINIMIZATION ANALYSIS OF ORAL VALGANCICLOVIR VERSUS INTRAVENOUS GANCICLOVIR FOR THE PROPHYLAXIS OF CYTOMEGALOVIRUS INFECTION IN SOLID ORGAN TRANSPLANT RECIPIENTS IN BRAZIL

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OBJECTIVE: Cytomegalovirus (CMV) remains the leading opportunistic infection in the transplant population and is responsible for numerous direct and indirect consequences. Some clinical trials (Paya CV, et al. 2004; Ciancio G. et al. 2004) have shown that prophylaxis with oral valganciclovir (VAL) is safe, effective and less costly when compared with IV ganciclovir (GAN) for the prevention of CMV infection in solid organ transplant (SOT) recipients. Our aim was to compare costs and medical resources of CMV infection prophylaxis in SOT recipients with oral VAL versus IV GAN in Brazil. **METHODS:** Based on study of Paya CV, et al. 2004, we assumed the same efficacy for both oral VAL and IV GAN for the prevention of CMV infection in SOT recipients. Therefore, a cost-minimization analysis was developed to assess costs related to the prophylaxis of CMV with oral VAL (900 mg/day) versus IV GAN (5 mg/kg/day), under the payer's perspective in Brazil. Only direct medical costs (drugs, administration, physician fees and daily inpatient care) were considered in this study. A panel with specialists was conducted to reflect local practices. A 90-day timeframe was considered based on the prophylaxis period which begins until 10 days after the transplant is done; consequently a discount rate was not necessary. One-way sensitivity analyses were performed to assess the robustness of the outcomes. **RESULTS:** Total costs were R\$17,673 for VAL and R\$45,625, a savings of 61% per patient. Cost-savings observed for VAL were due to lower costs related to inpatient care (VAL: R\$0 vs. GAN: R\$29,520) and lower administration costs (VAL: R\$0 vs. GAN: R\$7564). One-way sensitivity analysis supported the robustness of the findings. **CONCLUSION:** Findings suggest oral valganciclovir as a cost-saving alternative for the prophylaxis of CMV infection in SOT recipients under the payer perspective in Brazil.