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OBJECTIVES: In Uganda, mother to child transmission (MTCT) of HIV is responsible for approximately 25,000 infections among newborns annually and is the third leading cause of new infections. This analysis attempts to quantify the financial and disease burden associated with MTCT of HIV in Uganda. **METHODS:** Whereas HIV-negative infants have a life expectancy at birth ranging from 52.2 years for males and 54.3 years for females, the life expectancy of HIV-positive infants varies from 2 years in the absence of antiretroviral therapy (ART) to about 14.2 years with ART. Approximately 18% of eligible children in Uganda have access to ART, at an annual treatment cost of US$328. Lifetime health-care costs of HIV-positive untreated infants are assumed to be US$495. The model calculates years of life lost (YLL) as the difference in life-expectancy between HIV-positive and HIV-negative newborns and years of life lived with disability (YLD) by applying the relevant disability weights of 0.123 for each year lived with HIV and 0.5 for the last year of life with AIDS. All costs and life years are discounted at 3% annually. **RESULTS:** The total annual disease burden resulting from mother to child transmission of HIV is estimated at 592,480 disability adjusted life years (DALY's), which is defined as the sum of YLL: 572,662 and YLD: 19,818. The discounted net present value of future health care costs associated with mother to child transmission of HIV is estimated at US$27.3 Million. **CONCLUSIONS:** Mother to child transmission of HIV is associated with a substantial mortality and morbidity burden in Uganda. The financial burden is also worrisome in a country with annual health expenditures of US$24 per capita (circa US$ 830 Million total). Cost-effective strategies to reduce the incidence of MTCT that can be scaled-up nationally are urgently needed.

PIN32

ECONOMIC BURDEN OF NON-CF BRONCHIECTASIS ENROLLED IN A US MANAGED CARE PLAN

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OBJECTIVES: To determine the cost of non-CF bronchiectasis patients enrolled in a managed care plan. **METHODS:** Data were obtained from a large employer-based claims database. A cohort of bronchiectasis patients (cases) with and without acute exacerbations was identified using *ICD-9* 494.0 and 494.1 codes and matched (1:3) on demographics to those without the disease (controls) from January 1, 2005-December 31, 2009. Index event for cases were defined as the first medical claim of bronchiectasis during the study period and controls were assigned the same index event to whom they were matched. Cases had no medical claim for cystic fibrosis and chronic obstructive pulmonary disorder 12 months prior (baseline) and post index event. Medical resource use and expenditures were estimated for 12 months before and after index event. All statistical tests were conducted using SAS 9.2. **RESULTS:** The final study sample included 9,146 cases and 27,438 matched controls. 64% and 50% of the sample was females and between 45-64 years of age at index date, respectively. 37%, 29%, and 27% of the sample was enrolled in a POS, HMO, or PPO type of health plan. Overall comorbidity burden as measured by the Charlson comorbidity score and respiratory conditions other than bronchiectasis were significantly ($p<.001$) greater at baseline among cases vs. controls. The incremental overall ($2,128 vs. $783) and respiratory-related ($896 vs. $100) costs were significantly ($p<.001$) greater among cases vs. controls. The difference was primarily driven by an increase in outpatient care visits (2.21 vs. 0.43), emergency room visits (0.31 vs. 0.08) and pharmacy scripts (3.58 vs. 0.83) in the post-index period vs. baseline in cases vs. controls. **CONCLUSIONS:** The study found that overall incremental economic impact of non-CF bronchiectasis to a health plan was $1345 per patient. Further research needs to identify the impact of current treatment on the burden of the disease.

PIN33

ECONOMIC IMPACT OF THE ANTIRETROVIRAL PHARMACOTHERAPY ON COST AND HIV/AIDS CONTROL IN BULGARIA

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OBJECTIVES: To analyze the changes in the antiretroviral pharmacotherapy during 2006-2010 and its impact on cost and disease control of HIV/AIDS patients in Bulgaria. **METHODS:** Micro costing approach was used based on retrospective analysis of patients' records in major clinic for immunosuppressed patients at the University hospital of infectious and parasitic diseases in Sofia. Information was gathered for the way of diseases transmission, antiretroviral combinations and their cost, CD4 count and viral load per patient per year. It was evaluated the changes in the dosage regimes, cost of therapy and its influence on CD4 count and viral load. **RESULTS:** On total 162 patients were included in the study. Nearly 40 different dosage regimes were identified and all of them are combinations of 3 or 4 medicines. During the period were introduces 3 new antiretroviral medicines (tenofovir, emtricitabin, darunavir). The average yearly cost of pharmacotherapy (all regimes and patients) is increasing from 155 837.64 euro to 319 571.76 euro during 2006 - 2010 due to switch of the therapy for some of the patients to newer medicines because of drug toxicity, resistance or other reasons. All newly registered patients are treated with the new antiretroviral products and their yearly cost of therapy is 178251.12 euro. Introduction of the new medicines led to the increase in total pharmacotherapy cost with 291 89.64 euro, but also to better control measured with the increase in CD4 count (>500) and sustained suppression of vial load to <20 in 45.46% of patients. **CONCLUSIONS:** HIV/AIDS remain costly diseases for the Bulgarian population but new medicines led to better control on its progress and thus could save further hospital cost.

PIN34

COST-EFFECTIVENESS OF RESPIRATORY SYNCYTIAL VIRUS (RSV) VACCINATION OF DUTCH ELDERLY

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OBJECTIVES: Respiratory syncytial virus (RSV) is increasingly recognized as an important cause of morbidity, mortality and health-care resource use in the elderly. Therefore we determined whether there are specific levels of vaccine cost and effectiveness for which a hypothetical RSV-vaccine for Dutch elderly could be cost-effective. **METHODS:** The annual excess RSV-associated age- and risk-specific burden was estimated using a rate-difference method. Different vaccination strategies were evaluated, for various levels of vaccine effectiveness and different levels of willingness to pay per quality-adjusted life year gained (QALY). Outcome measures included costs, QALYs, life years gained (LYGs), and the amount of money that can be spent per vaccination, while remaining cost-effective. **RESULTS:** Significant excess RSV-associated deaths, hospitalisations, GP-visits and antibiotic prescriptions were found. The burden of RSV increased with age and was higher for high-risk (HR) elderly than for low-risk (LR) elderly. For several scenarios vaccination of the Dutch elderly appeared to be cost-effective. Using base-case assumptions, the amount of money that can be spent per vaccination, while remaining cost-effective, ranged from €26 when vaccinating all 60+ elderly to €68 when vaccinating only 85+ elderly, for a willingness to pay of €50,000 per QALY and a vaccine effectiveness of 70%. For HR-elderly only these estimates ranged from €52 to €99. **CONCLUSIONS:** Vaccination of Dutch elderly with a hypothetical RSV vaccine was found cost-effective for several scenarios. Vaccination is more likely to be cost-effective when vaccinating only HR elderly than when vaccinating all elderly, despite a decreased life expectancy and quality of life and a decreased effectiveness of the vaccine assumed in HR-elderly in the model. This study shows the major burden of RSV in the Dutch elderly, potential cost-effectiveness of vaccination, stressing the need to have an effective vaccine available shortly.

PIN35

COSTS OF MANAGING GENITAL WARTS IN THE UK

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OBJECTIVES: Cases of genital warts (GW), caused by human papillomavirus (HPV), remains a significant problem in the UK. Costs to the National Health Service (NHS) to manage GW have been recently estimated, but studies excluded treatment by General Practitioners (GP) and costed resources without inclusion of full staff time and overheads thereby underestimating the full cost impact. This study estimates the cost of GW management taking account of all identified GW cases seeking care and applying the full NHS cost algorithm. **METHODS:** The number of GW cases obtained from the surveillance of Genitourinary Medicine (GUM) clinics by Health Protection Agency (HPA) and estimated number of GP visits (using THIN data) for GW were combined and projected to 2010. The number of visits and therapy required for GW management were estimated by GUM experts for standard and hard-to-treat patients. NHS payment by results (PbR) tariffs were applied to estimate GUM resource costs and GP visit and therapy costs estimated from PSSRU and BNF data. **RESULTS:** Extrapolating to 2010, there were 173,077 GUM clinic (33.5% recurrent, 11% persistent) and 16,882 primary care GW episodes excluding referrals to GUM. Approximately 2% of GUM cases were estimated to be hard-to-treat, requiring additional visits and resources. Resulting NHS costs were £52.4 million (average £273/female; £278/male patient). The proportion hard-to-treat was the most sensitive variable for overall national costs. **CONCLUSIONS:** The £52.4 million includes the full per patient costs for GUM clinics and costs for GP visits not previously estimated. This is higher than previous estimates and reflective of real NHS costs. The full cost of GW management is important to understand and quantify when considering the potential value of introducing a quadrivalent HPV vaccination in the UK. This is relevant from both a public health and health economic perspective.

PIN36

SURGICAL SITE INFECTION INCIDENCE AND BURDEN ASSESSMENT USING MULTI-INSTITUTIONAL REAL-WORLD DATA

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OBJECTIVES: Surgical site infections (SSIs) are a significant burden to healthcare systems negatively affecting Medicare reimbursement, quality and hospital reputation. This study quantifies the economic impact of SSIs across multiple institutions in the United States (US) using more up-to-date real-world data **METHODS:** The economic impact of SSIs was evaluated in following surgeries (colon, hernia, CABG, shunt, abdominal and vaginal hysterectomy, c-section, hip and knee prosthesis, spinal fusion, abdominoplasty and breast surgery). The data source was the Premier Perspective™ Comparative Database, a national administrative discharge database (2007-2010) from about 500 hospitals throughout the US. The SSIs were identified by a combination of post-operative infection diagnosis codes, or postoperative prescription of selected antimicrobial drugs with treatment duration ≥5 days. The outcomes included rates of SSI by surgical category, the impact of SSI on