

older (adults). The mean length of stay was 10 days for all cases with a mean cost per stay estimated at €3259. Costs increased to €3816 for those <1 year based on a mean LOS of 11.5 days. On average, those in the 6–15 year age group had the lowest LOS and cost per stay (6.5 days; €2157) and adults had the highest (11.9 days; €3965). **CONCLUSIONS:** While most pertussis cases can be managed in an outpatient setting, the need for hospitalization does occur across all age groups in Germany. When hospitalization is required, a considerable expense is incurred. Thus, the cost of hospitalization should be factored into any economic analysis or decision-making process examining the benefits of vaccination to prevent the occurrence of this infectious disease.

PIN29

REDUCING INFLUENZA SYMPTOMS BY 1.5 DAYS: PROSPECTIVE RANDOMIZED TRIAL USING THE CONTINGENT VALUATION METHOD TO ELICIT PREFERENCES FOR NEURAMINIDASE INHIBITORS

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Introduction: Influenza (IZ) is a highly contagious acute respiratory disease with self-limiting duration, representing serious health risks for the elderly and those with chronic diseases. Vaccination is effective, but the most vulnerable population remains at risk of IZ. New, drugs entered the market, able to reduce IZ symptoms by 1.5 °V2 days when taken within 48h of symptom onset. We investigated the WTP for these drugs under the constraint of information and prescription. **METHOD:** Population: Health professionals, patients with chronic diseases and young healthy adults. Willingness to pay (WTP) was asked through closed ended questions, using a payment card system with increasing and decreasing bidding ranges. Questionnaires contained 3 scenarios including 2 levels of information and were randomly allocated. 1st scenario informed about IZ and asked WTP for no IZ risk, the 2nd WTP for the drugs, under time and office visit constraint, 3rd scenario addressed WTP for drugs if obtainable over the counter (OTC). **RESULTS:** We obtained 1594 answers, 59% female 41% male, evenly distributed for information, starting point and insurance. For scenario 2, 36% were unwilling to give anything, while only 22% answered nothing with the option of having the drug OTC, 41% were even willing to give more than 80CHF. WTP decreased significantly with age. Insurance had no influence on WTP and health professionals had a significantly lower WTP than others. Bidding ranges had no influence, neither did the level of information. Participants who had been vaccinated against influenza last year were willing to give more. **CONCLUSION:** We completed successfully the first large randomized WTP study in Health Care. Respondents valued independent decision-making, favouring the 3rd scenario Preferences of participants were much lower

than the drugs market price (CHF 80). Further large WTP studies need to be undertaken to confirm the WTP approach in Health Care.

PIN30

COSTS OF PULMONARY TUBERCULOSIS IN UKRAINE

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OBJECTIVES: The aim of study to assess the costs and cost distribution of pulmonary tuberculosis in Ukraine from the perspective of public health care in Ukraine. **METHODS:** The direct medical costs, doctor consultations, laboratory and diagnostic tests, and hospitalizations were identified and calculated. Indirect costs due to lost productivity were also included. **RESULTS:** The data collected from 8867 patients in West regional pulmonary centre (city Lviv) for 2000–2002 were analysed. The average cost per pulmonary tuberculosis patient per year was calculated at 835 UAH (€Euro = 6.1 UAH). The distribution of total costs is as follows: pharmacological treatment (42.5%), laboratory and diagnostic tests (8.2%), doctors' consultation (10.5%), hospitalization (26.4%) and productivity loss (12.4%). Indirect costs of pulmonary tuberculosis in Ukraine were much lower, because a social structure of patients on Ukraine has allowed to detect, that persons who were come back from places of an inference—10–20%, the alcoholics—20–50%, the immigrants—5–10%, persons not having of normal housing conditions and living in hostels—10–15%. Theoretically the total burden of pulmonary tuberculosis on society per year amounts 28.1 million UAH (€4.6 million). **CONCLUSIONS:** Pulmonary tuberculosis represents an important economic burden for the Ukrainian population. An optimal allocation of expenditure for pharmacological treatment and hospitalization may contribute to a significant reduction of the total cost of pulmonary tuberculosis in Ukraine.

PIN31

COST-EFFECTIVENESS ANALYSIS OF ONCE-DAILY MODIFIED RELEASE CLARITHROMYCIN VERSUS CONVENTIONAL TWICE-DAILY GENERIC CLARITHROMYCIN FOR THE TREATMENT OF RESPIRATORY TRACT INFECTIONS

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OBJECTIVES: Although efficacy of alternative antibiotic dosing regimes may be the same, compliance may vary thus affecting treatment effectiveness. The objective of this study was to assess the efficiency of once-daily clarithromycin (CL OD) versus conventional twice-daily generic clarithromycin (CL BD), in patients with tonsil-

lopharyngitis, acute exacerbation of chronic bronchitis (AECB) and community acquired pneumonia (CAP). **METHODS:** A decision-tree model was built to calculate the cost-effectiveness of the comparators in 2 cohorts of 1000 patients with each condition with a time horizon of 2 months. The study was conducted from the perspective of the Spanish NHS but an alternative scenario included the productivity losses. Efficacy rates were retrieved from published randomized controlled clinical trials. Compliance rates were retrieved from a published clinical study that evaluated patient compliance to antibiotic therapy with OD, BD and three times daily dosing. Health care resource use in each condition was retrieved from a panel of 9 experts. The unit costs of resources were obtained from national databases (€2003). The results of the study were expressed in terms of incremental cost-effectiveness ratio (ICER) per patient experiencing improvement or cure. **RESULTS:** The incremental effectiveness of the OD regime vs. BD regime is 10%, 14% and 16%, in tonsillopharyngitis, AEBC and CAP, respectively. The ICER was €13 in tonsillopharyngitis. In AEBC and CAP, CL OD is the dominant treatment strategy, offering higher effectiveness at lower costs. The scenario including productivity losses shows that the treatment with CL OD becomes less costly than CL BD in the three conditions ranging from -7 euros (tonsillopharyngitis) to -€158 (CAP) per patient treated. **CONCLUSIONS:** Higher compliance rates with CL OD vs. CL BD increase treatment effectiveness and improve the efficiency of the OD antibiotic treatment. Considering productivity losses, CL OD is a cost-saving option in all conditions under analysis.

PIN32

THE POTENTIAL EPIDEMIOLOGICAL AND ECONOMIC IMPACT OF A NEW COMBINATION VACCINE AGAINST MENINGOCOCCAL B AND C AND PNEUMOCOCCAL INFECTIONS IN THE NETHERLANDS

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OBJECTIVES: Worldwide, a large burden of invasive bacterial infections in infants is caused by meningococcal B, C and pneumococcal infections. In this presentation, the potential impact of a neonatal program with a newly developed combination vaccine in the Netherlands is analysed. **METHODS:** A decision analysis framework was developed using epidemiological and health care resource use data from 1996–2001. This model is used to estimate costs, benefits, and health gains associated with

vaccinating all newborns. In the resulting cost-effectiveness analysis, the societal perspective is taken. **RESULTS:** Annually, on average 663 cases of invasive pneumococcal and meningococcal B and C infection occur in infants aged 0 to 10 years. Introduction of the combination vaccine would prevent 233 cases of meningitis and 115 cases of bacteremia per year. Additionally, 3020 cases of pneumococcal pneumonia and 38,870 cases of otitis media would be prevented. Vaccination saves 34 lives per year and prevents 69 cases of severe sequelae. This translates into 845 life years gained, or 999 quality adjusted life years gained. Next to these health gains, vaccination will prevent €18,310,882 of the direct and indirect medical costs due to meningococcal and pneumococcal infections in the Netherlands. Base case cost-effectiveness (vaccine price €40) is €17,951 per QALY. The model is most sensitive to changes in incidence, vaccine price, and duration of protective efficacy. **CONCLUSIONS:** The introduction of this vaccine for infants leads to large reductions in morbidity and mortality, and is a potentially cost-effective preventive intervention.

PIN33

COST-EFFECTIVENESS OF DIFFERENT TREATMENT STRATEGIES WITH INTRAPARTUM ANTIBIOTIC PROPHYLAXIS TO PREVENT EARLY-ONSET GROUP B STREPTOCOCCAL DISEASE

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OBJECTIVE: To estimate the costs and effects of different treatment strategies with intrapartum antibiotic prophylaxis to prevent early-onset group B streptococcal disease in the Netherlands. The treatment strategies include a risk-based strategy, a screening based strategy, a combined screening/risk based strategy, and the current Dutch guideline. **METHODS:** A decision analysis model was used to compare the costs and effects of different treatment strategies with no treatment for a hypothetical cohort of 200,000 neonates. Baseline estimates were derived from literature and a survey among parents of GBS children. The analysis was performed from a societal perspective, and costs and effects were discounted at a percentage of 3%. **RESULTS:** The introduction of a combined screening/risk-based strategy with universal screening in pregnancy providing intrapartum prophylaxis for women with a risk factor or for unscreened women with pre-term labor would prevent 362 of the 600 cases with early-onset GBS for €9200 per QALY gained. The risk-based strategy is also an efficient strategy preventing 379 cases of onset GBS and a cost-effectiveness ratio of €10,200 per QALY gained. The other strategies resulted in lower effects for higher costs. Introducing the PCR test does not lead to more favorable cost-effectiveness ratios. **CONCLUSIONS:** In the Dutch