PIH12

GOLD STAGE AND DURATION OF HOSPITAL ADMISSION DETERMINES SIZE AND STRUCTURE OF COPD RELATED DIRECT MEDICAL COSTS IN ELDERLY

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OBJECTIVES: COPD cost of illness assessment and its dependence on GOLD stage or duration of hospital admission. **METHODS:** The sample consisted of 186 elderly COPD patients. Chest physicians conducted follow-up and financial data were obtained from administrative registry. Time horizon was one year and Health Insurance Fund perspective was selected. Included clinical endpoints were disease exacerbation and hospital admission. Economic data included all inpatient COPD-related medical goods and services consumption, and outpatient drug utilization. We excluded medical costs which did not arise from COPD. **RESULTS:** An average elderly COPD patient imposed €1745.41 of costs annually to the national health care budget. Severity grade (GOLD stage) and duration of all hospital admissions were significantly and directly correlated with overall cost. Expenses structure per year was: €14.54 outpatient care, €126.97 inpatient drug consumption, €377.98 hospital admission (Intensive Care Unit admissions and specialist consultations included in daily price), €133.5 imaging diagnostics, €111.43 laboratory analysis, €26.67 therapeutic interventions, €70.32 consumables, €884 outpatient drugs consumption. Most expenses originating from drug acquisition were due to antibiotics prescribed for curing infections and mucolitics and antihistamine drugs consumption. Average number of hospitalizations per person was 1.45 with a duration of 12.84 days. Fifteen persons deceased. Average number of outpatient visits was 2.71 per person. **CONCLUSIONS:** Overall burden of COPD is mostly driven by outpatient drug consumption and exacerbations leading to hospital admissions. Relative relevance of drug acquisition expenses in our country is higher than in high-income societies, because of still significantly lower human labour wages in the area. Pattern of diagnostic procedures requested and ATC drug classes consumed remains similar and comparable in most countries. More in-depth research of indirect COPD attributable costs e.g. lost productivity, absentism, premature death etc, will be needed in the future.

PIH13

PATTERNS AND COSTS OF HOSPITALIZATIONS IN ELDERLY PATIENTS IN RIO DE JANEIRO, BRAZIL

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OBJECTIVES: Ageing population implies greater demand of hospital services and consequent health care costs. This study aims to describe patterns of hospitalization and estimate hospitalization costs for aged patients in public hospitals in the city of Rio de Janeiro, Brazil. **METHODS:** Retrospective analysis of Rio de Janeiro hospital admissions for elderly people (aged ≥60 years) as reported in Brazilian Hospital Information System (SIH/DATASUS) database from January 1st to December 31st 2007. The costs informed in the database represent federal reimbursement values for hospitalizations placed in public hospitals in the city. Admissions were categorized according to ICD-10 groups and age categories. **RESULTS:** 287,972 hospital admissions were identified for all ages in the city in 2007 and 24.3% were for patients ≥60 years (70,077). The five more common reasons for hospitalization were cardiovascular diseases (22.4%), cancer (17.5%), mental and cognitive disorders (11.2%), gastrointestinal (9.3%) and respiratory diseases (7.6%). The in-hospital mortality rate was 14.76% for all causes. When disease groups were analyzed, infectious and respiratory diseases had the higher mortality rates (38.6% and 38.3%, respectively). The mean length of stay was 14.3 days and the average cost for elderly patients hospitalizations was 960,62 BRL. The total amount paid for hospitalization of elderly patients in 2007 was 67,317,348 BRL, 30.7% of all hospitalization costs. **CONCLUSIONS:** The findings showed the significant contribution of the elderly to public hospital expenditures with leading causes of admission including cardiovascular diseases, cancer and mental and cognitive disorders. Additionally, the higher in-hospital mortality rate was seen for preventable diseases. These results reinforce the need of prevention strategies among the elder population for targeted conditions.

PIH14

COST-BENEFIT OF FLUCONAZOLE FOR VAGINAL CANDIDIASIS

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OBJECTIVES: To perform cost-benefit analysis of fluconazole for VC in Russia. **METHODS:** Willingness-to-pay (WTP) for treatment of vaginal candidiasis was assessed. 240 women took part in the survey. a special questionnaire was designed to reveal women's preferable methods of antifungal drug application and WTP for fluconazole in comparison with other drugs. Women were proposed: 1) to chose the preferable method of drug application; 2) to chose the preferable drug among 4 options with similar efficacy but different methods of application and price (no concrete drug names were mentioned, only prices and costs of treatment and application methods); and 3) to give the maximal affordable price for treating vaginal candidiasis. **RESULTS:** More than 60% of women preferred oral treatment once with the mean costs of therapy 350 rubles ($11) among 4 proposed alternatives. The median WTP for antifungal therapy was 500 rubles ($16) (range from 50 to 5000 rubles, $1.6–161.0) that is less than real cost of treatment with original fluconazole preparation. The cost-benefit ratio (WTP/cost of treatment) was 1.30 (range 0.09–20.6). **CONCLUSIONS:** Fluconazole is a cost-benefit alternative for VC treatment.

PIH15

ECONOMIC EVALUATION OF DARBEPOETIN ALFA (ARANESP) COMPARED TO EPOETIN ALFA (ERYPO) AND EPOETIN BETA (NEORECORMON) IN THE TREATMENT OF CHEMOTHERAPY-INDUCED ANEMIA (CIA) IN AUSTRIA

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OBJECTIVES: Anemia is a common side effect observed in patients receiving myelosuppressive chemotherapy [1]. The purpose of this pharmacoeconomic analysis was to evaluate the cost-effectiveness of the long-acting erythropoiesis-stimulating agent (ESA) darbepoetin alfa (DA) 500 mcg once every 3 weeks (Q3W) and 150 mcg weekly (QW), and short-acting ESAs epoetin-alfa (EA) 40,000 IU QW, epoetin-beta (EB) 30,000 IU QW and 3-times weekly (TIW) for the treatment of CIA. **METHODS:** A cost-consequence model was constructed using a decision-analysis tree. The treatment period considered was based on 12 weeks and was aligned with routine chemotherapy regimen administration. Model inputs included: medical treatment, outcomes, and health care service utilization from published clinical trials and summary of product characteristics recommendation. Effectiveness of therapeutic alternatives was determined by comparing hemoglobin response rates. Costs included direct medical costs(intervention drug, inpatient and outpatient) and transportation costs. Costs presented reflect 2010 data. The analysis was performed from the perspective of the Austrian health care system. **RESULTS:** The average expected direct costs per patient were €3,675 for DA Q3W, €3830 for DA QW, €4290 for EA QW, €4240 for EB QW and €4745 for EB TIW. Cost-savings associated with DA Q3W were 4% relative to DA QW, 14% to EA QW, 13% to EB QW and 23% to EB TIW. The cost per hemoglobin response rate (therapeutic success) amounted to €5035 for DA Q3W, €5247 for DA QW, €6309 for EA QW, €6235 for EB QW and €6977 for EB TIW. **CONCLUSIONS:** In the treatment of CIA among cancer patients in Austria, darbepoetin alfa Q3W and QW are projected to provide more efficient use of health care resources compared to alternative treatment strategies such as epoetin-alfa and epoetin-beta. [1] Ludwig et al. Eur J Cancer 2004;40:2293–306.

PIH16

SURGICAL REPAIR OF ANTERIOR VAGINAL WALL PROLAPSE USING PROLIFT AND COLPORRHAPHY. A COST-EFFECTIVENESS ANALYSIS FOR A THIRD LEVEL HOSPITAL IN MEXICO

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OBJECTIVES: Estimate the clinical and economic outcomes of the surgical repair of anterior vaginal wall prolapse using Prolift® *vs.* colporrhaphy to assess its cost-effectiveness under a third level hospital perspective in Mexico. **METHODS:** A multistate Markov model was developed to assess the evolution of a patient with anterior vaginal wall prolapse under a conventional surgical repair strategy (colporrhaphy) and a mesh grant (Prolift®) after 2, 4, 10 and 20 years. a specialist panel was conducted to collect current clinical practice, resource utilization and complication data. After the first surgical prolapse repair, the base-case patient could face two additional surgeries if prolapse relapsed. Two scenarios were modeled to compare the clinical and economic impact of Prolift® as second line treatment; the mesh grant was the assumed third line treatment for both scenarios. The effectiveness variable was the objective recurrence (failure) rate. Clinical data, transition probabilities and mortality rates were taken from published sources. Only direct medical costs were considered, and cost data was retrieved from IMSS official cost list. The price of Prolift® was internally estimated. Results are expressed as 2010 inflation-adjusted Mexican pesos (MXN) and MXN/QALY for ICERs. a 4.5% discount rate was used for costs and outcomes. **RESULTS:** Total costs for year 1 were higher for the Prolift® strategy ($75,688 *vs.* $74,544), but yielded an overall 22% complication reduction. For year 2, total costs were lower for Prolift® ($81,675 vs. $104,007), yielding better outcomes (0.04 incremental QALYs), thus being a dominant strategy (–$528,682/QALY). For the following years, Prolift® showed to be a consistent cost-saving alternative *vs.* colporrhaphy: ICERs for years 4, 10 and 20 were –$273,598/QALY, –$29,942/QALY and –$1,212/QALY. **CONCLUSIONS:** Findings suggest Prolift® is a safe and cost-effective alternative to treat anterior vaginal wall prolapse when compared to colporrhaphy. Savings are due to lower failure and complication rates.

PIH17

COST-EFFECTIVENESS OF SEASONAL INFLUENZA VACCINATION IN PREGNANCY IS DEPENDENT ON VACCINATION EARLY IN FLU SEASON

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OBJECTIVES: To estimate the impact of vaccination timing on the cost-effectiveness of seasonal influenza vaccination in pregnancy for prevention of disease in women and infants under 6 months of age. **METHODS:** We constructed an open cohort