only 50% of the average salary the costs outweigh the benefit.

CONCLUSIONS: The benefit to an employer depends on the organization of the company and the value of reducing illness related work absence. These results indicate that providing influenza treatment may be a cost-saving intervention for employers. In addition, employees will benefit from improved quality of life.

**ECONOMIC EVALUATION OF INTRAVENOUS ITRACONAZOLE IN PRESUMED SYSTEMIC FUNGAL INFECTIONS IN NEUTROPENIC PATIENTS IN GREECE**

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OBJECTIVES: In immunocompromised patients, presumed systemic fungal infections (SFI) are treated empirically with an intravenous (IV) antifungal to reduce the occurrence of documented infections and associated mortality. Amphotericin B (AB) remains the treatment of choice. The toxicity of conventional AB (CAB) often results in discontinuation or suboptimal dosing. Liposomal or lipid formulations of AB (LAB), with improved toxicity profile, are extremely expensive. The objective was to compare the cost-effectiveness of intravenous itraconazole (IVitra) with CAB and LAB as empirical treatment of presumed SFI in neutropenic cancer and bone marrow transplant (BMT) patients.

METHODS: A medical decision tree was developed, including probabilities of toxicity, response, pathogen documentation and 2nd line treatments. Clinical data were obtained from randomized trials comparing IVitra with CAB (n = 392) and CAB with LAB (n = 687). Resource use was obtained via modified Delphi consensus panel, unit costs from official sources (public payer perspective). Cost-effectiveness was expressed as cost per additional “responder” (defined as patient without fever or major toxicity).

RESULTS: The total cost per neutropenic cancer patient was lowest for IVitra (7486€), followed by CAB (9721€) and LAB (11,956€). The same cost ranking was obtained in BMT patients, however with higher hospitalization costs. The variables accounting for cost differences between strategies were 1st and 2nd line antifungal drug costs. In cost-effectiveness analysis, IVitra was dominant over CAB combining greater “effectiveness” (because of less toxicity) and lower costs. The incremental cost-effectiveness ratios for LAB over IVitra in neutropenic cancer and BMT patients were 188,638€/“responder” and 206,866€/“responder” respectively.

CONCLUSIONS: IVitra was shown to be a cost-effective empirical treatment for presumed SFI in neutropenic cancer and BMT patients and to be cost saving compared to both CAB and LAB. These conclusions are similar to those for UK, Germany, Italy and Sweden, in which the same analysis was performed earlier.

**IN3**

**COMPLIANCE, ADHERENCE, AND PERSISTENCE: A COMPARISON OF THREE METHODOLOGIES FOR EVALUATING PATIENT COMPLIANCE USING PRESCRIPTION CLAIMS DATA**

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OBJECTIVE: To evaluate three measures of compliance by applying established methodologies for each to one population.

METHODS: Prescription claims data for 1164 patients receiving a chronic lipid-lowering medication (a combination product versus a statin) in 2002–2003 were obtained; MPRs, PDCs, and ELPTs were calculated. Because each method has different inclusion criteria, the measures were analyzed for three different subsets of the overall population. A second set of analyses was conducted on a fourth subset of patients (those included in all three of the other analyses) to evaluate the impact of inclusion criteria on the endpoints. Logistic regression analyses were conducted for each measure to determine the probability of being categorized as “compliant” by established definitions.

RESULTS: The results differed depending on the methodology used, suggesting each measure evaluates a different aspect of overall compliance. MPR analysis demonstrated higher overall compliance rates with the combination product versus statins (p = 0.001). PDC analysis demonstrated lower compliance rates with the combination product versus statins (2nd quarter p = 0.003, 4th quarter p = 0.011). ELPT analysis also demonstrated lower compliance rates for the combination product versus statins (6th quarter p = 0.002).
CORRECTING FOR COMPENSATING MECHANISMS RELATED TO PRODUCTIVITY COSTS IN ECONOMIC EVALUATIONS OF HEALTH CARE PROGRAMS
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OBJECTIVES: In economic evaluation of health care programs, productivity costs are often overestimated, because compensation of lost work is neglected. This study tested the conclusions of a small previous study (Severens et al. 1998) which indicated that short-term work absence often is compensated for during normal work hours, thereby leading to limited productivity costs. METHODS: We studied work absence and compensation of lost work in five different patient populations (psoriasis, low back pain, chronic fatigue syndrome, rheumatoid arthritis and persistent dyspepsia) and one employee population (workers of a pharmaceutical company). RESULTS: this study showed that only about 70–75% of lost work hours were compensated by the absentee or colleagues during normal working hours. Between 25–30% of the productivity costs as calculated by the classical method remained, if productivity costs were only calculated when extra efforts were needed. For 1 day absence only in 17–19% of the cases work absence occurred in productivity costs were relevant, while this was 35%–39% for absence of two weeks or longer. Measurement of the compensating mechanisms seemed to be valid, because of the large since the agreement between the opinion of supervisors and their employees whether compensation takes productivity costs. The measurement of compensating mechanisms, seemed to be valid. Also, for different occupations different compensating mechanisms were reported in the expected direction. In our study populations, compensating mechanisms differed with occupational characteristics, like part-time work, managerial work and shift work. For example, higher educated workers more often compensate for lost work themselves. CONCLUSIONS: Including compensation reduces productivity costs due to absence from work to a considerable extent. Nevertheless, we advise researchers to take a broad range for correction, because for some compensation mechanisms the consequences for productivity costs may vary between settings.

QUALYS LACK QUALITY IN PAEDIATRIC CARE: A CRITICAL REVIEW OF PUBLISHED COST-UTILITY STUDIES IN CHILD HEALTH
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OBJECTIVES: To critically appraise published cost-utility analyses of interventions in child and adolescent health care in terms of the methods used to estimate quality-adjusted life years (QALYs). METHODS: A comprehensive search of computerised databases (e.g. Medline, Embase) was undertaken to identify cost-utility studies published prior to April 2004. Studies were categorised according to the methods used to describe health status, the valuation technique and source of preferences. The methods were compared with the guidelines of the U.S. Panel on Cost-effectiveness in Health and Medicine and the National Institute for Clinical Excellence (NICE) in England and Wales which recommend the use of a generic health status classification system (e.g. HUI, EQ-5D), a choice-based valuation method (e.g. SG or TTO), and preferences of the general population. RESULTS: Fifty-four studies were reviewed, of which 34 (63%) were published in the latter 5 years. A generic health status classification instrument was used in 22 (35%) cases; the remainder developed study specific health state descriptions or elicited preferences directly from patients or proxies. In 7 cases (11%), sources were unclear. Utility values were elicited by using choice-based techniques in 28 cases (42%), either as tariffs for health status classification instruments (17 cases) or by directly valuing health state descriptions or patient health (11 cases). Community preferences were only used in 23 cases (37%). Four studies aggregated QALYs for mother/child or family/child pairs without giving any theoretical justification. CONCLUSIONS: Although the number of cost utility studies is increasing exponentially, the majority of studies did not adhere to standard recommendations with little improvement over time. Further research is warranted to develop appropriate methods to measure and value child health benefits within the QALY framework. In the interim, an expert panel is needed to provide guidance for cost-utility analysis of paediatric interventions to make studies more consistent.

FLEXIBILITY AND TRANSPARENCY OF BAYESIAN NETWORKS: MODELING THE ECONOMIC IMPACT OF DRUG-ELUTING CORONARY STENTS
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OBJECTIVE: Drug-eluting stents (DES) elute drugs that prevent coronary restenosis after a percutaneous revascularization. The cost of DES is quite high therefore imposing a relevant burden to hospital and NHS budgets. Patients selection and reimbursement policies need to be settled according to a large amount of clinical (number and anatomy of revascularized vessels, diabetes, unstable angina), economic (local cost of devices and procedures) and organizational variables (adoption rate of different types of DES and BMS, number of stent/procedure, shift from surgical to DES revascularization). The resulting decision models are usually blamed for high complexity but poor completeness and low transparency. METHODS: Bayesian networks (BN) are close acyclic graphs displaying value nodes, probability nodes and, possibly, decision nodes (influence diagrams). We explored the application of BN to policy selection for DES use, in both the NHS and the hospital perspective. Three commercial softwares were compared: Netica, TreeAgePro, HuginLite. Beta and gamma distributions were used to represent the probability of conditions/events and unit costs, respectively. Log-normal distributions were used to model relative risks. RESULTS: BN modeling of the DES problem was feasible with the three softwares and required 35–40 nodes. We tested five types of restriction policies to DES use, anchored to: 1) the presence of diabetes; 2) the number of vessels to be revascularized; 3) the overall risk of restenosis; 4) a cutoff adoption rate of DES; and 5) a cutoff budget. We could verify that flexibility, directness and transparency varied among the softwares. Also software modalities to manage uncertainty and to report the results had different appeal. CONCLUSIONS: BN allows rapid and transparent estimations of the local/specific economic impact of several differ-