OTHER COST STUDIES

A MARKOV MODELLED PHARMACOECONOMIC ANALYSIS OF BIMATOPROST 0.03% (LUMIGAN®) IN THE TREATMENT OF GLAUCOMA OR OCULAR HYPERTENSION AS AN ALTERNATIVE TO FILTERATION SURGERY IN ITALY

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OBJECTIVES: Glaucoma is a condition affecting one or both eyes with raised intraocular pressure (IOP). IOP reduction can prevent or slow progression of visual field loss. The objective of the analysis was to investigate the four-year costs of bimatoprost 0.03% as an alternative to filtration surgery (FS) for glaucoma patients on maximum tolerable medical therapy (MTMT) in Italy. METHODS: A Markov model with monthly cycles based on effectiveness and resource-use data from a clinical trial and expert statements was designed. The trial covered 83 patients on MTMT. The model compared bimatoprost with FS. In one model-arm patients began treatment with bimatoprost. If a 30% reduction in IOP was not reached using mono-therapy the patient proceeded with combination-therapy and eventually FS. In the other model-arm FS was performed after the first ophthalmologist visit. In both arms treatment changes involved additional follow-up visits besides the scheduled, an increasing proportion needed pressure-lowering medication after FS and 40% were operated in both eyes. Unit costs were obtained from an Italian chart and tariffs review. The model analysed four-year costs from a national Health care sector perspective. A 5% discount rate was used. RESULTS: The 4-year cost per patient in the bimatoprost arm was €3372 with visit costs and medications contributing the most. In the FS arm four years costs were €4284 with the costs being driven by primary surgery, secondary surgery, and pressure-lowering medications needed post-surgery to control IOP. CONCLUSIONS: The analysis indicates that bimatoprost over a four year horizon is a cheaper alternative than FS. This result was strengthened by a threshold sensitivity analysis showing that the FS price would need to be reduced 73% before FS and bimatoprost were equally costly. Italian ophthalmologists should therefore consider bimatoprost as an alternative to FS.

BURDEN OF ILLNESS OF INFLUENZA

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OBJECTIVE: The purpose of this study was to determine the burden of illness of influenza in the United States.

METHODS: Retrospective analysis was conducted of the 1999 portion of the Medical Expenditure Panel Survey. Data was collected from a nationally representative sample of 24,618 respondents and linked to data from respondents’ medical care and health insurance providers and employers. Data used in this study included medical conditions, use and payments for medical care, and employment information comprised of hourly earnings, hours worked, and disability days. Influenza patients were identified using ICD-9-CM codes (487.0–487.8). Direct costs were calculated using patient and third-party payments for influenza-related medical events. Indirect costs were calculated for influenza patients who incurred missed workdays using the human capital approach. Sample estimates were weighted and projected to the population and 95 percent confidence limits were calculated using the Taylor expansion method. RESULTS: Approximately 6.38% (95% C.L. = 5.86%–6.91%) or 17,640,761 individuals experienced influenza and 2.50% (95% C.L. = 2.22%–2.79%) or 6,920,976 individuals experienced influenza resulting in missed workdays. Total costs of influenza were $10,413,397,186. Direct costs were $1,251,588,028. Office-based medical provider visits represented the highest proportion of direct costs, at $407,049,515 (mean $64.56; 95% C.L. = $54.45–$74.67). Home health care expenditures were $265 million. Expenditures for inpatient stays, prescription medications, and emergency department visits were similar, at $189 million, $185 million, and $175 million, respectively. Outpatient services represented the lowest proportion of direct costs, at $31 million. Indirect costs of influenza were $9,161,809,158 with mean indirect costs of $1,325 per patient (95% C.L. = $1,130–$1,521). CONCLUSIONS: Affecting more than 17 million individuals in the population with a total cost of $10.4 billion, the burden of illness of influenza was substantial. With indirect costs accounting for nearly 90% of total costs, influenza significantly impacts the labor force underscoring the importance of prevention to minimize absenteeism and maintain productivity.

INITIAL INSERTION OF A METAL STENT FOR PALLIATION OF MALIGNANT BILIARY OBSTRUCTION: A COST CONSEQUENCE ANALYSIS FOR ENGLAND, FRANCE AND SWEDEN

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OBJECTIVE: Placement of a biliary stent (plastic or metal) is a recognised palliative treatment for malignant biliary obstruction. Metallic stents have a lower occlusion rate and avoid reinterventions for exchange but are more expensive. The objective of this analysis is to compare the total costs at one year of metal versus plastic stent placement. METHODS: A Markov model with a time horizon...