but these laws are neither universal nor consistent. This study estimates the hospital-wide prevalence, cost, and mortality of CLABSI-associated discharges for all US community hospitals. Hypotheses are that CLABSI prevalence and mortality are increasing and cost is unchanged. METHODS: Data for the study was extracted from the Healthcare Cost and Utilization Project (HCUP) National Inpatient Sample (NIS) database for 2002 to 2006. CLABSI was defined as a discharge with an ICD9-CM procedure code for a central line procedure (38.92, 38.93, and 38.95) and an ICD9-CM diagnosis code for a BSI (24 codes). SAS Proc Surveyreg was used to estimate (log of cost) and Surveylogi- cts was used to estimate mortality and CLABSI prevalence. NS weights were used to make national estimates, charges were adjusted using cost-to-charge ratios, and costs were adjusted to 2006 US dollars using the hospital service CPI. RESULTS: Average cost of a CLABSI-related hospitalization was $31,879 in 2006 dollars. Pres- ence of CLABSI had a positive significant effect on cost ($0.128, p < 0.001) and an additional number of procedures ($0.125, p < 0.001) and LOS ($0.034, p < 0.001) while being female had a significant negative effect (-$0.027, p < 0.001). The time variable was not significant (-$0.056, p = 0.052). OR for CLABSI increased over time (1.196, p < 0.001) when controlling for gender, LOS, number of procedures, liver disease, and renal failure. Mortality significantly ORs (p < 0.001) were time (0.761), female (0.875), LOS (0.982), age (1.026), number of procedures (1.204), liver disease (1.184), and CLABSI (2.348). CONCLUSIONS: CLABSI-related hospital mortality in the US is decreasing as is the cost of treatment. However, the prevalence of CLABSI is increasing.

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SYSTEMATIC REVIEW OF THE COST-EFFECTIVENESS OF PALIVIZUMAB IN HIGH-RISK PATIENTS
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OBJECTIVES: Palivizumab has been shown to reduce the number of respiratory syn- cytial virus (VSR) related hospitalizations in preterm infants and patients with bron- chopulmonary maturity or congenital heart disease. It is widely used but its high price raises concerns about its cost-effectiveness. The aim of this study was to systematically review economic evaluations (EE) of palivizumab in high-risk patients. METHODS: A comprehensive search for literature on the cost-effectiveness of palivizumab versus no palivizumab was conducted. Bibliographic databases were searched from September 2001 to February 2008. Additional relevant studies were identified from manual searches. Only studies published in English and Spanish were included. Quality was assessed using the Drummond criteria for EE. Two independent reviewers scrutinized retrieved references and assessed the quality of the studies. RESULTS: Twenty-five references were included, representing a total of 32 EE: 20 cost-effectiveness analyses (CEA), 10 cost-utility analyses (CUA) and 2 cost-benefit analyses (CBA). Quality was variable. Populations varied widely with some studies including all high-risk patients and others focusing on specific subgroups. Results were reported as incremental cost- effectiveness ratios in terms of cost per hospitalization prevented, life-year gained or quality-adjusted life-year in all CEA and ACU and as cost-benefit ratios in CBA. Esti- mates of incremental ratios ranged from cost savings to incremental costs of a high order of magnitude. Assumptions on hospitalization rates in intensive care units, mortality and long-term consequences due to RSV infections, as well as acquisition cost of palivizumab seems to be related with more favourable ratios. A tendency for better results was also observed in studies receiving financial support from the manu- facturer. CONCLUSIONS: A true determination of cost-effectiveness of palivizumab is difficult. Costs of palivizumab seem to exceed potential cost-saving from reduced admission rates and might only prove to be cost-effective in a small subset of very high risk patients.

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THE ROLE OF ECONOMIC EVALUATION IN THE HEALTH TECHNOLOGY ASSESSMENT (HTA) OF VACCINES—LESSONS LEARNED FROM FINLAND
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OBJECTIVES: The aim of economic evaluation (EE) is to provide information to help decision makers maximize health benefits with given resources or advise how to attain retained resources. EE can have a crucial role when vaccine introduction is considered. The aim of this study was to review economic evaluations (EE) of the HTA of vaccines in Finland and explored how EEs have and should have been conducted. METHODS: The methods and perspective of national EEs related to rotavirus and pneumococcal conjugate vaccines programs were evaluated. An official call for a rotavirus vaccination tender, competitive bidding process and tender decision-making criteria were explored. RESULTS: EE can have a crucial role when a new vaccine is considered for inclusion in a national vaccination program, which is necessary before a tender call for bids can be given. However, for tenders the predominant decision-making criterion seemed to be cost per vaccine. EEs either should be conducted using a pair-wise comparison instead of multiple comparisons (i.e. different vaccines for a certain disease are compared only to no vaccine strategy). Advanced methods to characterize uncertainty, such as cost-effectiveness acceptability frontiers and cost-utility analyses have not been applied. Also, no specific cost-effectiveness threshold for new vaccines has been set in Finland although international references and Finnish home dialysis and bypass surgery thresholds have been cited in the evaluation reports. However, the literature revealed that setting a threshold may be impractical. Thus, we present an ideal EE process that enables value-based threshold pricing for manufacturers and decisions that can lead to efficiency. CONCLUSIONS: There is a discrepancy between the scientific principles and objectives of EE and real life in terms of national EEs of vaccines and tender calls in Finland. The current practice does not necessarily lead to optimal decisions based on cost-effectiveness. Particularly, multiple comparisons with valid prices should be encouraged.

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MODELING AND SIMULATION OF EPIDEMIOLOGIC EFFECTS OF PENUMOCOCCAL CHILDREN VACCINATION IN AUSTRIA USING CLASSICAL MARKOVIAN METHODS AND DIFFERENTIAL EQUATIONS
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OBJECTIVES: The aim of the current work is to implement a Markovian-model and a Differential Equation Model for simulating the pneumococcal illnesses and estimate the impact of palivizumab by vaccination of high-risk populations. Implementing the two models opens the possibility of comparison of both and offers better insights on the influence of non linear effects like herd immunity and serotype replacement. METHODS: To assess the epidemiological influence of pneumococcal infant vaccination using PCV7 in Austria a static Markovian model and a Differential Equation Model for simulating the pneumococcal illnesses and estimate the possibility of preventing the disease by vaccination of infants is implemented. Particularly, multiple comparisons with valid prices should be encouraged.