SARPAM programme, including a regional procurement cooperation intervention of ARVs, is both a cost beneficial and cost effective way of improving access to ARTs specifically for the SDAC. Specifically, it allowed for significant improvements in access to healthcare of HIV/AIDS patients where antiretroviral drug costs will be significantly reduced.

**PIN42 METHODOLOGICAL DECISIONS IN ECONOMIC EVALUATIONS OF CHILDHOOD INFLUENZA VACCINATION: FINDINGS FROM A LITERATURE REVIEW**

**OBJECTIVES:** Influenza vaccination programs targeted at children have gained increasing attention in recent years. In the US, recommendations for influenza vaccination have expanded over the last decade to include all children aged 6 months to 18 years. However, in most other developed countries childhood influenza vaccination is voluntary. Methodological decisions in terms of what costs and benefits to include appeared influential. Many studies applied a wider perspective (i.e. including non-productivity losses) than the reference case for economic evaluations used in many countries.

**RESULTS:** The studies differed widely in terms of the costs and benefits that were included. All but one of the studies were conducted from a societal perspective. The majority of the studies included the value of lost productivity due to caregivers missing work to care for sick children. However, other forms of lost productivity were also considered by some studies, including those resulting from being vaccinated, school absenteeism, premature death, and illness in caregivers. Only a small minority of studies also measured benefits in terms of non-monetised utilities such as quality-adjusted life years. Several evaluations, particularly those directly targeted at healthy children, did not include serious influenza complications. Only one of the reviewed studies used a dynamic transmission model able to fully incorporate indirect herd protection to the wider population.

**CONCLUSIONS:** The conclusions of the studies were generally favourable towards vaccination. Methodological decisions in terms of what costs and benefits to include appeared influential. Many studies applied a wider perspective (i.e. including productivity losses) than the reference case for economic evaluations used in many countries.

**PIN43 THE TOTAL COST OF HIV PATIENTS TREATED WITH ARV THERAPY: REAL WORLD EVIDENCE FROM THREE ITALIAN ADMINISTRATIVE DATABASES**

**OBJECTIVES:** To calculate the cost of Human Immunodeficiency Virus (HIV) patients treated with Anti-Retroviral therapy (ART) including medications, hospitalizations, tests, and specialist visits over a 12 months follow-up period, 3 Italian Local Health Units databases were analyzed. METHODS: All records (patients ≥18 years) between January 1, 2008 and December 31, 2009 associated with nucleoside analogue reverse transcriptase inhibitor (NNRTI), non-nucleoside analogue reverse transcriptase inhibitor (NNRTI), protease inhibitor (PI), or other drugs in ATC J05A group, were included. Data and costs were collected for medications, hospitalizations, diagnostic tests, and specialist visits for the 12 months after the first ART prescription. RESULTS: A total of 213 records were included in the analysis. The annual average total cost (medications, hospitalizations, tests, and specialist visits) over 12 months follow-up period was €7,099.70 for ARV therapy (77%), €7,637.40 (medications, hospitalizations, tests, and specialist visits) was €5,525 per QALY. In Germany, the current quadrivalent HPV vaccine can be considered as a cost-effective strategy. An increase in vaccination coverage rate could lead to a more effective programme. Further public health benefits could be expected on other HPV-related diseases such as vulvar, vaginal and anal precancerous lesions on which the quadrivalent vaccine has demonstrated high efficacy.

**PIN46 COST-EFFECTIVENESS AND PUBLIC HEALTH IMPACT OF PNEUMOCOCCAL VACCINATION IN MALAYSIA**

Lee K1, Hong LW2, Roberts CS3, Lee VW4, Hon K1, Strutton DB4
1Monash University Sunway Campus, Bandar Sunway, Selangor, Malaysia, 2 Pfizer (Malaysia) Sdn. Bhd, Kuala Lumpur, Selangor, Malaysia, 3 Pfizer, Inc., New York, NY, USA, 4Chines University of Hong Kong, Hong Kong, China, 2Chinese University of Hong Kong, Hong Kong, China, 3Pfizer, Inc., Colleuville, PA, USA.

**OBJECTIVES:** There are currently two pneumococcal conjugated vaccines in Malaysia. Pneumococcal vaccination is not currently part of the national immunization program (NIP). We studied the cost-effectiveness of population-wide pneumococcal vaccination in Malaysian children with the 13-valent pneumococcal conjugate vaccine (PCV13) versus the 10-valent pneumococcal conjugate vaccine (PCV10). METHODS: A 10-year Markov model was used to analyze the population level public health and economic impact of infant vaccination. Costs were considered from the payer’s perspective. A 3% discount rate was applied to costs and outcomes. Local and regional epidemiology data were used when possible. PCV13 vaccination effectiveness was extrapolated from PCV7 data, taking into consideration the local serotype distribution. Medical and vaccine costs were obtained from local sources while lifetime medical costs of disability were estimated from US data. The analysis assumes a 3-dose vaccine series. Sensitivity analyses were performed. RESULTS: We assessed the robustness of the model results to a range of assumptions including vaccine effectiveness, pneumococcal disease (IPD) (8,671 cases), hospitalized pneumonia (346,716 cases), non-hospitalized pneumonia (897,729 cases) and acute otitis media (72,220 cases) are estimated to be avoided following vaccination with PCV13 vs PCV10. 1,952 IPD related deaths and 16,114 deaths from hospitalized pneumonia would additionally be prevented. Compared to PCV10, PCV13 saved an additional 489,916 life years and 447,681 QALYs. This resulted in a cost per life-year saved of RM810,011 and a cost per QALY gained of RM 19,710 for PCV13 vs PCV10. CONCLUSIONS: This analysis supports the cost-effectiveness of PCV13 vaccination compared with PCV10 in a population level NIP in Malaysia.

**PIN47 COST-EFFECTIVENESS OF TELBIVUDINE IN FIRST LINE TREATMENT OF HBeAg-NEGATIVE PATIENTS WITH CHRONIC HEPATITIS B (CHB) IN THE TURKISH HEALTHCARE SETTING**
Pala A1, Salih U2, Aydin M3, Recep Yilmaz4, Istanbul, Turkey. 2Novartis, Istanbul, Turkey, 3Novartis, Istanbul, Turkey

**OBJECTIVES:** The aim of this study is to analyze the cost-effectiveness over 6-year duration of first line telbivudine and lamivudine treatment in HBeAg-negative CHB patients with low viral load at baseline in line with the Turkish reimbursement guideline for oral CHB treatments. METHODS: Using a decision analysis model, the cost-effectiveness of telbivudine was evaluated versus lamivudine in first-line use for HBeAg-negative patients with baseline HBV DNA levels <7 log10 copies/ml. In Turkish healthcare setting from national payer’s perspective in accordance with the local reimbursement guideline for oral CHB treatments based on roadmap concept. Primary measure of effectiveness was undetectable HBV DNA level by polymerase chain reaction (PCR) assay at model duration, while costs included only cost of oral CHB drugs incurred by the Payer. Probabilities of PCR negativity and resistance rates used in the model are derived from telbivudine’s head-to-head study vs lamivudine subgroup analyses outcomes for week 24 and 104; and from respective pivotal clinical studies for second line therapies.

**RESULTS:** In the CE model, total oral CHB treatment cost per negative patient treatment week (IPD) was estimated to be 9144€ and 7980€ respectively. Percentage of patients remaining on lamivudine at model duration was 29%, while 67% on telbivudine. The average cost-effectiveness ratio, cost per successfully treated patient at year 6, was calculated as 10,754€ for the lamivudine arm and 8,750€ for the telbivudine arm (difference is 2,004€) and the incremental cost-effectiveness rate was 18,766€. CONCLUSIONS: First line CHB treatment in telbivudine in negative patients has been demonstrated as a dominant cost-effectiveness option than lamivudine in the Turkish health care setting. Although telbivudine has higher reimbursement price, it has been offset by superior efficacy compared to lamivudine in HBeAg-negative patients with baseline serum HBV DNA levels <7 log10 copies/ml and less need for more costly second line treatments.