was used to assess the population level public health and economic impact of infant anti-pneumococcal vaccination. The alternatives compared were: no vaccination (comparator), PCV-7, PCV-10 and PCV-13. The effectiveness measures were: child illness, life years gained (LYs) and quality-adjusted life years (QALYs) gained. Effectiveness and utilities were obtained from literature. Local costs (expressed in 2011 $US and epidemiology (data from 2009-2011) were obtained from Guatemala’s official databases. Univariate sensitivity analysis was performed. The time horizon for total costs was one year and for outcomes was lifetime with a discount rate of 3%. RESULTS: Results show that immunization is cost-saving against no-vaccination. PCV-13 gained the highest number of QALYs (305) against PCV-7 (290), PCV-10 (269), PCV-13 prevented 629 illnesses and gained 334 LYS. PCV-10 and PCV-7 prevented 392 and 359 illnesses and gained 208 and 182 LYS, respectively. Total costs of illness with PCV-13, PCV-10, PCV-7 and no vaccination were $602,445, $777,878, $804,978 and $1,005,512, respectively. These results were robust to variations in herd immunity and impact adjustments of PCV-10 immunogenicity. CONCLUSIONS: This is the first cost-effectiveness study for anti-pneumococcal immunization in Guatemala. Immunization strategies based on 7, 10 and 13-valent PCV’s may be cost-saving interventions compared to no vaccination. PCV-13 dominates PCV-10 and PCV-7.

PINF4
COST-EFFECTIVENESS ANALYSIS OF ANTI-PNEUMOCOCCAL VACCINES IN GUATEMALA
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OBJECTIVES: Pneumococcal bacteremia and pneumonia are priority diseases for public health in Guatemala since these are among the 10 most frequent causes of hospitalizations and mortality in children under 4 years old. The aim of this study was to estimate the cost-effectiveness of immunization strategies based on pneumococcal conjugate vaccines (PCVs) in Guatemala, from an institutional perspective. METHODS: A decision tree (used to model was used to proxy for the population level) public health and economic impact of infant anti-pneumococcal vaccination. The alternatives compared were: no vaccination (comparator), PCV-10 and PCV-13. The effectiveness measures were: child illness avoided, life years gained (LYs) and quality-adjusted life years (QALYs) gained. Effectiveness and utilities were obtained from literature. Local costs (expressed in 2011 $US) and epidemiology (data from 2009-2011) were obtained from Guatemala’s official databases. Univariate sensitivity analysis was performed. The time horizon for total costs was one year and for outcomes was lifetime with a discount rate of 3%. RESULTS: Results show that immunization is cost-saving against no-vaccination. PCV-13 gained more QALYs (7,569) against PCV-10 (8,824). PCV-13 prevented 5658 illnesses and gained 8404 LYS, while PCV-10 prevented 4140 illnesses and gained 6465 LYS. Total costs of illness with PCV-13, PCV-10 and no vaccination were $2,599,952, $3,071,811 and $4,105,575, respectively. These results were robust to variations in herd immunity and impact adjustments of PCV-10 immunogenicity. CONCLUSIONS: This is the first cost-effectiveness study for anti-pneumococcal immunization developed in Guatemala. Immunization strategies based on 10 and 13-valent PCV’s may be cost-saving interventions. PCV-13 dominates PCV-10.

PINF5
HEALTH ECONOMIC MODEL ON THE COSTS AND EFFECTS OF ROTAVIRUS VACCINATION IN GERMANY
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OBJECTIVES: Rotavirus gastroenteritis (RVGE) is one of the 10 most frequent causes of hospitalization in children aged 5 or younger. A general recommendation for rotavirus vaccination in Germany does not exist so far, leading to a vaccination rate of <30%. This analysis simulates the cost-effectiveness of a general rotavirus vaccination in Germany using Rotarix from the perspective of the statutory health insurance (SHI). METHODS: An existing Markov model on rotavirus infection in children (published before) was adapted to the German situation. The model simulates costs and effects of rotavirus vaccination in a birth cohort of 699,801 children. In Germany, vaccine efficacy rates from international clinical trials were combined with German epidemiology and cost data from the SHI perspective for 2011 (including SHI supplementary health insurance). Direct medical costs were estimated. Local costs were obtained from literature. RESULTS: The cost of introducing HPV vaccination program with 100% vaccination coverage was $4,016,071 (€3,630,424). HPV prevented 8,961 cases of rotavirus diarrhea, which resulted in a health gain of 0.23 QALYs. CONCLUSIONS: Despite a significant increase in vaccination coverage, the cost-effectiveness ratio was not cost-effective.

PINF6
COST OF VIROLOGIC FAILURE WITH ETRAVIRINE AND RALTEGRAVIR IN THE BRAZILIAN NATIONAL AIDS PROGRAM
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OBJECTIVES: To estimate the cost of virologic failure with the treatment of etravirine and raltegravir in multi-experienced patients in the Brazilian National AIDS Program. METHODS: Treatment regimens of etravirine and raltegravir were defined by the guidelines of the Brazilian National AIDS Program. Upon virologic failure, subsequent treatments were defined according to the same guidelines considering new drug combinations not yet used by the patients. Treatment costs comprised all direct medical costs as purchased by the Brazilian government and published on their website. As maraviroc, a rescue treatment, is not yet reimbursed by the AIDS program, its price was defined by law. To estimate the total cost, patient numbers were calculated by the number of capsules of raltegravir dispensed in the past 96 weeks and assumed the same for patients treated with etravirine. Virologic failure was gathered from the phase III clinical trials of raltegravir and etravirine at week 48 and week 96. RESULTS: The average cost of treatment for multi-failure patients with etravirine was on average R$ 26,694.26 at week 48 and R$ 34 million for etravirine. At week 96, the average treatment cost per patient was R$ 53,904.30 for etravirine. Given that 3,942 patients received treatment in the previous 98 weeks, around 1,301 patients will fail treatment with raltegravir and 630 with etravirine. The total cost of treating these patients is R$ 73 million for raltegravir and R$ 34 million for etravirine. CONCLUSIONS: Despite a significant increase in vaccination coverage, the cost-effectiveness ratio was not cost-effective.