The data collection of antibiotic use’s expenditure for nosocomial infection treatment at in-patient department was performed between 1 January 2010 to 30 June 2010. The source of information came from Infection Control Division of the hospital. All information were recorded further source such as in-patient data-based was used if the information of former source was incomplete. RESULTS: The analysis showed that patients with nosocomial infection is 314 patients (114 male and 190 female). The most age of infection is between 71-89 years (31.53%). Building that has the most infected frequency is female medicine building (infected 35 patients (11.15%)). The most common pathogen is Acinetobacter baumannii-MDR (25.34%) while the most origin of infection is lower respiratory tract (62.80%). Duration in admission in hospital until the occur of nosocomial infection is during the first 10 days (32.80%). The value of all antibiotics used to treat patients is 12,354,176.50 bath and the cost of each month as shown in Figure 1. Sulbactam and Cefoperazone (Sulperazon®) is the highest cost, our data is similar trend from previous study writing. Figure 1 also show the use of antibiotics in hospital (data for 6 months). CONCLUSIONS: From the information obtained from this study will make the hospital concern about strategies to prevent nosocomial infection to reduce the loss of various and enhance the quality of life for patients.

**PIN14**

**COST OF TREATMENT FOR PATIENT WITH HIV AIDS IN HOSPITAL OF EAST JAVA, INDONESIA**

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**OBJECTIVE:** to obtain information on the cost of treatment (outpatient and inpatient care), including laboratory, drugs, medical supplies, consultation, Xray, room.

**METHODS:** A crosssectional study was done to collect data in public hospital in East Java. Samples were 89 cases IDU with HIV, 49 of them received inpatient care. Subsequently further included in the study was increasing number of IDU and HIVAIDS cases in Indonesia (one province with high cases is East Java) has lead the policy makers to provide subsidy for people living with HIVAIDS. Little is known about the cost of treatment in hospital. It is important for both payer and hospital managers to know how best the provider payment scheme to provide services for PLHIV. The study revealed that most of them were men, at productive age, and come from both urban and rural area. Only 25% of them has less than 3 diagnosis (opportunist infection), and the rest are having more than 3 diagnosis. The top three cases were Lung disorder, GastroEnteritis and Candidiasis. Sixty-twofive of them discharged with better condition, but 35% died. Average Length of stay was 9 days, and some of them were hospitalized more than one month. Average cost for inpatient care was USD 547 perday and outpatient care was USD 61 for one visit. Medical exam, drugs and hotel costs were having highest proportion. This situation was blame by the hospital it felt that cost were not sufficiently covered by government financing scheme for the poor. CONCLUSIONS: Cost of treatment for PLHIV is high and in the future become serious burden for both payer and provider. Payment to provider should consider the cost of treatment.

**PIN15**

**ECONOMIC EVALUATION OF VACCINATION IN SOUTHEAST ASIAN COUNTRIES: A SYSTEMATIC REVIEW**

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**OBJECTIVE:** to explore the research situation in Southeast Asian countries on the economic evaluation of vaccination. **METHODS:** a systematic literature search was conducted in March 2012 using the Medline electronic database with the PubMed interface. The search was limited to English-language articles published during 2000 to 2012. Keywords of “(vaccine OR evalua) AND (cost OR health economic*) AND (region/ country names)” were employed. The methodological quality of the study was assessed against the CHEC criteria list. **RESULTS:** Out of 1344 articles, 27 eligible articles were retrieved and reviewed. It was found that the studies had been conducted in seven of eleven countries in the region. Thailand had the greatest number of publications (18). Twelve articles (44%) were written by local researchers, 19% by outside researchers, and 37% in collaboration of both. Among the articles, 56% mentioned the name of a local researcher as the first or corresponding author. The number of articles tended to increase yearly. The types of vaccination included in the studies were dengue, HPV, hib, Hepatitis A and B, HIV, influenza, Japanese encephalitis, PCV, rotavirus and varicella. Most of the publications dealt with HIV (6) and rotavirus (6). Three studies evaluated a vaccination program that was included in the NIP of the particular country (hepatitis B in Thailand, and influenza and PCV in Singapore) All of the studies employed modeling. The most frequent category of evaluation was CUA (56%), followed by CEIA (15%) and CBA (11%). Most of the studies met a brief CHEC criteria list, such as study population, time horizon, perspective, discounting, and sensitivity analysis. **CONCLUSIONS:** An analysis was conducted that interventions focusing on the economic evaluation of vaccination in Southeast Asian countries. Most studies were conducted by local researchers. It can be assumed that such economic information is gaining importance in policy decision making.

**PIN16**

**COST-EFFECTIVENESS OF ROTAVIRUS IMMUNIZATION IN INDONESIA TAKING BREASTFEEDING PATTERNS INTO ACCOUNT**

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**OBJECTIVE:** this study aims to cost the effectiveness of rotavirus immunization in Indonesia, taking breastfeeding patterns explicitly into account.

**METHODS:** a 2-year economic cohort model was derived from a national population under 1 year old with 100% exclusive breastfeeding, 100% partial breastfeeding, 100% no breastfeeding and the actual combination over the different breastfeeding modes as present in Indonesia currently. Monte Carlo simulations were performed to examine the cost-effectiveness of an active vaccination. **RESULTS:** Rotavirus immunization in Indonesia would be a cost-effective health intervention with GAVI’s financial support. The results showed that rotavirus immunization would greatly reduce the burden of disease due to rotavirus. It also showed that no breastfeeding would make vaccination the most cost-effective intervention compared to other two breastfeeding patterns.

**PIN17**

**COST-UTILITY ANALYSIS OF PNEUMOCOCCAL NON-TYPEABLE HAEMOPHILUS INFLUENZA PROTEIN-D CONJUGATE VACCINE (PHID-CV) IN HONG KONG USING TRANSMISSION DYNAMIC MODEL**

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**OBJECTIVES:** To examine the health and economic impact of pneumococcal non-typeable haemophilus influenza protein-D conjugate vaccine (PHID-CV) in the public sector of Hong Kong compared to no vaccination. **METHODS:** A transmission dynamic model adapted with local data was developed to simulate multiple age-specific cohorts progressing with invasive pneumococcal diseases (IPD) (meningitis and bacteremia), all-cause pneumonia, and acute otitis media (AOM) over 10 years assuming annual universal vaccination on newborn infants with coverage rate of 90%. The study was performed from a health care payer’s perspective. **RESULTS:** from prior clinical trials and post-marketing studies. 1-way and multivariate probabilistic sensitivity analyses were performed to test the robustness of model outcomes. 3% discount rate was applied to both cost and effectiveness. **RESULTS:** Model predictions predicted that universal infant PHID-CV vaccination could prevent 74 deaths [1,553 quality-adjusted life years] cases of invasive pneumococcal disease, and 16,900 cases of rotavirus during the first 5 years of life. Under the GAVI-subsidized vaccine price the vaccine cost would amount to US$ 3.7 million per annum. The incremental cost-effectiveness ratio (ICER) of PHID-CV vaccination could prevent 74 deaths (1,553 quality-adjusted life years) would be US$ 265 (including administration cost of US$ 70) per dose, PHiD-CV vaccination is estimated to save an additional US$ 2,899,65 as compared with no vaccination at the total vaccination cost of US$ 66.18 millions. **CONCLUSIONS:** PHID-CV is expected to have great impact in alleviating pneumococcal disease burden and to spare considerable disease management cost in treating pneumococcal diseases in children. **OBJECTIVE:** to analyze the health care and economic impact of pneumococcal non-typeable haemophilus influenza protein-D conjugate vaccine (PHID-CV) in the public sector of Hong Kong compared to no vaccination. **RESULTS:** PHID-CV was projected to prevent 555 cases of rotavirus during the first 5 years of life. Under the GAVI-subsidized vaccine price the vaccine cost would amount to US$ 3.7 million per annum. The incremental cost-effectiveness ratio (ICER) of PHID-CV vaccination could prevent 74 deaths (1,553 quality-adjusted life years) would be US$ 265 (including administration cost of US$ 70) per dose, PHiD-CV vaccination is estimated to save an additional US$ 2,899,65 as compared with no vaccination at the total vaccination cost of US$ 66.18 millions. **CONCLUSIONS:** PHID-CV is expected to have great impact in alleviating pneumococcal disease burden and to spare considerable disease management cost in treating pneumococcal diseases.

**PIN18**

**ANTIMICROBIAL RESISTANCE (AMR) IN THAILAND: A SYSTEMATIC REVIEW**

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**OBJECTIVES:** To analyze AMR in Thailand. **METHODS:** a systematic literature review over the period 1980 to present under the PRISMA guidelines using 4 databases: Pubmed, ScienceDirect, Health System Institute (HSI) of Thailand and Thai Antimicrobial Index Centre (TCI). **RESULTS:** More valid and reliable data on the use of antimicrobials and of AMR as well as morbidity and mortality data related to AMR will make the hospital concern about strategies to prevent nosocomial infection to reduce the loss of various and enhance the quality of life for patients. It is important for both payer and hospital managers to know how best the provider payment scheme to provide services for PLHIV. The study revealed that most of them were men, at productive age, and come from both urban and rural area. Only 25% of them has less than 3 diagnosis (opportunist infection), and the rest are having more than 3 diagnosis. The top three cases were Lung disorder, GastroEnteritis and Candidiasis. Sixty-twofive of them discharged with better condition, but 35% died. Average Length of stay was 9 days, and some of them were hospitalized more than one month. Average cost for inpatient care was USD 547 perday and outpatient care was USD 61 for one visit. Medical exam, drugs and hotel costs were having highest proportion. This situation was blame by the hospital it felt that cost were not sufficiently covered by government financing scheme for the poor. CONCLUSIONS: Cost of treatment for PLHIV is high and in the future become serious burden for both payer and provider. Payment to provider should consider the cost of treatment.