with an average patient age of 63.4 (+1.8) years in the SBT group, and 81 residents placed 262 CVC higher lines in patients with an average age of 62.8 (+1.3) years in the control group. Compared to the traditional training, the SBT was a dominant case with cost-saving (-$5,062, p=0.002), and reductions of overall complications (3.9%, p=0.017) and severe complications (3%, p=0.043) per admission, resulted in the incremental cost-effectiveness ratios of $1,298 vs. -$5,062/3.9% and $1,657 (-$5,062/3.0%) per 1% averted probability of overall and severe complications gained, respectively. The total benefit cost ratio was 10.2. Even in the first year, the SBT demonstrated lower cost with high reduction compared to linezolid and does not require outpatient parenteral administration compared to other intravenous antibiotics.

**CONCLUSIONS:** Using SBT for CVC insertion is a cost-effective approach that can be widely implemented.

**PIN52**

**PROJECTED COST SAVINGS OF INTRODUCING FECAL MICROBIOTA TRANSPLANT TREATMENT FOR CLOSTRIDIUM DIFFICILE INFECTION IN CANADA.**

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**OBJECTIVE:** To project the cost savings of introducing Fecal Microbiota Transplant (FMT) for Clostridium difficile infection (CDI) with current antibody use, by age, and three major subpopulations; hospitals, long-term care facilities (LTCF), and communities. **METHODS:** We modified our existing CDI decision analysis model to project the cost reduction and the SISMED database. Univariate and probabilistic sensitivity analyses were conducted by varying LOS data, using unit LOS costs from World Health Organization and the SISMED database. **RESULTS:** The costs of procedures were performed. **RESULTS:** The total expected costs per patient were: anidulafungin USD$ 4,685.61; amphotericin B deoxycholate USD$ 928.22; amphotericin B liposomal USD$ 25,569.12; caspofungin USD$ 3,368.48; fluconazole USD$ 628.39. The results for each alternative in terms of QALY were: anidulafungin 3.08; amphotericin B deoxycholate 2.26; amphotericin B liposomal 1.90; caspofungin 2.14; fluconazole 2.46. The benefit cost ratio (BCR) for QALY of anidulafungin compared to fluconazole was USD$ 5,621.38. Amphotericin B deoxycholate, amphotericin B liposomal and caspofungin were dominated alternatives. **CONCLUSIONS:** Assuming as threshold for Colombia GDP per capita USD$ 7,609.42 anidulafungin is a cost-effective alternative for the treatment of the patients with invasive candidiasis.

**PIN50**

**AN ECONOMIC COMPARISON OF LINEZOLID AND VANCOMYCIN FOR THE TREATMENT OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) RELATED COMPLICATED SKIN AND SKIN STRUCTURE INFECTIONS (CSSSI) IN THE KINGDOM OF SAUDI ARABIA.**

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**OBJECTIVES:** To assess the value of linezolid compared with vancomycin in the treatment of CSSSIs caused by MRSA from a payer perspective in the Kingdom of Saudi Arabia (KSA) using a two week decision analytic model. The model comprised all-cause and cause-specific medical costs with patient and outpatient settings related to both treatments. **METHODS:** Published literature and local expert opinion provided clinical inputs and resource utilization data on MRSA efficacy, failure/ AE rates, length of stay (LOS), at-home parenteral administration, and outpatient resource use. Cost data were derived from local sources and expert feedback. The base case analysis assumed equal efficacy for treatment comparators within the 14 day length of treatment timeframe. Scenario-based sensitivity analyses were conducted by varying LOS data, using unit LOS costs from World Health Organization website, and excluding peripherally inserted central catheter (PICC) costs. **RESULTS:** The base case analysis resembled a cost-minimization analysis due to an equal efficacy assumption. Total drug acquisition costs were lower for vancomycin compared to linezolid (SAR1,885 vs. SAR7,641 respectively). However, the overall cost of treatment including drugs, clinical failures, complications, and outpatient parental administration were lower with linezolid (SAR14,246) than with vancomycin (SAR15,804) resulting in substantial cost-savings of SAR1,558 vs. vancomycin. Linezolid provided savings due to lower outpatient medical costs (SAR1,548 vs. SAR7,831), specifically from outpatient parenteral administration. These findings were reinforced in all of the scenario sensitivity analysis and linezolid was consistently the cost saving treatment alternative. **CONCLUSIONS:** Results from this analysis demonstrate the overall economic savings resulting from linezolid use compared with vancomycin for the treatment of MRSA CSSSI. Savings were demonstrated in both treatment-naïve and treatment-experienced patients not requiring parenteral formulation and does not require outpatient parenteral administration compared to other intravenous antibiotics.

**PIN56**

**COST-EFFECTIVENESS ANALYSIS OF OSILTAMIVIR IN THE INFLUENZA PNEUMONIA PREDICTION IN COLOMBIA.**

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**OBJECTIVES:** Influenza disease may result in a severe disease causing hospitalization and deaths in younger children and older adults. Early antiviral treatment may improve clinical outcomes. Our goal was to estimate the oseltamivir cost-effectiveness in the prevention of pneumonia due to influenza in the Colombian urban population. **METHODS:** A probabilistic decision-tree model was used to simulate Influenza-Like Syndrome (ILS) burden of disease and influenza pneumonia complications in Colombian population was programmed in excel. Transition probabilities and care costs for Colombia were obtained from a literature review and surveillance databases of Oseltamivir effectiveness was meta-analyzed from randomized trials and observational studies. Incremental cost-effectiveness ratio (ICER) for oseltamivir in the prevention of pneumonia complication in population under 5 years and older than 65 years old with ILS was estimated. Monte Carlo simulation with 10,000 iterations were used to estimate 95% confidence interval. Costs were expressed in 2013 USD. **RESULTS:** A total of 275,788 ILS cases in children and 86,675 in elderly population were estimated for 2014. Whit no oseltamivir would occur 75,789 and 62,652 pneumonias in children and elderly, respectively, and a total 22,719 deaths. Including the oseltamivir treatment at 90% coverage would aver 33,462 pneumonias and 6639 pneumonia deaths. The oseltamivir cost were estimated USD 6,139,552 USD$ 7,689 and reductions of overall complications of 46% with a $4,863 net benefit per admission. The ROI could reach 934% and 986% in 5 years and 10 years, respectively. **CONCLUSIONS:** The use of oseltamivir in children and elderly whit ILS appear to be a cost-saving treatment for both age groups.

**PIN63**

**ECONOMIC IMPACT OF SOFOSBUVIR BASED REGIMENS IN HEPATITIS C: AN INTERNATIONAL PERSPECTIVE.**

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**OBJECTIVES:** Chronic hepatitis C virus (HCV) incurs significant economic costs to the health care system. There is a paradigm shift in the treatment of hepatitis C with the introduction of sofosbuvir. It is highly efficacious and safe but is an expensive treatment alternative to existing treatment options. The study goal is to provide an in-depth review of economic studies that have evaluated the cost-effectiveness of sofosbuvir in hepatitis C. **METHODS:** A comprehensive literature search was conducted using electronic databases such as PubMed, CINAHL, Scopus, and Cochran Reviews. The search strategy included treatment-naive as well as treatment-experienced patients of all genotypes. Full-text, published articles from Europe and United States (U.S.) were identified. Data on decision model, perspective, comparators, time horizon, costs, outcomes, price sensitivity, analysis, and results were extracted from the reviewed studies. **RESULTS:** A total of 9 economic studies (5 U.S. and 4 Europe) were identified from the literature. The comparators included no treatment, peginterferon + ribavirin, boceprevir, telaprevir, and simprevir based regimens. Markov model utilized by all studies to simulate disease progression over a lifetime horizon. The cost/QALY for treatment-naive, patients ranged from US$21,869-$31,152 for genotype 1 and US$7,146-$99,189 for genotype 2 and 3. The cost/QALY for treatment-experienced patients was US$2,277-$42,900 for genotype 1 and US$655,280-$128,344 for genotype 2 and 3. Overall, sofosbuvir was cost effective in younger patients and those with severe fibrosis. Sofosbuvir and simprevir combination led to an average cost savings of US$9,390. **CONCLUSIONS:** Genotype 1 HCV patients who are treatment-naive and treatment-experienced genotype 1 patients. For genotypes that are not predominant, decision on the use of sofosbuvir should be made based on the willingness-to-pay threshold values. Factors that were found to influence cost-effectiveness of sofosbuvir include disease severity, duration of treatment, and age of patients.

**PIN65**

**THE COST EFFECTIVENESS OF A NOVEL HIGH PRICED COMBINATION THERAPY FOR HEPATITIS C IN TREATMENT NAÏVE GENOTYPE 1 INFECTED PATIENTS.**

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**OBJECTIVES:** Among the 2014 approved therapies for genotypes 1, 4 and 12, sofosbuvir led to an average cost savings of US$91,590. The cost/QALY for treatment-experienced patients was US$2,277-$42,900 for genotype 1 and US$655,280-$128,344 for genotype 2 and 3. Overall, sofosbuvir was cost effective in younger patients and those with severe fibrosis. Sofosbuvir and simprevir combination led to an average cost savings of US$9,390. **CONCLUSIONS:** Genotype 1 HCV patients who are treatment-naive and treatment-experienced genotype 1 patients. For genotypes that are not predominant, decision on the use of sofosbuvir should be made based on the willingness-to-pay threshold values. Factors that were found to influence cost-effectiveness of sofosbuvir include disease severity, duration of treatment, and age of patients.
OBJECTIVES: Hepatitis C virus (HCV) affects 3 to 4 million people in the United States and is a major cause of liver failure, hepatocellular carcinoma, and liver transplantation. Treatment of HCV has changed substantially in the last 2 years, with the introduction of new direct-acting antiviral therapies, which have been shown to reach cure rates higher than 95%. However, this new class of therapies comes with a high cost, which has sometimes critically criticized. Among the main points to note is how high to understand the economic implications of their introduction into the market. The objective of the current study is to evaluate the cost-effectiveness of one of the most promising of these new drugs: daclatasvir (DCV) + sofosbuvir (SOF) (SOF+LDV-R), as compared to the two previous standard of care treatment options for treatment-naïve genotype 1 infected HCV patients. METHODS: Cost-effectiveness analysis using a Markov model of the natural disease progression of HCV infection and impact of treatments using a simulated cohort of 1000 patients. Over the 20-year time horizon, no treatment resulted in 9.76 QALYs and a total discounted cost of $41,434, while DCV+R treated resulted in 11.06 and $88,162, TVR+P in 11.08 and $92,150 and SOF+LDV-R in 11.79 and $74,477, respectively. That is, our analysis showed that DCV+R and TVR+P were strongly dominated, with SOF+LDV-R being the most cost-effective therapy. CONCLUSIONS: Despite the high price of SOF+LDV-R, this new therapy not only yields higher QALYs, but actually costs less than the previous standard of care treatment options for genotype 1 HCV patients. These results have important health and economic implications for the treatment of hepatitis C.

PIN65 COST-EFFECTIVENESS ANALYSIS OF ANIDULAFUNGIN IN THE TREATMENT OF CANDIDIASIS IN CHILE
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OBJECTIVES: Candidiasis incidence in Chile has been estimated around 0.3 (0.21–0.47) per 1,000 admissions. The aim of this study is to assess the cost-effectiveness of anidulafungin compared with currently licensed antifungal agents in the treatment of confirmed infection of candidiasis or invasive candidiasis in Chile. METHODS: The analysis was made from third payer perspective, the model timeline was 12 months and is a Markov process with a week inpatient follow-up and an 11.08 years period with an exponential discount to lifetime for those surviving the 6-week period. Non-neutropenic patients were assumed. A tree decision model was used to estimate potential treatment costs of anidulafungin vs comparator agents. Clinical success, mortality and adverse events rates were taken from international literature. Drug costs were taken from local institutional report and nephrotoxicity cost from official document, considering hemodialysis as required procedure. Comparators were: anidulafungin (loading dose 200mg, 5mg/kg maintenance dose), caspofungin (70mg/day, maintenance 50mg/day), micafungin (100mg/day), fluconazole (400mg/day, voriconazole (loading dose 6mg/kg/twice daily, maintenance 200mg twice daily or 4mg/kg twice daily), conventional amphotericin B [CAMB] (1 mg/kg, and liposomal amphotericin B [LAMB] 3mg/kg/day). It was considered an average patient weight of 76.4 kg (SD 25.5k). Results are expressed as incremental cost-effectiveness ratio (ICER) US$/per life year gained (LYG) in 2014 US$ (exchange rate US$1=1,543.00 Chilean pesos). Total costs (drugs and hospital stay) associated with the treatment were: CAMB US$18,664, fluconazole US$15,327; micafungin US$17,210; voriconazole US$17,510, anidulafungin US$17,941; caspofungin US$18,619, LAMB US$13,467, number of life years gained were: 6.30, 6.52, 6.77, 7.3, 6.03 and 5.47, respectively. Caspofungin, Amphotericin B and LAMB were dominated by anidulafungin; ICER of anidulafungin compared to voriconazole, micafungin and voriconazole was US$436 and US$371, respectively. CONCLUSIONS: For the analyzed scenario with threshold per life year gained was US$739, anidulafungin is a cost-effectiveness therapy compared to voriconazole, micafungin and voriconazole and saves generating savings compared to CAMB, caspofungin and LAMB for candidiasis in Chile.

PIN66 COMBINED DISEASE TRANSMISSION AND NUMBERS TREATED IN CONVENTIONAL COST-EFFECTIVENESS ANALYSES OF HEPATITIS C TREATMENT IN THE UK
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OBJECTIVE: The goal of hepatitis C virus (HCV) treatment is the attainment of sustained virologic response (SVR). As the predominant source of infection in the UK is associated with high-risk behaviour among people who inject drugs (PWID), reducing the infected population via treatment may prevent future infections. This study evaluated the health economic impact of two treatment regimens, daclatasvir (DCV) + sofosbuvir (SOF) and telaprevir pegylated interferon-alfa (TVR) + Peginterferon (PR), in a cohort of people with high transmission risk, when accounting for future infections avoided. METHODS: A combined dynamic HCV transmission and public health model (PIN68) was populated with published UK data for PWID. Future costs, life years and quality-adjusted life years (QALYs) were discounted at 3.5%. A prevalence parameter amongst PWID of 25% was utilised and scenario analysis performed on per-1,000 patients. The impact of treating all (85/1000) or a proportion (8/1000) of patients with DCV+SOF or TVR+PR within a one-year period was evaluated. Published SVR rates of 95% and 59% were applied to DCV+SOF and TVR+PR, respectively. RESULTS: Ignoring future infections, DCV+SOF was associated with incremental patient costs of £18,166 and incremental benefits of £1.4 QALYs and an incremental cost-effectiveness ratio (ICER) of £9,867 compared to TVR+PR. When considering reduced transmission, additional per-patient discounted cost savings of £8,803 and QALY gains of 1.42 were estimated, from 1,845 future infections and 128 related long-term complications avoided over the period 2015–2065 if all patients were treated. The associated ICER decreased from £9,867 to £2,869. Assuming 8/1000 PWID were treated, the ICER decreased from £9,867 to £3,156. CONCLUSIONS: Accounting for the impact of SVR on future disease transmission can significantly impact cost-effectiveness results in HCV. Factoring in the consequences of infections avoided is imperative when evaluating the cost-effectiveness of HCV treatment among groups at high risk of transmission, such as PWID.

PIN70 COST-EFFECTIVE SCOPING REVIEW OF ECONOMIC EVALUATIONS OF VACCINES IN CHINA
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OBJECTIVE: To systematically review economic evaluations of vaccination programs in China. METHODS: We did a computerized search of published full text English and Chinese literature until March 2014. Literature published from 2006 to 2014 in major English and Chinese databases. RESULTS: Seventeen economic evaluations of 8 vaccines were identified, and Hepatitis B vaccine (29%) and 7-valent pneumococcal conjugate vaccine (18%) were the most studied. All studies were model-based studies, the model used was mostly a Markov decision model. Fifteen (88%) studies used a societal perspective. Eleven (65%) studies used a lifetime time horizon. Seventy one (35%) used the 3% discount rate for base case analysis, and 24% either did not discount health outcomes or cost, or did not explicitly report the discounting rate. Effectiveness and cost data in 88% and 41%, respectively, were from literature alone. All 8 studies with