infection possibilities were improved. The shrinkage of services of the district hospitals had attracted decision-makers' attention, some measures were adopted. Future impact is yet to be studied.

**PHP3**

**USE OF READY-TO-USE (RTU) VERSUS CUSTOMIZED NUTRITION (CNF) FORMULATIONS AS A TOTAL PARENTERAL NUTRITION (TPN) ALTERNATIVE IN MEXICAN PUBLIC HEALTH CARE SYSTEM. A PHARMACOECONOMIC APPROACH**

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OBJECTIVES: To determine the less costly alternative of parenteral nutrition in Public Health Care Institutions in Mexico. METHODS: A cost-minimization study was performed comparing the use of RTU (considering four different formulations with 3.6 g, 6.6 g, 11.2 g and 13.2 g of nitrogen) against equivalent CNF preparations made by a third-part company. This study compared all direct and indirect costs considering an institutional perspective based on data collected from the main Public Health Institution in Mexico. Costs associated with third-party services were estimated within a Monte Carlo Simulation. Costs of the equivalent RTU TPN bags were obtained from a manufacturer. Results were evaluated with a Student t-test considering the mean use of 20 bags a day in order to evaluate if there is any significant differences between the costs of in-hospital and third-party companies preparations for long-term use of TPN. RESULTS: The third-party services costs showed a triangular distribution according to Figure 1. Including RTU costs were 9.95%, 16.93%, 36.45% and 27.21% lower than CNF TPN for preparations with 3.6 g, 6.6 g, 11.2 g and 13.2 g of nitrogen respectively. T-test showed a significant effect of favor of RTU TPN for all evaluated formulations (p < 0.0001 for all). CONCLUSIONS: The use of RTU offers a significant less costly alternative for adult TPN when compared with equivalent third-part CNF in Public Health Institutions in Mexico. The long-term adoption of the RTU TPN system can be associated with important cost-savings for public health institutions in Mexico.

**PHP4**

**LINKING PAYMENT AND HEALTH OUTCOMES: A SYSTEMATIC REVIEW AND TAXONOMY OF PERFORMANCE-BASED HEALTH OUTCOMES AGREEMENTS BETWEEN HEALTH CARE PAYERS AND MANUFACTURERS**

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OBJECTIVES: To identify and categorize publicly available cases of performance-based health outcomes agreements. METHODS: We performed a systematic review of performance-based health outcomes agreements over the past 20 years (July 1998 –October 2008) using publicly available databases and input from colleagues and health care experts. We further developed a taxonomy of agreement types by inductively organizing the cases identified according the timing, execution, and health outcomes measured in the agreements. RESULTS: Our search yielded in excess of 60 documents including peer-reviewed articles, secondary publications, websites and in-person communications. From this set, we identified 28 agreements categorized as coverage with evidence development, eight that were categorized as conditional treat- ment continuation, and ten agreements categorized as performance-linked reimburse- ment. Because of current national reimbursement policies, devices appear to be the best candidate. In the US, whereas pharmaceuticals appear to the best candidates for EU and other non US payers. CONCLUSIONS: With a relatively small number of cases from which to draw conclusions, it is difficult to ascertain whether performance-based health outcomes agreements signal a fundamental change in reimbursement policies. Given the interest to date and the potential to meet the goals of interested stakeholders, these agreements have the potential to become more common in health care. However, significant challenges including high transaction costs and insufficient information systems may limit the long-term impact and viability of health outcomes based agreements. Future studies regarding the attitudes and perceptions of various stakeholders are needed, as well as evaluations of the results and experience with the agreements implemented thus far.

**PHP5**

**THE IMPACT AND CHALLENGES OF INCLUDING PATIENT COST SHARING IN COST-EFFECTIVENESS ANALYSES FROM THE PAYER PERSPECTIVE**

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OBJECTIVES: The ISPOR Task Force for Good Research Practices for Measuring Drug Costs in Cost-Effectiveness Analyses recently vetted a draft report suggesting that costs from a payer perspective be net all copayments. Our objective is to highlight the impact and challenges of including patient cost sharing in cost-effectiveness analy- ses. METHODS: We used a 1-year decision model to calculate the incremental cost-effectiveness ratio (ICER) of a biologic from the payer perspective. The biologic plus usual care was compared to usual care. Effects and costs were taken from the litera- ture. We assumed 50% of patients covered biologics as coinsurance and 50% as copay- ments. The maximum coinsurance was assumed to be $2500. We assumed 20% of the maximum coinsurance was attributable to the biologic. We assumed the average coinsurance for a biologic was 20% and the average copayment was $50. Sensitivity analyses were performed. RESULTS: The ICER was $114,813/QALY without accounting for patient cost sharing. With cost sharing the biologic drug cost was 4% lower with an ICER of $98,144/QALY. Sensitivity analysis showed that a 5% increase in the rebate has a larger effect on the ICER than cost sharing. The amount of coincur- rance attributable to the treatment had the largest effect on cost sharing. CONCLUSIONS: Cost sharing does not affect the ICER when the copayment is fixed and remains constant for all comparators. Data exists within plans to update inputs for many of our assumptions. Patient coinsurance levels should be assessed without the biologic of interest in order to determine whether excess coinsurance could be attributed to the biologic (drug of interest). Cost sharing should not be included if patients reach their maximum coinsurance without treatment. This analysis did not consider cost sharing associated with non-drug costs, which may increase the ICER due to more cost offsets for the biologic comparator.

**PHP6**

**EVALUATION OF THE FIRST-YEAR OPERATION OF KOREAN POSITIVE PAYER SYSTEM FOR PHARMACEUTICAL REIMBURSEMENT**

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OBJECTIVES: We evaluated the first-year operation of Korean positive list system for pharmaceutical reimbursement through analyzing decisions accomplished by Drug Reimbursement Evaluation Committee (DREC) since we introduced this system in December 2006. METHODS: Ninety-four decisions made by DREC till October 2008 were included in this analysis. Variables concerned in reimbursement decisions were selected and regression analysis was carried out to explore which variables are likely to lead to positive recommendations. RESULTS: DREC decided 54(57.4%) products to be listed among total of 94 decisions. New molecular entity drugs and orphan drugs account for 44.7% and 18.1% of all included drugs. Lack of evidence to prove cost-effectiveness was the most common reason which lead negative recommendation (N = 26, 65%) followed by lack of evidence for clinical effectiveness (N = 5, 12.5%) and for both of them (N = 4, 10%). In terms of clinical aspect, the number of RCT, Ana- tomical Therapeutic Chemical (ATC) classification and orphan drugs did not have significant influence on the odds of positive decision (p > 0.05) except for improved extent of clinical benefit compared with comparators (p < 0.001). In other aspects, less medical cost was a positive factor and additional budget impact was a negative factor in relation to recommendation (p = 0.001). CONCLUSIONS: Lack of evidence for cost-effectiveness was the most common reason to lead negative recommendation. Many clinical factors which we considered seemed not to be significantly associated with recommendations in Korea. DREC recently decided reference range of cost-effectiveness threshold reflecting disease severity, social burden, quality of life and aspect of renovation after in-depth discussions. According to newly established criteria, evaluation would be conducted comprehensively in decision making for pharma- ceutical reimbursement.

**PHP7**

**HEALTH STATUS AND ATTITUDES TOWARDS HEALTH INSURANCE IN MEPS SAMPLE POPULATION**

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OBJECTIVES: To examine association between health status and attitude about health insurance in Medical Expenditure Panel Survey population (MEPS). Studies have shown that lack of health insurance is associated with important clinical characteristics, including use of fewer health care services, delaying-seeking medical care, and forgoing necessary care for potential financial burdens. METHODS: The Household Component (HC) public use file from the 2005 MEPS data, a nation- ally representative survey of the noninstitutionalized population was used in the United States. Health status and attitudes towards health insurance were measured using the Self-Administered Questionnaire (SAQ) data collected within MEPS. Data were analyzed using SAS®9.1.3. Descriptive statistics were obtained using PROC UNIVARIATE. PROC CANCORR was used to measure canonical correlation between set of attitude about health insurance variables and set of health status variables. RESULTS: The mean age of sample was 46.33 years (Standard deviation: 17.6%), the majority were female 60.6% and white 77.2%. The first canonical correlation was 0.32 (11% overlapping variance); the second was 0.08 (0.6% overlapping variance). All four pairs of canonical variables accounted for the significant relationships between the two sets of variables. Canonical Redundancy Analysis obtained using PROC CANCORR found first health status variable accounting 4% of variance in attitude about health insurance variable set. CONCLUSIONS: A person's health status and their attitude about health insurance are moderately related. Further studies need to be conducted with more measures of attitude about health insurance to determine exact relationship between health status and attitude about health insurance.