PHS58
COST-EFFECTIVENESS ANALYSIS OF A HOSPITAL CARE AT HOME PROGRAM VERSUS IN-PATIENT HOSPITAL CARE IN PATIENTS OF THE MEXICAN INSTITUTE OF SOCIAL SECURITY IN MEXICO CITY
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OBJECTIVES: Hospital care at home programs could improve patient’s health and quality of life through increasing treatment adherence, therefore it could be considered for implementation beyond the Mexican Institute of Social Security.

PHS59
COST-EFFECTIVENESS ANALYSIS OF INSULIN GLARGINE (LANTUS) INITIATION BY PHARMACISTS IN A CANADIAN SETTING: THE IXING STUDY
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OBJECTIVES: Type 2 diabetes is a progressive disease with 50% loss in insulin-producing capacity at time of diagnosis, with an average 5% annual thereafter. Therefore, many patients with type 2 diabetes (T2DM) require insulin treatment. Pharmacists are frontline health care professionals who see patients with T2DM frequently and as such they could help them achieve their targets by intervening in timely manner. The IXING study assessed the effect of a community pharmacist intervention in uncontrolled patients with T2DM treated with oral hypoglycemic agents. Those patients were prescribed insulin glargine and followed up for 26 weeks by their pharmacist. At endpoint, the average A1C reduction was 1.8% (95CI 1.4 to 2). The objective was to assess the cost-effectiveness of having pharmacists’ intervention in prescribing insulin. METHODS: The IMS COCO Diabetes Model, a Markov model, was used to simulate insulin use among patients with T2DM in Canada. We used a payer’s perspective for the analysis. The model estimated the lifetime costs and health benefits of HIV treatments in the two hospitals. RESULTS: The undiscounted lifetime costs for No ART in Mbagathi and Moi were, KSh169,123 ($2,260) and KSh184,415 ($2,464) respectively, while life-year gained for both hospitals was 2.68 years. The undiscounted lifetime costs for the ART group in Mbagathi and Moi were, KSh108,721 ($1,429) and KSh115,851 ($1,566) respectively, with life-year gained of 4.14 and 4.17 years respectively. The undiscounted lifetime benefits for No ART in Mbagathi and Moi were, KSh15.85 and 25.56 years for Mbagathi and Moi respectively. At 10 years discounting rate, the lifetime benefits for No ART for both hospitals was 2.1 years and costs were KSh153,807 ($2,055) and KSh166,377 ($2,223) for Mbagathi and Moi respectively while the lifetime cost for ART was KSh623,959 ($5,646) and KSh563,647 ($4,798) respectively.

PHS60
COST-EFFECTIVENESS ANALYSIS OF MASS SCREENING PROGRAM FOR TYPE 2 DIABETES MELLITUS IN SOMERVILLE, NJ, USA
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OBJECTIVES: In spite of the national screening program, evidence is lacking on the health benefits such as decrease in complications and cost of screening of diabetes. Little is known about cost-effectiveness of national diabetes screening program. The purpose of the present study is to evaluate cost-effectiveness of the current national screening program of type 2 diabetes in South Korea. METHODS: A Markov model for type 2 diabetes that reflected current national screening program was developed. This model analyzed the cost-effectiveness for the population with first and second FGG (fasting plasma glucose) tests. Data sources for the model parameters included the National Health and Nutrition Examination Survey data for cohort characteristics, the National Health Insurance claims data (HRK-NPS) for costs, and published literature for other epidemiology data, treatment effects and utility pertaining to diabetes patients. From a payer’s perspective, cost per life-year gained (LYG) and cost per quality-adjusted life-year (QALY) were calculated based on lifetime costs and accumulated LYGs and QALYs. One-way sensitivity analyses were carried out. RESULTS: The incremental cost-effectiveness ratio (ICER) was higher than 84 million KRW per LYG and higher than 94 million KRW per QALY. The superior strategy in screening interval was determined as every two years. The results of sensitivity analysis showed that older age, higher participation rates of second FGG test, and higher rates of glucose control could improve cost-effectiveness of diabetes screening. CONCLUSIONS: The current national diabetes screening program was not cost-effective considering GDP per capita or willingness-to-pay per QALY. Policies to improve participation rates in second screening test need to be established since higher second screening rate leads to more impacts on health and cost savings. Also, effective diabetes management program for diagnosed patients after screening is required as glucose control is related to ICER improvement.
Cost-effectiveness analyses of incremental hospital-treated exacerbations per patient. In addition, a exacerbations (167 for PHARMACOP versus 238 for usual care), i.e. 0.07 (95%CI: 0.00-0.10) incremental hospital-treated exacerbations per patient. This reflects cost savings of €2,221 and €2,448, respectively within the 1-year time horizon. This cost-effectiveness analysis was conducted with simulated twenty scenarios based on different outpatient profiles that affect the solvent flow, having ten cases established by standardizing processes control on the dialysate flow in prevalent cases: 7.3% and 33.3% in the outpatient profile, respectively. It was observed savings among the scenarios with standardized processes ranging between 7.7% and 33.3% in the outpatient profile cost (powder or liquid products). It is possible to restrain the wasteful use of dialysate solutions, both powder and liquid. Consequently, the cost from the patterning on the reducing the fluid dysplasia during the intervals between shifts observed in the outpatient hemodialysis. These findings are beneficial to the commitment of health professionals, mainly to supervision exercise and control of activities in quality function deployment.

PHS66 STRATEGIES AND INTERVENTIONS TO REDUCE THE SOCIO ECONOMIC IMPACT OF ANXIETY AND DEPRESSION AT THE WORKPLACE
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OBJECTIVE: There are few studies about costs of inputs used in hemodialysis and among these expenditures, the compounds that make up the dialysate are one of the values considered as representative of this therapy. However, there aren't costs studies that guiding solutions. The objective of this article is discuss whether there is wasteful of alkaline solutions in hemodialysis and therefore the possibilities to standardize processes to control the dialysate flow in periods between shifts in hemodialysis patients.

PHS67 EFFICIENCY OF THE BRAZILIAN SYSTEM OF RENAL TRANSPLANTATION: AN ANALYSIS USING DEA AND MALquist INDEX METHOD (2006-2011)
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OBJECTIVE: The purpose of this article is to analyze the efficiency of the Brazilian System of the public system of kidney transplant, in the years 2006 and 2011, and evaluate the performance of the efficiency of these States throughout this period of time. Thus sought to analyze the behavior of States in this sector, before and after the institutional changes adopted by SUS in October of 2009.

PHS52 WASTE AND COST MINIMIZATION OF ALKALINE SOLUTION BY STANDARDIZATION PROCESSES CONTROL FOR AMBULATORY HEMODIALYSIS: A SIMULATION STUDY
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OBJECTIVES: The Belgian community pharmacist-led PHARMACOP intervention provided educational inhalation training sessions and motivational interviewing regarding adherence to maintenance inhalers in patients with Chronic Obstructive Pulmonary Disease (COPD). The program significantly improved medication adherence and inhalation techniques compared with usual care. This study aimed to evaluate its cost-effectiveness. METHODS: An economic analysis was performed from the Belgian healthcare perspective. The model was constructed in which a cohort of 1,000 patients with COPD receiving the 3-month PHARMACOP-intervention or usual care, was followed. This cohort had a mean age of 70 years, 66% were male, 43% current smokers and patients had a mean Forced Expiratory Volume in 1 second of 0.3% predicted of 50. Three types of costs were calculated: intervention costs, medication costs and exacerbation costs. Outcome measures included the number of hospital-treatment exacerbations, cost per prevented hospital-treated exacerbation and cost per Quality Adjusted Life-Year (QALY) gained. Follow-up was 1 year in the basecase analysis. Univariate, probabilistic sensitivity- and scenario analyses (including long-term follow-up) were performed to assess uncertainty. RESULTS: In the basecase analysis, the average overall costs per patient for the PHARMACOP intervention and usual care were €2,221 and €2,448, respectively within the 1-year time horizon. This reflects cost savings of €227 for the PHARMACOP-intervention. The sensitivity analysis resulted in the previous year was 167 (for PHARMACOP versus 238 for usual care), i.e. 0.07 (95%CI: 0.00-0.10) incremental hospital-treated exacerbations per patient. In addition, a small (<0.01 QALY) increase in QALYs was observed. Results showed robust cost-effectiveness in probabilistic sensitivity analysis. CONCLUSIONS: Optimization of current pharmacotherapy (e.g. close monitoring of inhalation technique and medication adherence) has been shown to be cost-saving and should be considered before adding new therapies.

PHS64 SCREENING FOR ABDOMINAL AORTIC ANEURYSM: A COST-EFFECTIVENESS ANALYSIS
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OBJECTIVES: The US Preventive Services Task Force currently recommends one-time ultrasound screening for all men at age 65 years (B recommendation), while screening for female ever-smokers is a C recommendation due to a perceived small net benefit. Our goal was to assess the cost-effectiveness of a one-time ultrasound screening and follow-up surveillance for abdominal aortic aneurysm in men and women who have smoked and do not smoke. METHODS: We constructed a Markov model using the best available clinical data following screening at age 65. AAA-specific costs (2012 dollars) were assessed. A systematic and a priori system perspective of the PHARMACOP intervention and usual care were €2,221 and €2,448, respectively within the 1-year time horizon. This reflects cost savings of €227 for the PHARMACOP-intervention. The sensitivity analysis resulted in the previous year was 167 (for PHARMACOP versus 238 for usual care), i.e. 0.07 (95%CI: 0.00-0.10) incremental hospital-treated exacerbations per patient. In addition, a small (<0.01 QALY) increase in QALYs was observed. Results showed robust cost-effectiveness in probabilistic sensitivity analysis. CONCLUSIONS: Optimization of current pharmacotherapy (e.g. close monitoring of inhalation technique and medication adherence) has been shown to be cost-saving and should be considered before adding new therapies.

PHS65 GENERALIZED COST-EFFECTIVENESS ANALYSIS FOR CARE OF MAJOR CANCERS AND OTHER MAJOR ILLNESSES IN TAIWAN
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OBJECTIVES: The aim of this study was to define the determination of major cancers in Taiwan are in cost-effective compared with other major illnesses. METHODS: 395,330 patients with pathologically verified cancer, 125,277 patients with end-stage renal disease (ESRD), and 50,481 under prolonged mechanical ventilations (FMV) during 1998-1999 were collected and followed until the end of 2003. All patients who were expatriated to lifetime based on a semi-parametric method. A convenience sample of measuring utility value with EQ-SD were conducted for 6,189 cancer patients and 1,401 with other major conditions, which were multiplied with survival functions to estimate quality-adjusted life expectancies. The monthly healthcare expenditures were abstracted from the reimbursement database of National Health Insurance Research Database and multiplied by the corresponding survival probabilities, and summed up for lifetime cost with a 3% annual discount rate. We used 22,344 cancer patients with hospice care as a comparison group to conduct generalized cost-effectiveness analysis and estimate cost-per-QALY (quality-adjusted life year). RESULTS: Care of patients under FMV-treatment was the highest with €2,448 and 0.94-0.99 GDP (gross domestic product=18,588 US dollars in 2010) of Taiwan per QALY, respectively. All of the nine different cancers were reimbursed less than GDP per QALY in Taiwan. Lung, esophageal and liver cancer were the highest with 0.37-0.46, 0.20-0.43, and 0.23-0.24, GDP per QALY, respectively The cumulative incidence rates of cancer show a consistent increase for all cancer except those of the stomach, nasopharynx, and cervix. CONCLUSIONS: The treatments of major cancers in Taiwan are cost-effective, but prevention is still the fundamental solution for a sustainable NHI.