OJECTIVES: Automated peritoneal dialysis (APD) has been increasingly used since its scheme was extended to cover APF machine in addition to the continuous ambulatory peritoneal dialysis (CAPD) in the benefit package of National Health Insurance Program in May of 2008. This study aims to compare the health outcome between patients who used APD and CAPD. METHODS: The including criteria were patients treated by APD or CAPD identified in National Health Insurance Research Database (NHIIRD) during 2001-2010. The excluding criteria were patients who were treated by hemodialysis for more than 3 months before PD, or younger than 18 years old, or received kidney transplant before the CAPD. Patients and APD patients were identified and matched according to their propensity score predicted by age, gender, comorbid conditions, Charlson Comorbid Index, medication history, and premiums wares in the year of treatment initiation. There were 2,267 APD and 2,267 CAPD patients ended the final analysis. The Kaplan-Meier curve found the Cox proportional hazard regression were performed to examine the differences in mortality rate, technique failure rate and incident rate of peritonitis between APD and CAPD. RESULTS: CONCLUSIONS: The APD patients and APD patients were matched and had lower incident rate of peritonitis comparing with CAPD patients in Taiwan.

PUK3
A STUDY TO ASSESS DISEASE PROGRESSION TO ESRD WITHIN A YEAR IN PATIENTS WITH ADVANCED CKD
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OBJECTIVES: Aimed at determining the time period for the progression to ESRD and also to look into risk factors for the same progression to ESRD. METHODS: A retrospective cohort study was conducted in a tertiary care teaching hospital. The data was collected from medical record dept. for the last two years (2012 and 2013) in hospital. Demographic details and clinical parameters of ESRD patients with major risk factors for ESRD were collected using the descriptive statistics feature of SPSS v20.0. RESULTS: A total of 240 patients were included in the study. The mean age of the population was found to be 54.6±14.2 years. Majority of the population were males (74.83%). Hypertension 67.7%, Diabetes 47.1%, and anaemia 40.83% were the most prominent risk factors present in the study population. More than half of the population (72.5%) took more than a year to progress to ESRD. CONCLUSIONS: The study revealed that males are at a higher risk of ESRD with respect to their age. The risk factors are mainly hypertension, diabetes and anaemia.

PUK4
BE CAUTIOUS OF TRIPLE WHAMMY!!!
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OBJECTIVES: This study was aimed to identify the occurrence of concomitant pre-prescription of NSAIDs, ACE Inhibitors (ACEI) and diuretics known as triple whammy recorded in patients at a Malaysian teaching hospital. It also aimed to identify the relationship between prescriptions of triple whammy with specific age. METHODS: A retrospective, observational study was performed in a general teaching hospital. The patients’ prescriptions (January-March 2012) from the outpatient pharmacy department were prescribed with NSAIDs, ACE inhibitors (ACEI) and diuretics were reviewed and recorded. The association between the prescriptions with age was investigated. Statistical analysis was done using SPSS with significance difference determined by p value of < 0.05. RESULTS: Four hundred and twenty four patients (56.1% male) were included. Four hundred and twenty two patients were taking one or more of NSAIDs, ACEI and diuretics and only 2 patients were taking all three. Majority of our patients (60.1%) received the combination of ACEI and diuretics. Combination of ACEI and diuretics were mainly (21.7%) prescribed to patients above 65 years old (p=0.362). CONCLUSIONS: The occurrence of triple whammy at a teaching hospital during the period of data collection is low. This is indeed a good predictor of safe prescription of drugs among physicians as concomitant use of these three medicines may impair renal function especially in the elderly and dehydrated patients. Majority of the patients that were prescribed with combination of diuretics and ACEI are above 65 years old, therefore proper monitoring of their renal function and the hydration status should be performed to reduce the risk of renal insufficiency in the future.

PUK5
A BUDGET IMPACT ANALYSIS (BIA) OF THE USE OF PARICALCITOL FOR THE TREATMENT OF SECONDARY HYPERPARATHYROIDISM (SHPT) IN END STAGE RENAL DISEASE PATIENTS
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OBJECTIVES: Budget impact analysis (BIA) of the use of paricalcitol versus alterna- tive treatment for the management of secondary hyperparathyroidism (SHPT) in end stage renal disease patients. METHODS: A Markov model was used to simulate the evolution of end stage renal disease patient through transplant and death and to estimate associated direct health costs comparing the use of paricalcitol and darbepoetin plus low dose vitamin D over a 5-years horizon and using the Italian National Health System perspective. The model was developed using parameters from literature and assumption discussed with clinicians. National tariffs and costs from literature were used to value drug use, dialytic treatment, hospitalizations and transplant. One-way sensitivity analyses were conducted for model inputs were performed. Costs and effects were discounted at 3% annum. RESULTS: Considering 13,311 candidate subjects for each treatment strategy, results from the model showed a decrease in direct health care costs from 1,762,921.35 EUR to 1,632,377.39 EUR in favour of paricalcitol over 5 years. Particularly, paricalcitol produced an overall saving in drug costs for more than 51 millions Euro while the other direct health costs related to dialysis, hospitalization and transplant were reduced by approximately 105 million Euros in light of the high economic burden of end stage renal disease mainly associated with dialysis and transplant the use of paricalcitol for the treatment of IPTS in these patients represents a valid alternative not only from a clinical point of view but also from an economic point of view.

PUK6
ANALYSIS OF BUDGET IMPACT OF ANEMIA CORRECTION IN RUSSIAN PATIENTS WITH CHRONIC KIDNEY DISEASE
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OBJECTIVES: To analyze budget impact of strategies of anemia correction with different stimulators of erythropoiesis in patients with chronic kidney disease (CKD). METHODS: Pharmacoeconomic analysis included cost modelling for a new strategy for patients with CKD and anemia that includes the use of continuous erythropoietin receptor activator (CERA) compared with traditional darbepoetin alfa (as described in ARCTOS study). The model included two stages: 1. Estimation of costs in 18 week correction period (phase 1 study), and 2. Estimation of costs of administration within 10 weeks (phase 2 study). The results were compared in two groups of 100 people, the first with CERA and the second with darbepoetin alfa. According to ARCTOS study, fewer patients treated with continuous erythropoietin receptor activator (CERA) required transfusion procedures compared with darbepoetin alfa (2.5% and 6.8%, respectively). The drugs in the study were administered under medical supervision in a day hospital. The time horizon of the study was 28 weeks. RESULTS: The costs of a phase 1 was 53 187.21 in CERA group and 104 528.88 RUB in darbepoetin alfa group. The costs were almost identical in the second phase. The costs in darbeopeetin alfa group were 2.7 times higher compared with CERA in respect of blood transfusion and 2 times higher in respect of drug administration. The cost of pharmacotherapy in CERA group was significantly lower than in group of darbepoetin alfa. Total costs in CERA group were 1, 7 times lower than those for darbepoetin alfa. CONCLUSIONS: The study demonstrates that administration of CERA is the most economically effective strategy for the treatment of patients with chronic kidney disease (CKD). It is associated with considerably lower costs com- pared to darbepoetin alfa.}

PUK7
BUDGET IMPACT EVALUATION OF TREATMENT WITH A LOW PROTEIN DIET AND KETOANALOGUES OF ESSENTIAL AMINOACIDS FOR PREDIALYSIS PATIENTS IN RUSSIAN FEDERATION
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OBJECTIVES: To evaluate budget impact of low protein diet (LPD) and ketoana- logues of essential aminoacids (CERA) required transfusion procedures compared with darbepoetin alfa. METHODS: Analytic decision-making model and budget impact analyses (BIA) were performed. Direct costs (ketoanalogues, hemodialysis, peri- dialysis, etc.) were considered. The intervention group were compared in the model: ketoanalogues and LPD was administered for the first 5 years in predialysis stage, while second arm started in the model of dialysis patients. Results of retrospective efficacy analysis state, that administration of keto-analogues and LPD delays start of dialysis at least for 1 year. The following prices were used: rates of State medical insurance fund, Sechenov First Moscow State Medical University hos- pital price lists, NHS medication price. Exchange rate: 1EUR = 40 RUB. RESULTS: The first year annual costs were 13316 EUR per patient for the patients group on dialysis and 8620 EURO for the group of ketoanalogues. The results of BIA have shown that administration of ketoanalogues and LPD provides cost-saving of 14562 Euro per patient in the first year compared with dialysis group. Total cost-saving per patient in the group of ketoanalogues and LPD over 5-year period was 12895 EUR compared with the dialysis group. CONCLUSIONS: Budget impact assessment has shown, that ketoanalogues and LPD in Russian Federation is a preferable technology and provides cost-saving of 12895 EUR over five years per patient.

PUK8
A PROGNOSTIC MODEL TO INVESTIGATE THE BUDGET IMPACT IN SPAIN OF ONABOTULINUMTOXINA TO MANAGE URINARY INCONTINENCE IN PATIENTS WITH IDIOPATHIC OVERACTIVE BLADDER
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OBJECTIVES: Treatment options for patients for whom urinary incontinence (UI) due to idiopathic overactive bladder (OAB) is treated by chino- linergic therapy are limited, and can be expensive, invasive and inefficient. This can lead to a significant economic burden to hospitals and health care systems. OnabotulinumtoxinA may provide an effective and minimally-invasive treatment option. The aim of this study was to develop in the National Health System perspective. The model was developed using parameters from literature and assumption discussed with clinicians. National tariffs and costs from literature were used to value drug use, dialytic treatment, hospitalizations and transplant. One-way sensitivity analyses were conducted for model inputs were performed. Costs and effects were discounted at 3% annum. RESULTS: Considering 13,311 candidate subjects for each treatment strategy, results from the model showed a decrease in direct health care costs from 1,762,921.35 EUR to 1,632,377.39 EUR in favour of paricalcitol over 5 years. Particularly, paricalcitol produced an overall saving in drug costs for more than 51 millions Euro while the other direct health costs related to dialysis, hospitalization and transplant were reduced by approximately 105 million Euros in light of the high economic burden of end stage renal disease mainly associated with dialysis and transplant the use of paricalcitol for the treatment of IPTS in these patients represents a valid alternative not only from a clinical point of view but also from an economic point of view.
system. The model took into account the cost of drugs, disposables (e.g., incontinence pads and devices), procedures, monitoring costs, and the cost of managing adverse events. Model input data were derived from the Spanish Ministry of Health, published and unpublished clinical studies, clinical guidelines, and expert opinion. RESULTS: In the Spanish population, an estimated 96,360 individuals were eligible for treatment with OnabotulinumtoxinA, from the combined treatment pattern in which 5% of patients received OnabotulinumtoxinA, increasing OnabotulinumtoxinA usage annually from 10% in year 1 to 30% in year 5 resulted in an estimated cost saving of €24,435 per patient and the increased usage of OnabotulinumtoxinA may reduce the economic burden to the Spanish health care system, with increased acquisition costs of OnabotulinumtoxinA completely offset by savings due to decreased resource use.

PUK10 THE IMPACT OF CARDIOVASCULAR DISEASE AND TYPE 2 DIABETES MELLITUS ON SOCiaL COST IN CHRONIC KIDNEY DISEASE PATIENTS IN ITALY

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OBJECTIVES: Chronic kidney disease (CKD) is leading condition of several comorbidities with additional social economic burden. The study aims to estimate the economic impact of cardiovascular disease (CVD) and type 2 diabetes mellitus (T2DM) on the social cost of a patient with CKD (stage IV and V pre-dialyses) in Italy. METHODS: All adult CKD stage IV and V patients in 14 main Hospitals Centers in Tuscany Region have been enrolled during 7 week in the cross sectional study. Direct medical costs have been estimated using tariff for laboratory test, diagnostic exams, visits and hospitalization and paid by public and private insurance. Non medical costs include patients and caregivers travel expenses, domestic help and informal care. The loss of productivity of adult outpatients in charge of 14 main Hospitals Centers in Tuscany Region have been estimated using tariff for laboratory test, diagnostic exams, visits and hospitalization. RESULTS: Across the 22 practices was approximately €16,300 (95% CI: €12,763 to €19,837) per patient with CKD-T2DM. Direct non medical costs and indirect costs accounted respectively for 31% and 22% of social cost for CKD-T2DM and 30% and 22% for CKD-T2DM. The incremental mental effects of having comorbidities on the overall social cost of CKD were €2,928 (95% CI: €1,680-€4,176, p=0.000) for CKD and €2,640 (95% CI: €1,301-€3,979, p=0.000) for T2DM. CONCLUSIONS: CVD and T2DM significantly increase the social cost of CKD and T2DM and there was no evidence of a difference in effects (-0.019 QALYs, 95% bootstrapped CI -0.025 to 0.013). ‘IUT’ generated an incremental cost per QALY of €800. A stochastic analysis showed that at a zero-willingness to pay threshold the IUT was 96% likely to be cost-effective. The VOI analysis suggested there would be value from additional research to cost-effectiveness of the treatment is more efficient. The ENG was estimated to be €91m and to maximize ENG a sample size of 105 complete cases in each treatment arm is required.

PUK11 THE ECONOMIC COST OF URINARY TRACT INFECTIONS IN THE COMMUNITY: RESULTS FROM IRELAND

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Neovius K.E., Lundqvist T

OBJECTIVES: Urinary tract infections (UTI) are the second most common bacterial infection in primary care and are often treated empirically with antibiotics. However, outside of the United States there has been a lack of systematic cost-of-illness studies to assess the economic cost of UTIs in the community. The objective of this study was to estimate the economic cost of UTIs from the perspective of public and private insurers. METHODS: We conducted a Bayesian meta-analysis of a database which contained information on adult patients (excluding pregnant women) presenting to their General Practitioner (GP) with a suspected UTI. Data was collected from 22 GP practices in the West of Ireland over a 9 month period from September 2009 to May 2010. Results from micro-sociological analysis to determine the burden of the disease is mainly sustained by patients, their families and the productivity system.

PUC14 CIC USERS’ PREFERENCE FOR CATHETERS REDUCING THE UTI FREQUENCY

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OBJECTIVES: To investigate the preference among individuals practicing clean intermittent catheterization (CIC) and alpha-blockers for urinary incontinence that can reduce the frequency of urinary tract infections (UTIs). METHODS: A questionnaire was sent by e-mail to 769 catheter users from Germany, Italy, Sweden, the UK and the USA through a database held by Wellpet HealthCare. The participants were asked to assume a situation in which they use their current catheter but have the choice to switch to a similar catheter, which hypothetically would reduce the frequency of UTIs including possible complications. Either every fourth or every second UTI could be avoided. The participants’ willingness-to-pay for the new catheter was collected by letting them choose to spend either one of eleven explicit monthly amounts from €0-€100 or any other amount in an open answer. The participants also reported their UTI frequency. Only individuals stating that they were “certain” or “very certain” regarding their answers included in the analyses. RESULTS: 429 (response rate 56%) individuals returned the questionnaire, of which 278 (65%) were certain or very certain regarding their answers. The proportion of respondents with ≤1 UTI/y and >1 UTI/y were 47% and 53%, respectively. The respondents were willing to spend on average €16 each month to avoid every second UTI and €22 each month to avoid every fourth UTI. The willingness-to-pay was higher among the users with >1 UTI/y both to avoid every fourth and every second UTI (€21 vs €11 and €30 vs €15, respectively). These differences in willingness-to-pay were statistically significant (p<0.05). CONCLUSIONS: The CIC users in this study, who practice intermittent catheterization on a daily basis, expressed a clear preference for catheters that could help to decrease the frequency of urinary tract infections (UTIs).

PUC15 COST-CONSEQUENCE ANALYSIS OF DARBEPOETIN ALFA FOR THE TREATMENT OF ANEMIA DUE TO CHRONIC KIDNEY DISEASE (CKD) IN GREECE

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