The costs were valued in terms of year 2004 Ringgit Malaysia (RM). Sensitivity analyses were performed. RESULTS: Erythropoietin therapy improved the mean haemoglobin level of anaemic haemodialysis patients by 9.39% and CAPD patients by 8.48% at the range of 8 to 10 g/dl. Overall life expectancy on dialysis was 10.13 years with superior life expectancy for haemodialysis (11.37 years) compared to CAPD (7.94 years). The cost per quality-adjusted life years was RM43,000 for haemodialysis and RM41,000 for CAPD. The incremental QALYs gained for haemodialysis and CAPD patients at haemoglobin baseline were 2.04 and 0.27, respectively. The incremental cost per QALY gained of EPO was RM66,000 and RM137,000 for haemodialysis and CAPD patients, respectively at the same average baseline haemoglobin level between 8 g/dl and 10 g/dl. CONCLUSION: With the current state of utilisation of EPO therapy in the Ministry of Health of Malaysia setting, haemodialysis is more cost effective modality compared to CAPD.

**PUK12**

**DECISION MODEL OF RESOURCE (TIME) SAVINGS GENERATED BY EXTENDED DOSING OF ERYTHROPOIESIS STIMULATING PROTEIN (ESP) FOR THE TREATMENT OF ANAEMIA IN CHRONIC KIDNEY DISEASE (CKD) PATIENTS**

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**OBJECTIVE:** Three quarters of patients with CKD and anemia are not treated with ESP prior to End Stage Renal Disease. The capacity to provide anemia treatment in nephrology practices may be a hindrance to early initiation of treatment in these patients. METHODS: A decision tree was developed, simulating annual time savings associated with ESP administration when weekly (QW) administration is transitioned to less frequent administration. Parameter estimates were derived from a cross-sectional observational study assessing time utilized to administer ESP injections to CKD anemic patients. The model has two arms, simulating treatment over a one year period; arm “A” of the model has four transition states which represent the frequency of ESP administration (QW, Q2W, every two weeks, QM (monthly), and “QW only”). In arm “A” 100% of the patients start on a QW regimen. The ‘QW only’ state simulates those patients whose hemoglobin cannot be stabilized on extended dosing and fail transition to extended dosing. Arm “B” has only one state, QW. RESULTS: At the end of the simulated year, estimated ESP administration time was 263 minutes per patient per year in arm “A” (QM) vs. 467 minutes in arm “B” (QW). The difference in time between arm “B” and “A” results in 3.4 hours less for arm “A”. In arm “A” 79% of patients were in the Q4W state, 9% in Q2W, and 12% in QW and QW only. On average, it took 3–4 months to extend the patient to QM. CONCLUSIONS: The results of the model suggest that a nephrology clinic could save, on average, 3.4 hours per patient during the first year by transitioning to less frequent ESP administration. Greater savings may be realized once the transition has been completed, possibly providing increased capacity for treatment of additional patients with CKD and anemia.

**PUK13**

**TRENDS IN MEDICATION PRESCRIPTION FOR ANEMIA MANAGEMENT OF CHRONIC KIDNEY DISEASE IN A NATIONALLY REPRESENTATIVE SAMPLE OF OUTPATIENT SETTINGS IN THE UNITED STATES**

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**OBJECTIVE:** This study examined trends in physician-prescribing of medications for anemia management of chronic kidney disease (CKD) in outpatient settings in the United States. METHODS: This cross-sectional study used data from the National Ambulatory Medical Care Survey (NAMCS) from 1996 to 2003. Patients aged ≥18 years with chronic kidney disease treated in the US outpatient settings were included in the study sample. Office visits were considered related to CKD if relevant ICD-9 codes were recorded and if CKD was reported as the reason for the visit. Similarly, office visits were considered related to anemia if anemia relevant ICD-9 codes were recorded and if anemia was reported as the reason for the visit or laboratory testing was ordered during the visits. Anemia medications (Erythropoietic stimulating agents or iron replacement) were retrieved using the NAMCS drug codes, and all analyses were weighted to make national estimates. RESULTS: There were approximately 92 million weighted patient visits were made for CKD in the outpatient settings from 1996 to 2003. Nearly two-thirds (63%) of these visits were related to female and 54% of these visits were by patient aged more than 65 years. Nephrologists accounted for 18% of the patient visits and 48% of the patient reported having anemia. Only 10% of visits with anemia resulted in a prescription for anemia medication (Erythropoietic stimulating agents & iron replacements). There were no time-related differences observed in these prescribing patterns. CONCLUSIONS: The findings of this study seem to suggest that few visits with anemia are receiving anemia medications in US outpatient settings, since most of the visits do not result in anemia medication prescription.

**PUK14**

**A COST-UTILITY ANALYSIS IN A UK SETTING OF CINACALCET FOR SECONDARY HYPERPARATHYROIDISM IN END STAGE RENAL DISEASE**

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**OBJECTIVES:** Secondary hyperparathyroidism (SHPT) is a common side effect of end-stage renal disease and is associated with increased risk of fracture and cardiovascular events. Cinacalcet is the first of a new class of calcimimetic drugs, which suppress parathyroid hormone (PTH) production. The aim of this study is to estimate the cost-utility of cinacalcet in patients with SHPT. Although there is convincing evidence of the positive impact of cinacalcet on serum biomarkers such as PTH, the long-term cost and clinical implications of treatment are less clear. METHODS: A Markov model was developed in Excel to estimate differences in quality adjusted life years (QALYs) in people with SHPT in end stage renal disease (ESRD) treated with cinacalcet, compared to those receiving standard treatment alone. The model was stratified by degree of disease progression. Estimates of the effectiveness of cinacalcet were taken from a systematic review of the literature by the authors. Where possible, other transition probabilities, costs and utilities all came from published sources. Costs and benefits were discounted at 3.5% annually. The perspective of the UK National Health Service was taken throughout. Extensive one-way and probabilistic sensitiv-