

the French Sickness Fund. **METHODS:** Medical consumption was based on clinical trial data. Cost data (medical fees, hospitalization, surgery) were extracted from the National Health Insurance website (www.ameli.fr) and from PMSI database. Cost-efficacy ratios were calculated to compare therapies when significant differences were demonstrated on study outcomes. **RESULTS:** Costs per clinical progression prevented were respectively €7404 for finasteride, €7314 for doxazosin, and €8206 for the combination of both as compared with placebo. Cost-efficacy ratio (additional drug costs per invasive therapy avoided) was €16,153 for finasteride versus placebo, and €3153 versus doxazosin. It was €16,400 for combination therapy versus doxazosin, and €28,779 versus placebo. **CONCLUSION:** Cost-efficacy ratios of finasteride and doxazosin for the prevention of clinical progression were in the same range. The cost-efficacy ratio of the combination was slightly higher, but with a further significant clinical benefit. Only finasteride alone or in combination with doxazosin reduced the risk of invasive therapy. Its cost-efficacy ratio for preventing invasive therapy remains in an acceptable range in the French setting.

PUK9

COST OF ILLNESS IN ITALIAN WOMEN WITH LUTS FOLLOWED AT UROLOGY CENTRES: THE FLOW STUDY

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OBJECTIVES: To estimate the direct annual costs (from May 2004 to May 2005) associated with Lower Urinary Tract Symptoms (LUTS) in Italian women from the NHS perspective. To assess, at the same time, costs borne by subgroup of women with Urinary Incontinence (UI). **METHODS:** This evaluation was carried out as a part of the FLOW project: a 2-year observational study aimed at evaluating the prevalence, incidence and remission rates of LUTS in a large sample of women followed at 39 Italian Urology Clinics. NHS costs, such as specialist visits, hospitalizations, therapy and laboratory tests were collected retrospectively. The Dowell-Bryant Incontinence Cost Index (DBICI) was used to investigate personal UI costs, such as: disposable pads, re-usable incontinence products, laundry and health professional expenditure, surgery/diagnostic investigation and medication. **RESULTS:** A sample of 279 women were re-evaluated after two years follow-up. The estimated total annual cost to the Italian NHS for curing female with LUTS ranged between €70,488,843 and €1,325,850,296. The average annual NHS costs per patient in our sample were €232.90, of which the major components were: rehabilitative therapy (€83.24), surgical therapy (€64.54) and instrumental tests (€47.39). As for women with UI, surgery interventions accounted for 35% of the total NHS costs Vs 27% for whole study sample with LUTS. Regarding women with UI, the average annual personal cost estimated by DBICI was 215.21€ of which disposable pads and medications accounted respectively for 50% and 33%. **CONCLUSION:** After 2-yr follow-up the higher costs for the NHS seem to be associated to rehabilitative therapy and surgical procedures. Some differences were detected among the NHS resources used by the subgroup of women with UI. Costs borne by women with UI were quite high and the most important estimated component were the use of disposable products.

PUK10

A COMPARATIVE STUDY OF THE ECONOMIC BURDEN OF OVERACTIVE BLADDER AND URINARY URGE INCONTINENCE ACROSS 6 WESTERN COUNTRIES

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OBJECTIVES: This study's objective was to estimate the burden of illness (BOI) of overactive bladder (OAB) and urinary urge incontinence (UUI) in the over 40 population using recent findings from a prevalence survey (EPIC) and recent published literature. **METHODS:** New prevalence data was incorporated into a previously published BOI model. A literature search obtained data pertaining to consequence probabilities for OAB, UUI and related co-morbidities. The model was then used to produce estimates of the total burden of OAB in 6 countries. **RESULTS:** It is estimated, for these 6 countries, that that over 20 million people have OAB symptoms of which 2 million have UUI. The annual total direct cost of OAB was calculated to be 12 billion euros (2005 prices). 80% of this cost is associated with UUI. The total costs per country are: €257,402,489 Canada, €5,301,967,560 Germany, €4,536,571,901 Italy, €550,697,531 Spain, €327,640,146 Sweden and €1,026,091,457 UK. The cost of OAB management (medical visits, diagnostic testing, incontinence pads and drugs) and co-morbidities (UTIs, skin conditions, falls/fractures, depression and increased likelihood of nursing home admission) ranged from €2600 in Spain to €35,000 in Italy per person. The largest cost driver was the increased likelihood of nursing home admission followed by the cost of incontinence pads. **CONCLUSIONS:** These estimates of the total direct cost burden of OAB are higher than previous published estimates. This is due to current prevalence rates and probabilities of developing consequences of uncontrolled OAB. The OAB symptom UUI is associated with the most co-morbidity costs. These COI results may under-estimate the true costs, as OAB also affects people under 40 years old. Indirect and intangible costs have also been excluded. Cost-effective treatments for OAB and UUI in particular have the potential to significantly improve the allocation of health care resources in a growing proportion of the population.

PUK11

COST UTILITY ANALYSIS OF ERYTHROPOIETIN THERAPY IN THE MINISTRY OF HEALTH DIALYSIS PROGRAMME

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OBJECTIVES: End-stage renal failure patients are normally anaemic due to failure of renal to produce endogenous erythropoietin (EPO). Erythropoietin is used to treat anaemia in these patients but the drug is expensive. The objectives of this study were to determine the life expectancy, the improvement in quality of life associated with haemoglobin, the utility of the dialysis patients, and the cost utility as cost per quality-adjusted life year (QALY) saved. **METHODS:** The perspective was for the health provider and the treatments compared were haemodialysis and CAPD. The National Renal Registry database for the period of 1997–2004 formed the basis of patient selection. There were 406 haemodialysis and 333 continuous ambulatory peritoneal dialysis (CAPD) patients to evaluate the utility of quality of life. The health-related quality of life questionnaires and the time trade-off were used to acquire the quality of life index and the utility.

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 ANEMIA 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-