

with more severe nephritis, an induction course of immunosuppressive therapy is recommended—typically, intravenous cyclophosphamide (IVC) or mycophenolate mofetil (MMF), followed by a maintenance course, typically of azathioprine. The objective is to determine which induction therapy results in better quality of life for patients, and which represents best value for money. **METHODS:** A patient-level simulation is used to model the total costs and QALYs gained of a patient treated with either IVC or MMF for an induction period of six months. Efficacy data are extracted from a systematic review of randomised controlled trials, and utility, resource and unit cost data from published sources and standard databases. The perspective and setting of the model is the English NHS and the price year, 2005. An incremental analysis demonstrates the relative cost-effectiveness of the two options. **RESULTS:** On average, MMF is more effective (resulting in improved quality of life) when compared with IVC (mean 0.039 QALYs gained over six months). MMF therapy is less expensive overall than IVC, on average ≤ 1600 less over the period. Therefore, MMF dominates IVC. The major determinant and cost driver of this result is the requirement for a day-case procedure to administer IVC. Analysis of uncertainty shows an 81% probability that MMF will be cost-effective compared with IVC at a willingness to pay of approximately .21230,000 per QALY gained. **CONCLUSION:** Treatment with MMF is likely to be more effective and less expensive overall than IVC as induction therapy for LN.

PUK13

PANEL DATA ANALYSIS SHOWS PERITONEAL DIALYSIS TO BE NEGATIVELY ASSOCIATED WITH HOSPITALIZATION AT THE STATE LEVEL

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OBJECTIVES: Hemodialysis (HD) and peritoneal dialysis (PD) are the two main types of dialysis therapy performed on patients with ESRD. The United States Renal Data System (USRDS) produces, among a host of other types of data, annual State-level data related to dialysis and hospitalizations. Panel data sets (cross-sectional time series) can be created from these USRDS data to estimate the impact of dialysis therapy on hospitalization rates at an aggregate level. The objective of this study is to assess the relationship of hospitalizations and dialysis therapies using USRDS State-level data. **METHODS:** Data used in the analysis were obtained from the 1999 through 2005 Annual Data Reports on the USRDS Web site. The data covers the fifty states plus Washington D.C. for the years 1997 through 2003. Regression analysis was performed on the panel data using the TSCSREG procedure in SAS 9.1. A one-way fixed effects model was used. The dependent variable was the Standardized Hospitalization Ratio (SHR). SHR is the ratio of observed over expected hospitalization events in the ESRD population. The independent variables included in the regression analysis were dialysis modality, demographics, and other State-level data. **RESULTS:** The adjusted R2 for the estimated regression model was 0.88. The results showed that the percent of dialysis patients on PD was negatively associated with SHR ($p < 0.01$) whereas HD was positively associated with SHR ($p < 0.01$). In addition, an interaction term between the percent of the ESRD population with diabetes and the percent of the State population under 65 years of age was positively associated with SHR ($p < 0.0001$). **CONCLUSION:** A robust econometrics model on aggregate State-level USRDS data showed PD was negatively associated with hospitalization. Policymakers and payers need to carefully consider the impact of health care policy on dialysis modality choice and thus on costs.

URINARY/KIDNEY—Health Care Use & Policy Studies

PUK14

ANEMIA-RELATED TREATMENT VARIATIONS IN WOMEN WITH CHRONIC KIDNEY DISEASE IN US OUTPATIENT SETTINGS

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OBJECTIVES: Women with chronic kidney disease (CKD) are often at risk of having anemia. This study examined the variation in anemia care of CKD among women in outpatient settings in the U.S. **METHODS:** This cross-sectional study used data from the National Ambulatory Medical Care Survey (NAMCS) from 1996–2003. Women aged 18 years and older with CKD were included in the study sample based on clinical diagnoses and the reason for the visit. Anemia diagnoses were retrieved using clinical diagnoses and anemia-related medications (Erythropoietic stimulating agents or iron replacement) were retrieved using the NAMCS drug codes. All analyses were weighted to make national estimates. **RESULTS:** There were approximately 58 million weighted outpatient visits for women with CKD in the outpatient settings from 1996 to 2003. Nearly 14% of these visits were related to Hispanics and 50% of these visits were by patient aged 65 years and older. Nephrologists accounted for only 15% of CKD patient visits and 58% of these patients had a diagnosis of anemia. Only 11% of visits with anemia resulted in prescription for anemia related medication (erythropoietin stimulating agents or iron replacement). Women with Medicare coverage were 2.6 times more likely ($p \leq 0.05$) to be seen by nephrologists. Women seen by nephrologists were 2.4 times more likely ($p \leq 0.05$) to receive a prescription for an erythropoietin stimulating agent compared to patients seen by non-nephrologists. Additionally, PCPs were less likely ($p \leq 0.05$) to prescribe erythropoietin stimulating agents compared to non-PCPs. **CONCLUSION:** The findings of this study suggest that PCPs are less likely to prescribe anemia medications in US outpatient settings compare to non-PCPs. Increased awareness of the impact of early treatments of anemia among women with CKD is needed in outpatient settings in the U.S.

PUK15

DRUG UTILIZATION AND COSTS OF ERYTHROPOIETIC AGENTS IN ELDERLY PATIENTS WITH CHRONIC KIDNEY DISEASE

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OBJECTIVES: To understand current real-world utilization of erythropoietic agents, this study examined epoetin alfa (EPO) and darbepoetin alfa (DARB) dosing patterns and treatment costs in elderly patients with chronic kidney disease (CKD) not receiving dialysis. **METHODS:** A retrospective analysis was conducted using medical claims from approximately 35 health plans nationwide during the period of January 2004 through February 2006. To be included in the analysis, patients were required to be ≥ 65 years old, have ≥ 2 EPO or DARB claims, have a CKD diagnosis within 90 days prior to EPO or DARB initiation, and be newly initiated on either agent. If a patient received renal dialysis, data were censored 30 days prior to the first date of dialysis. Patients diagnosed with cancer or that received chemotherapy were excluded. Mean weekly doses weighted by treatment duration were used to calculate drug costs based