After controlling for confounding factors, the adjusted ratios remained significant at 4.3:1 ($651 incremental monthly cost, p < 0.0001) for direct costs, and 3.3:1 ($157 incremental monthly cost, p < 0.0001) for indirect costs. CONCLUSION: Both the unadjusted and adjusted ratios for mean direct and indirect costs for pre-dialysis CKD patients compared to non-CKD patients indicated that pre-dialysis CKD resulted in statistically significant increases in both direct and indirect costs to the employer.
with more severe nephritis, an induction course of immuno-suppressive 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 per QALY gained. Therefore, MMF dominates IVC. The major determinant and cost driver of this result is the requirement for hospitalization. Policymakers and payers need to carefully consider the impact of health care policy on dialysis modality choice and thus on costs.

CONCLUSION: Shows an 81% probability that MMF will be cost-effective compared with IVC (mean 0.039 QALYs gained over six months). MMF therapy is less expensive overall than IVC, on average £1600 less per QALY gained. Therefore, MMF dominates IVC. The major determinant and cost driver of this result is the requirement for hospitalization.

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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.