

## **Nephrology Referral and Outcome after CKD Diagnosis in the US Medicare Population.**

***Shuling Li, Robert N. Foley, David T. Gilbertson, Jiannong Liu, Allan J. Collins. U.S. Renal Data System, MMRF, Minneapolis, MN; Medicine, University of Minnesota, Minneapolis, MN***

It is unknown, at a population level, whether referral to specialist nephrology services is associated with better outcomes after diagnosis of CKD.

We used the 5% Medicare Denominator file to identify patients who survived for 6 months without recourse to renal replacement therapy (RRT) after a diagnosis of CKD in 1999 (N=10819).

Comorbidity-adjusted rates of RRT, hospitalization and death were compared in those with and without nephrology referral.

35.6% of subjects were between 66 and 75 years, 64.4 % greater than 75 years, 47.9% male, 84.8% white and 40.5% diabetic. Outpatient nephrology referral, which occurred in 14.2%, was more likely among younger, male, anemic and hypertensive patients. 4.7% went on to RRT, 65.6% were hospitalized and 35.6% died during the follow-up period, which began after 6 months following CKD diagnosis. Referred patients were more likely to develop RRT (adjusted HR 3.26,  $P < 0.0001$ ) and to be hospitalized (adjusted HR 1.14  $P = 0.0001$ ) than non-referred patients, while death rates were similar (adjusted HR 1.04,  $P = 0.5$ ), suggesting that referral was triggered by evidence of advanced CKD.

Referral to a nephrologist in US Medicare patients is uncommon, even after CKD has been diagnosed. In terms of CKD progression, referral practices appear to be reactive rather than preventive in philosophy.