Frequency of nephrologist claims prior to ESRD initiation, by CKD stage

David A. Zaun, MS, David T. Gilbertson, PhD, Allan J. Collins, MD
United States Renal Data System, Minneapolis Medical Research Foundation, University of Minnesota Twin Cities

Introduction

As patients near ESRD, chronic kidney disease (CKD) may be recognized more frequently, yet preparation for ESRD treatment may be lacking.

Referral to a nephrologist has been shown to be associated with the use of fewer dialysis catheters and improved outcomes.

In this analysis we assess how frequently CKD was recognized before ESRD and when nephrology referral occurred.

Objective

We performed this study to determine the cumulative percent of Medicare patients age 67 and older that visit a nephrologist prior to ESRD, by CKD status.

Methods

We identified 28,613 incident ESRD patients in 2008 age 67 and older at initiation, with Medicare as their primary payer in the two years prior to initiation.

 Patients’ nephrologist claims were studied in the 12 months prior to ESRD.

CKD stages were defined during a period of 12-24 months prior to ESRD using claims containing ICD-9-CM codes of 585.1-5 and 585.9

CKD stage categories were defined as: stage 3-5 CKD (a stage 3, 4, or 5 claim), stage 1-2 CKD (a stage 1 or 2 claim), other (a non stage specific CKD claim); and no CKD (no CKD claims).

Results

CKD is under recognized in patients prior to ESRD:

- 27.6% with no CKD, 1.8% with stage 1-2 CKD, 53.8% with stage 3-5 CKD, and 16.8% with other CKD.

Not all patients are referred to a nephrologist:

- 20% with stage 3-5 CKD, 40% with stage 1-2 CKD, 30% with non stage-specific CKD, and 70% with no CKD were not referred to a nephrologist 3 months prior to ESRD.

The percentage of patients seeing a nephrologist one year to three quarters prior to ESRD was different across groups:

- 8.2% with no CKD, 21.8% with non stage specific CKD, 31.3% with stage 1-2 CKD, and 63.5% with stage 3-5 CKD.

The percentage seeing a nephrologist within the year prior to ESRD was similar across all groups:

- 82.6% with no CKD, 86.4% with non stage specific CKD, 88.9% with stage 1-2 CKD, and 92.7% with stage 3-5 CKD.

This is higher than historically seen in the Medical Evidence Form.

Conclusions

- There is a large percentage of patients not recognized as having stage CKD in the period from two years to a year prior to ESRD.
- Many patients do not see a nephrologist until the quarter prior to ESRD.
- Although there is a dramatic increase in the percent of patients with nephrologist claims in the quarter prior to ESRD, there is little time to address CKD care, manage risk factors, and plan for ESRD treatment.