

MEDICAL COSTS OF CHRONIC KIDNEY DISEASE IN PATIENTS WITH DIABETES: A MANAGED CARE PERSPECTIVE

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The purpose of this study was to quantify the incremental direct healthcare costs of CKD in patients with diabetes from a managed care perspective. An analysis of medical claims and laboratory data between 01/2000 and 02/2006 from a large managed care database was conducted. Inclusion criteria were continuous insurance coverage, ≥ 18 years of age, and ≥ 2 claims for diabetes within a 90-day period. Patients were excluded if they had cancer, lupus, or had received organ transplantation or chemotherapy. CKD was defined as ≥ 1 claim for CKD and ≥ 2 glomerular filtration rate values of < 60 mL/min/1.73 m². Both univariate and multivariate analyses were conducted to compare diabetes patients that developed CKD versus those who did not for yearly direct healthcare costs, which consisted of outpatient services, inpatient services, and pharmacy dispensing claims. A total of 30,480 patients with diabetes were identified, of which 859 developed CKD during the study period. The CKD group was older (63.5 vs. 54.8 years, $p < .001$) with less women (43.9% vs. 47.1%, $p = 0.066$), compared to the non-CKD group. CKD was associated with a significant increase in total direct healthcare costs, with an unadjusted incremental yearly cost of 13,154\$ (\$21,503 vs. \$ 8,349, $p < .001$) relative to non-CKD. The largest driver of medical cost differences between the CKD and non-CKD groups was cost associated with hospitalizations (cost difference: \$7,738, $p < .001$). After controlling for age, gender, baseline comorbidities, and prior hospitalization, the cost impact of CKD remained statistically significant. Findings from this large observational study demonstrated that CKD was associated with a significant cost increase in managed care patients with diabetes. The cost impact remained significant after adjusting for confounding factors that may otherwise contribute to increased costs.