APPARENT DISPARITY IN TESTING OF PATIENTS WITH CHRONIC KIDNEY DISEASE (CKD), PLUS DIABETES AND/OR HYPERTENSION AND IMPACT OF GENDER

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This study represents a joint effort of Quest Diagnostics and the National Kidney Foundation to examine the relationship between CKD and two major diagnostic risk factors for CKD, diabetes mellitus (DM) and hypertension (HTN), in US adults.

This analysis is based on national data from the Quest Informatics Data Warehouse, specifically 3.4 million eGFR results in October 2006, and 2.8 million urinary albumin-creatinine ratio results (ACR) from November 2005 to October 2006. The analysis identified 629,761 patients with eGFR <60 (study criteria for CKD) and determined the percentage who had ACR during the prior 12 months, grouped by diagnosis (based on ICD-9 codes), age, and gender.

The results showed that a majority of patients with evidence of CKD as well as DM and/or HTN had not had ACR in the prior 12 months. Specifically, 83% of patients with HTN and CKD, 59% with DM and CKD, and 52% with CKD and both DM and HTN had no ACR performed at Quest Diagnostics during this period. Analysis by age and gender further revealed that men were consistently more likely to have had ACR than women across diagnostic risk and age groups. Patients with HTN showed the most striking disparity with 7.1-12.6% of women and 9.8-15.4% of men having ACR in the prior 12 months (p-values ranged from 0.01 to <0.001 except for ages 18-30). The effect of age was inconsistent, with minimal differences among patients with DM, a gradual increase with age for patients with HTN, and an overall drop for patients >70, possibly an artifact of older patients having already been diagnosed with CKD thus no longer screened with ACR.

The study suggests a need for physician education to improve compliance with evidence-based guidelines in patients with CKD, and DM, HTN, or both, with added emphasis on women, particularly those with HTN.