New chronic kidney disease audit published

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Sustainability and Transformation Partnerships, Clinical Commissioning Groups and primary care practices must all work together to improve outcomes for patients with Chronic Kidney Disease (CKD), according to the national Chronic Kidney Disease Audit published today. Recommendations include reviewing practice procedures and monitoring performance to help identify and actively manage patients with CKD.

CKD is a long-term irreversible deterioration in the function of the kidneys, usually found in older patients or those with diabetes and high blood pressure. CKD is often without symptoms until it progresses to the very advanced stages and is detected through blood and urine tests. Advanced CKD (stages 3-5) affects 5.5% of adults in England and Wales.

When detected, it is recommended that CKD is recorded in electronic patient records using Read codes; these allow patients to be effectively monitored and allow the safer prescribing of drugs. Compared to patients with reduced kidney function who do not have a Read code, those with a read code are known to receive more comprehensive management (such as blood pressure therapy and statin prescription).

The audit reviewed how the coding of CKD patients in primary care improved patient outcomes; it looked at the data of patients with advanced CKD (stages 3-5) from a sample of 1,005 primary care practices across England and Wales. The sample accounted for 10% of practices in England and 75% in Wales. From a total of more than 400,000 patients with kidney disease, there was a total of more than

250,000 years of follow-up.

Patients with advanced CKD who had a CKD Read code were found to be half as likely to be admitted to hospital in an emergency, and six time less likely to suffer a sudden worsening of their kidney function (acute kidney injury or AKI), when taking into account their age, gender, kidney function, and the presence of other relevant medical conditions (diabetes, hypertension, cardiovascular disease). In similar analyses, death rates were approximately twice as high among people with advanced CKD who had not been coded compared to those who had.

The audit found there were wide variations in the coding of CKD patients in the primary care practices reviewed.

A key recommendation of the report is that when patients with CKD are identified and coded in primary care they should be reviewed regularly for management of high blood pressure, including being prescribed cholesterol lowering treatments. In more severe cases, advice on preventative flu and pneumococcal vaccination should be given.

Audit co-author Dr. Dorothea Nitsch, Professor in Clinical Epidemiology at the London School of Hygiene & Tropical Medicine, said:

"Each year, for every 100 patients with CKD and moderate to severe kidney function impairment there are 38 unplanned hospital admissions, two admissions to intensive care and seven deaths. Detecting and subsequently Read coding CKD in primary care is crucial to enable systematic management of these patients with regards to their blood pressure, statin medication, and vaccination. Together these measures can improve patient outcomes.

"Primary care practices should review their processes to improve the

identification and care of people with CKD. Clinical commissioning groups should put in place quality improvement tools and incentives to support identification and regular clinical review of CKD patients."

Professor David Wheeler, UCL Centre for Nephrology Royal Free Hospital and Chair of the Clinical Reference Group of the Audit, said:

"This report raises the possibility that improved identification and management of patients with CKD in primary care might reduce unplanned admissions to hospital."

The National CKD Audit was commissioned by the Healthcare Quality Improvement Partnership (HQIP) and conducted by the Informatica Systems, the London School of Hygiene & Tropical Medicine, UCL (University College London) and Queen Mary University of London.

The sample used in this audit was broadly representative of England and Wales in terms of age and sex, although though those of White ethnicity and living in rural areas are overrepresented.

The authors note that further research is needed to establish whether it is the use of CKD Read codes (and the care processes that follow from this) that lead to the reduced rates of hospital admissions and death or whether the effect is explained by other characteristics of those patients that have not been coded.

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