

The CLAHRC Chronic Kidney Disease Collaborative: Improving care for patients with CKD in a primary care setting

The Greater Manchester CLAHRC (Collaboration for Leadership in Applied Health Research and Care) has been working with 19 general practices from 4 PCTs to improve care for patients with Chronic Kidney Disease (CKD). Research on the expected prevalence of patients with CKD showed that **approximately 49,000 people in these 4 PCTs have the condition but are undiagnosed and therefore untreated***. This puts them at significantly increased risk of cardiovascular events such as heart attacks or strokes and could eventually lead to them requiring dialysis or a transplant, or death. The CLAHRC, in consultation with experts in primary care and nephrology, set the target for each practice to halve the gap between their current recorded prevalence and their expected prevalence. This equated to adding 2407 new patients to CKD registers and making sure all these patients were treated to the appropriate NICE blood pressure targets.

Introduction:

Cheadle Hulme Health Centre is one of the 19 practices participating in the Collaborative. They are a large training practice in the suburbs of Stockport with approximately 10,600 patients and they are spread across 2 sites. Their clinical staff consists of 5 partners, a salaried GP, 3 nurses and a registrar. One of these partners, a nurse and the assistant practice manager are working together as an improvement team on the CKD project. Their target was to find 343 patients in order to raise their CKD prevalence from 2.5% to 5%. Their first piece of work was to validate their existing register and make sure everybody on the list was correctly diagnosed and coded.

Method:

The assistant practice manager ran a search to provide the last 2 eGFR results of all patients currently on their CKD register. This information was used to check that every patient was correctly staged using the NICE recommended staging of 1, 2, 3A, 3B, 4 and 5. They also ensured that all patients with ACR or PCR results had accurate records of whether they had proteinuria or not (proteinuria is a significant indicator of cardiovascular risk and those patients with the condition should have their blood pressure controlled to the lower target of 130/80). Figure 1 shows the stratification of patients across the stages of CKD before validation took place.

Results:

Out of 270 patients on the register, 31 (11%) were found to be inaccurately coded. Two patients were found not to have CKD at all and 19 patients were moved to a less serious diagnosis e.g. from stage 3 to stage 2 after improvements in kidney function were shown on their eGFR results. The most significant inaccuracy found was the 10 patients whose record stated that they had stage 3 kidney disease, when in fact their kidney function had declined to the point that they actually have stage 4, or in one

Figure 1: Stratification of CKD patients' staging before register validation (N=270)

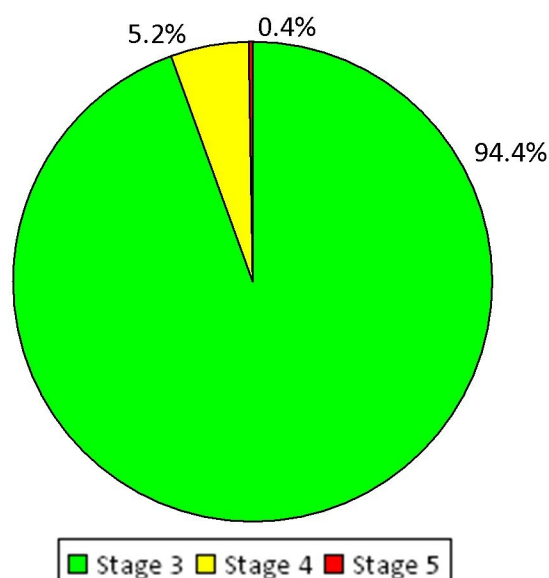
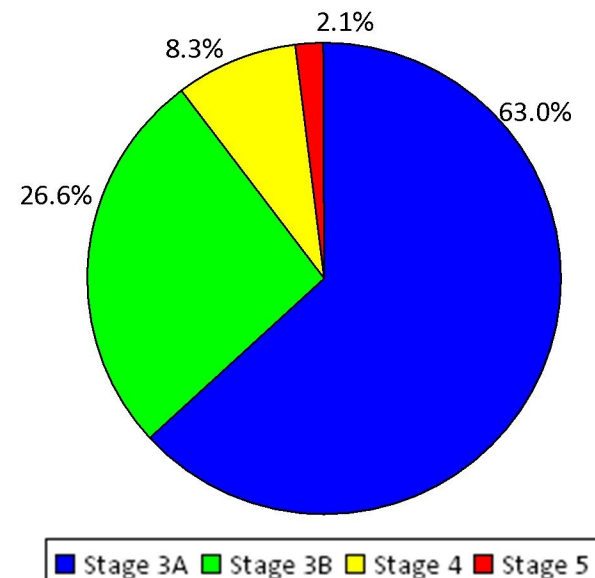


Figure 2: Stratification of CKD patients' staging following register validation (N=241)



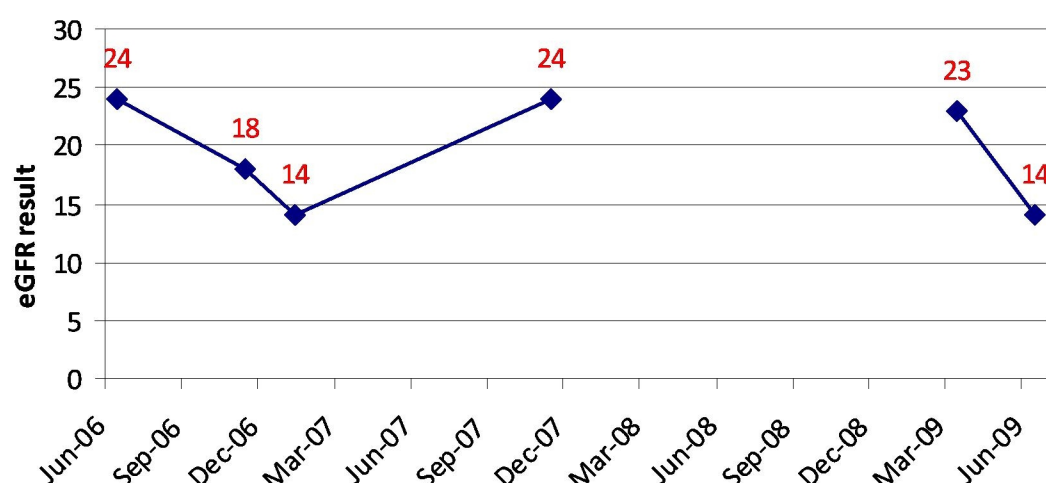
Case Study:

An example of the benefit this work can have for the care of individual patients:

One 92 year old female, non smoker with no co-morbidities was diagnosed with stage 4 CKD in 2006 but her eGFR results history is erratic and incomplete (see figure 3). As a result of the validation process it was discovered that she now has stage 5 CKD. On reviewing her record it was seen that she has not had an ACR test to check her proteinuria status and she has a BP of 150/80; the systolic being well over NICE recommendations for best care of those with CKD. Her notes show that referral to a nephrologist and initiation of ACEs was considered but not actioned.

An action plan to arrange for full review of her bloods, BP and ACR has been created and the results of these tests can now be used to develop a care plan that will give her the most appropriate care.

Figure 3: The erratic and incomplete eGFR record of one CKD patient, highlighted as a result of the register validation



Conclusion:

Knowing the level of your patients' kidney function accurately makes it a lot easier to treat your patients appropriately and ensure they are receiving the right treatment. Validating your register and checking the coding of every patient is a quick and simple way to ensure all your records are accurate and this can have clear benefits for patients.

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*Stevens et al, 2007. Chronic kidney disease management in the United Kingdom: NEOERICA project results. *Kidney International*, 72(1), pp.92-99.