

CKD Improvement Project: Implementing accurate registers and best practice care for patients in primary care

P260-Thu

Authors: John Humphreys¹, Anna Betzlbacher¹, Nigel Brunskill³, Brook Butler¹, Viv Entwistle¹, Gill Harvey², Phil Shelton³, David Shepherd³, Janet Hegarty¹, Donal O'Donoghue¹

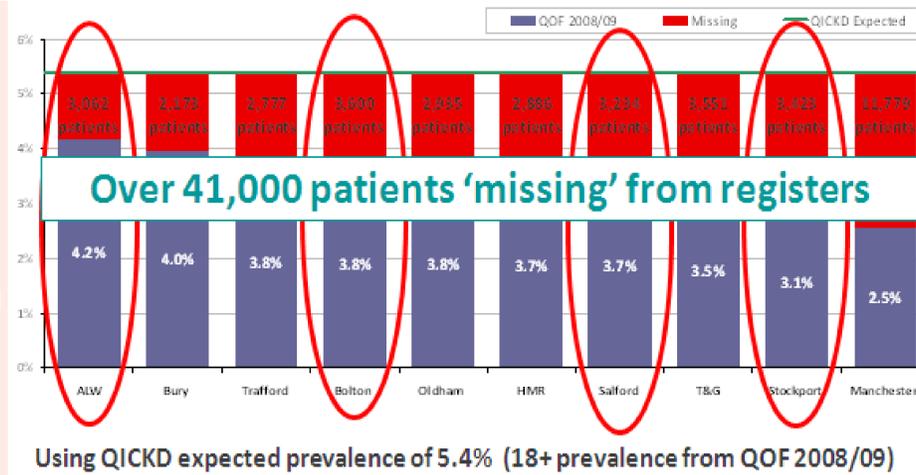
1) NIHR CLAHRC for Greater Manchester, Salford Royal Foundation Trust 2) University of Manchester 3) NIHR CLAHRC for Leicestershire, Northamptonshire and Rutland, University Hospitals Leicester

Phase 1: Identified problem and first phase results

QOF data from 2008/09¹ combined with published Quality Improvement in CKD (QICKD) study data² on expected prevalence suggested a gap of around 2% between local recorded and national estimated prevalence of CKD. This equated to around 41,000 undetected cases (Figure 1) missing from primary care CKD registers across the ten Greater Manchester primary care trusts (PCTs).

The GM CLAHRC formed a project with two universal objectives for all teams:

- 1) Halve the gap between estimated and recorded prevalence on CKD registers
- 2) For 75%* of CKD patients to be tested for proteinuria and managed to NICE BP targets (*no exceptions)



Using QICKD expected prevalence of 5.4% (18+ prevalence from QOF 2008/09)

Figure 1: Missing CKD patients in Greater Manchester

Phase 1 of the project involved 19 practices in a Collaborative-style quality improvement project from four local PCTs between September 2009 – September 2010, identifying 1,324 additional CKD patients; 92% of the overall target for patients to find. This was an overall CKD prevalence increase of 1.2% for these 19 practices.

Each of the 19 practices did some work on register validation at the outset of the project, but this was done solely by Plan, Do, Study, Act (PDSA) cycles and conducting manual searches so remained open to human error. We had no measure for the accuracy of CKD registers.

Phase 2: Additional improvement through audit

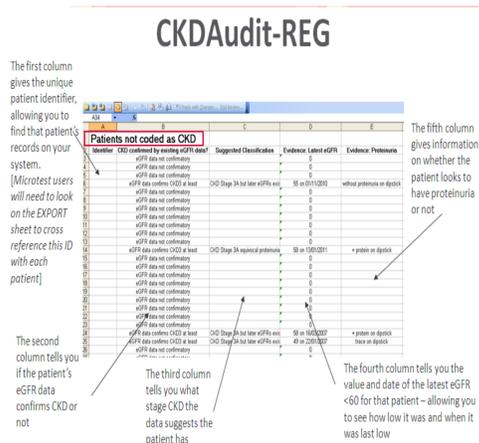


Figure 2: Identifying CKD patients

- Using implementation evidence from the first phase we created the GM CLAHRC Improvement Guide containing advice and tools for practices to improve their CKD registers either independently or with facilitated support. The guide is available from the GM CLAHRC website at <http://clahrc-gm.nihr.ac.uk>.
- For our second phase of work we halved the number of PCTs that we worked with and created a more localised project with 11 practices.
- An opportunity arose to create a link with the CKD team at Leicestershire, Northamptonshire and Rutland (LNR) CLAHRC, and use a CKD audit tool that the team had developed to support the implementation of our second project. The audit tool runs MIQUEST queries on practice systems to produce results in an easy-to-follow Excel output file.
- As a result the validation stage of the project became a lot more thorough and structured.
- Teams could accurately identify those patients that could be added to the CKD register immediately, and those who required further testing (Figure 2). It also became easier to find patients who had been misdiagnosed with CKD and take appropriate action (Figure 3).

CKDAudit-REG – register validation

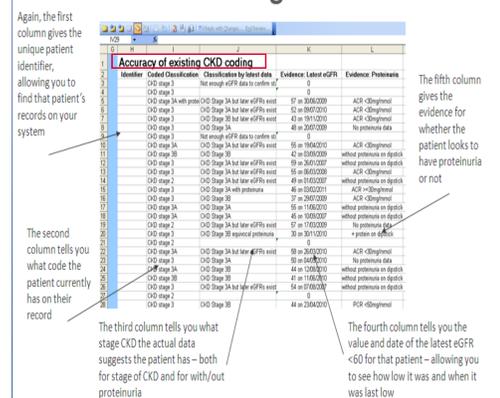
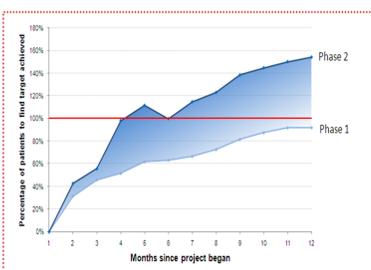


Figure 3: Validating existing CKD register

Phase 2: The effect on results

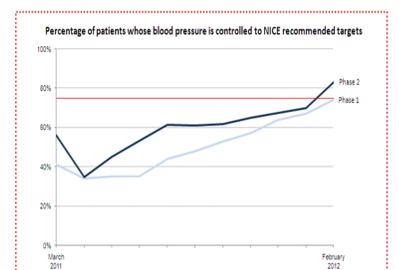
The more structured approach that the audit tool propelled the teams to identify their overall target number of patients within 5 months in Phase 2, and 154% by the project close. This improvement is more impressive when we take into account the number of patients that teams also removed during validation to achieve accurate registers.

The steeper incline and early achievement of Objective 1 of the project gave the improvement teams within the practices additional time to work towards achieving Objective 2 for the project—and meant that increased numbers of patients had good controlled blood pressure and were on a good management pathway.



In Phase One, practices achieved 62% by month 5 and 92% by the project close. In Phase Two, practices achieved 100% by month 3 and 154% overall. Both phases have identified 1,863 additional CKD patients in 30 practices

Figure 4: Progress against Objective 1 in each phase



Blood pressure control seemed initially weak in both phases of work—as patients with high blood pressure or no ACR results were added. However, both practices in both phases improved blood pressure control, and the target of 75% was achieved in phase 2—where final achievement stood at 83%.

Figure 5: Progress against Objective 2 in each phase

The use of the CKD audit tool has given team members a more accurate and efficient way of identifying cases of CKD than manual searches. Using the audit tool regularly will promote earlier detection of CKD by highlighting patients who meet the criteria for coding or require more diagnostic tests. It also allows the user to trace misdiagnosed cases and address education needs within the practice related to this.

Conclusion

The increased efficiency of this process allows practices more time to concentrate on important aspects of disease management for CKD patients, such as good blood pressure control, establishing good review processes, and delivering effective lifestyle messages.

The GM CLAHRC Improvement Guide is now being combined with the audit tool in a package known as IMPAKT. More details are available at www.impakt.org.uk.

References. 1. Quality and Outcomes Framework 2008/09, 2. De Lusignan et al 2010, 3. <http://www.clahrc-lnr.nihr.ac.uk/impakt>