Improving health outcomes for CKD patients in Greater Manchester

Authors: Anna Betzlbacher[1], Nigel Brunskill[3], Michelle Coleiro[1], Viv Entwistle[1], Gill Harvey[2], John Humphreys[1], Donal O'Donoghue[1], Phil Shelton[3], David Shepherd[3], Janet Hegarty[1]

[1]NIHR CLAHRC for Greater Manchester, [2]University of Manchester Business School, [3]NIHR CLAHRC for Leicestershire, Northamptonshire and Rutland, University Hospitals Leicester

Outline of the problem

- Chronic kidney disease (CKD) strongly predicts hospitalisations, cardiovascular events and premature death, offering opportunities to modify these key health outcomes.
- Research has shown a knowledge translation gap in primary care management of CKD. Local QOF data (Figure 1) has repeatedly demonstrated a significant 'gap' between recorded and estimated numbers of CKD patients detected, and in most recent data that nearly 30% of detected patients were not meeting QOF blood pressure targets.
- GM CLAHRC iterated and refined a CKD improvement package to deliver in various local contexts.
- The widest local coverage of this work has been within the Wigan Borough Clinical Commissioning Group where we have worked with around half (27) of the practices in this area over three, 12-month project cycles.

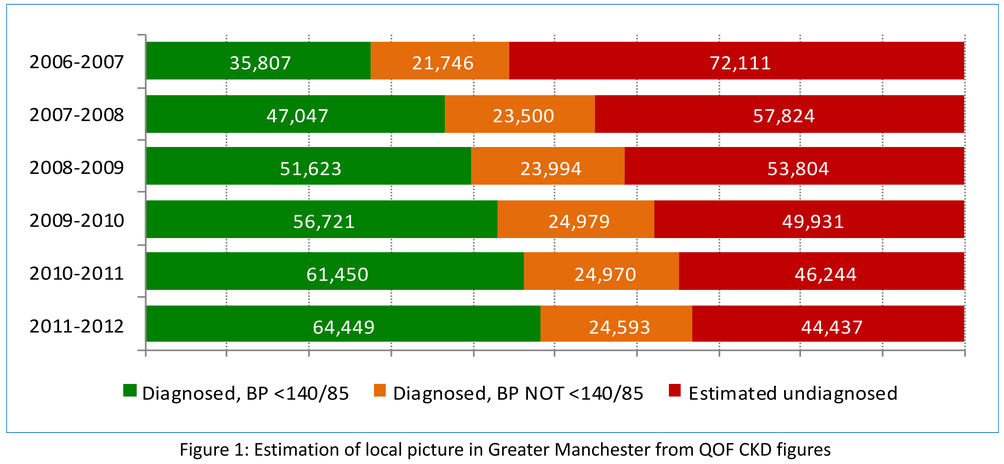

Figure 1: Estimation of local picture in Greater Manchester from QOF CKD figures

Objectives of the work

In aiming to improve both the identification of CKD patients as well as their care, two universal objectives are established for each practice involved in this project:

(1) To halve the gap between their recorded and estimated number of CKD patients. The estimate is calculated by entering age/sex profile data into a prevalence modelling tool

(2) For 75% of recorded CKD patients to be tested for proteinuria and managed to NICE recommended blood pressure targets by the close of the facilitated period.

Janet Hegarty, Salford Royal Foundation Trust, janet.hegarty@srft.nhs.uk

Improving our delivery

With each improvement cycle we have refined our implementation model to lower input costs by creating and improving upon our supporting resources. Two key developments have supported this. (1) The recruitment of local practice nurses from the implementation areas on a part-time seconded basis to help implement the project within a local context. (2) The introduction of a bespoke CKD audit tool, known as IMPAKT™ that has been run at each practice and helped us to shape improvements suitable to each GP practice.

Results and outcomes

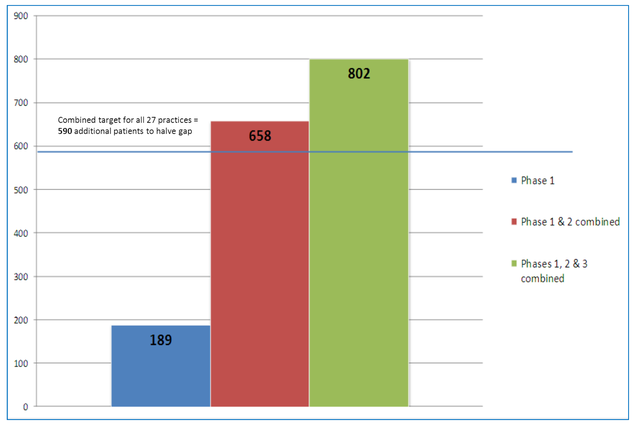

Figure 2: Cumulative numbers of CKD patients identified by project phase

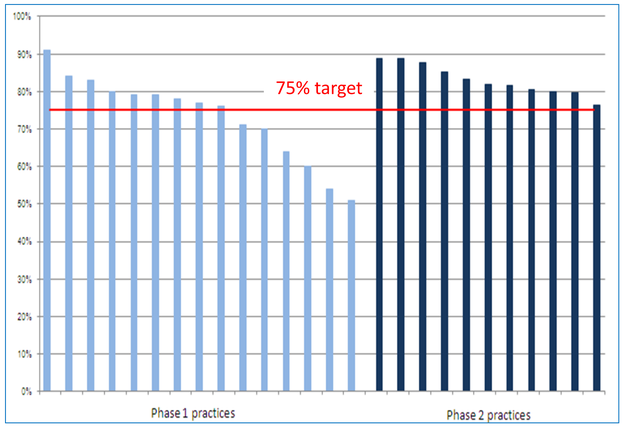

Figure 3: Percentage of patients treated to NICE recommended BP targets

Objective One: We are roughly halfway through our third phase of work—and practices again are on target to more than halve their modelled prevalence gap. In the 27 practices overall, 68% (802) of the 1,180 estimated 'missing' CKD patients have now been identified (Figure 2).

The above graph shows the cumulative numbers of patients added by phase. You can see that the combined target for all three phases had been met before the current project commenced.

Objective Two: Quicker achievement in closing the prevalence gap in Phase 2 allowed teams more time to concentrate on getting blood pressure control to NICE recommended targets in greater numbers of patients. We saw a more standardised outcome in relation to the 75% target (Figure 3). This data is collected by a manual count at the project close so is unavailable for the current project.

Across both completed projects thus far, 92% of CKD patients have been tested for proteinuria, with 79% of registered CKD patients achieving blood pressure control within NICE targets.

Discussion

The benefits of the work are perhaps just as well evidenced by the anecdotal feedback given by members of the implementation sites post-project. This demonstrates how the work has helped to bridge a proven knowledge gap within primary care and inspire clinicians to improve health outcomes for their CKD patients through engagement in quality improvement work.

> *"Now we all feel more confident in going ahead with the management of these patients, and I think in the practice all our clinicians are going to manage CKD in a similar way whoever the patient comes to see."*
>
> *Dr Nick Browne, The Gill Medical Centre*

> *"I definitely worry less about CKD now I've gained an understanding around the disease, and I feel that I can manage patients more confidently."*
>
> *Judith Fearnley, Practice Nurse, Meadowview Surgery*

One example of a patient who made simple lifestyle adjustments after her diagnosis of CKD was Frances. Sixty-six years old at the time of her diagnosis, Frances was keen to take control of her health and prevent progression of her CKD. After being referred to an active living group Frances began moderate exercise through the group and eating more healthily. In doing this, she lost two stone in under four months, improving her health prognosis.

> *"I feel so energetic as a result of the changes that I've made that I will keep on attending the classes to keep the weight off. I used to be active and involved in a lot of things but felt very tired as a result—now I can keep going."*
>
> *Frances, patient at Dr K Khatri's Surgery*

Summary

We have demonstrated how quality improvement work can be applied into a primary care setting to improve areas of care where a shortfall of knowledge and confidence was well recognised. After each cycle of improvement we have analysed our implementation methods and managed to repeatedly scale down costs for implementing this work, providing increased patient safety and improved health outcomes in more cost effective ways.

Ambitious targets have been set for teams in each project but these have been met through the application of clearly defined objectives, suitable improvement tools and dedicated facilitation support.

Our challenge now is to make appropriate tools available on a wider scale to improve capacity for unfacilitated improvement work. We are currently working with another CLAHRC team to provide a support package for individual practices and whole localities to improve their identification and care of CKD. This is available from http://www.impakt.org.uk/.