Measuring sustainability of chronic kidney disease identification improvement in primary care practices

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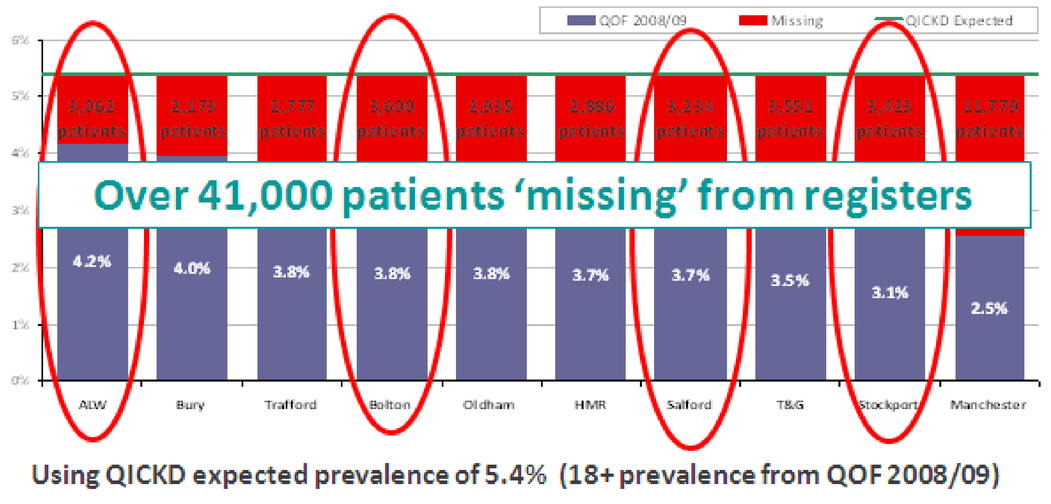
Background

Five-year (2008-2013) Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) were established throughout England to address the gap between research and practice through implementing evidence-based care. Two of the nine CLAHRCs, the Greater Manchester (GM) and Leicestershire, Northamptonshire and Rutland (LNR) CLAHRC, each selected implementation of evidence based care for patients with CKD as a key area for improvement as research evidence indicated a translation gap between knowledge and best practice in the identification and management of chronic kidney disease (CKD).

Where did we start in 2009? Missing patients across Greater Manchester

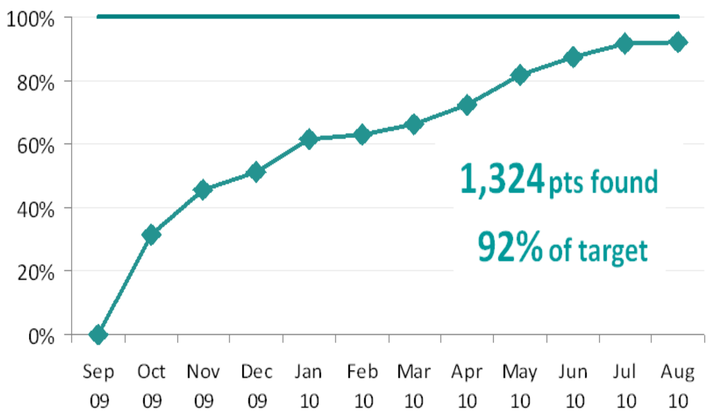
QOF data from 2008/09[1] combined with published QICKD study data[2] on expected prevalence suggested a gap of around 2% between local recorded and national estimated prevalence of CKD. This equated to around 41,000 undetected cases missing from primary care CKD registers across the ten Greater Manchester primary care trusts (PCTs) .

The Greater Manchester CLAHRC facilitated an 12 month improvement project between September 2009 – September 2010 to improve the identification and treatment for patients with CKD working with 19 practices across four of these PCTs (circled in Graph 1). The project consisted of two objectives: 1) to halve the gap between expected and recorded prevalence (expected prevalence was calculated from an 18+ age/sex profile based on QICKD[2] study outcomes) and 2) for 75% of registered patients to be tested for proteinuria and treated to NICE recommended blood pressure targets.



Graph 1: Missing CKD patients in Greater Manchester

Results of the CKD improvement project



Graph 2: CKD patients added to register during 2009/2010 project

Overall, the 19 practices identified 1,324 additional patients, 92% of the target of halving the prevalence gap (Graph 2). In preparation for the second phase of CKD improvement project (which took place March 2011-March 2012), the GM CLAHRC developed a link with colleagues at LNR CLAHRC and were given the opportunity to utilise the IMPAKT CKD audit tool[3] that the LNR CLAHRC had developed to implement their local CKD improvement project.

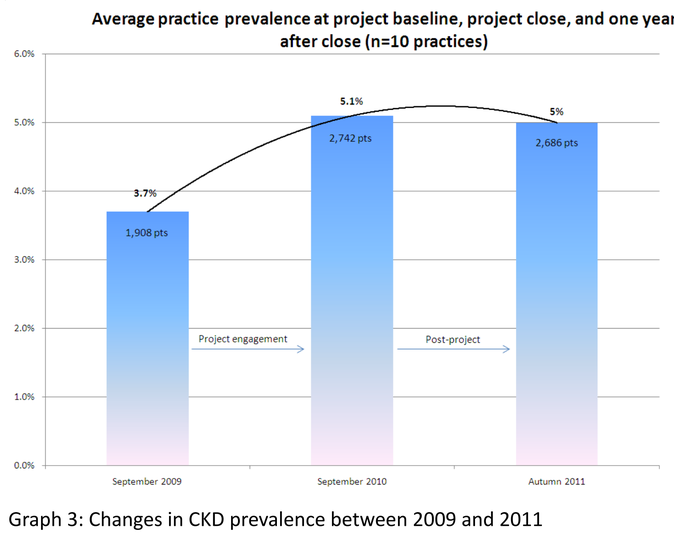
After successfully embedding the use of the IMPAKT tool during our Phase Two CKD improvement project, we offered the tool to our Phase One teams during September 2011 to support their capacity for sustaining improvements they made during 2009/2010. 10 of the 19 teams originally involved accepted, which gave us scope to measure changes in prevalence 12 months after Phase One closed.

Sustainability findings

The ten practices measured had 1,908 CKD patients registered (an average prevalence of 3.7%) in September 2009. They coded 834 patients during the initial project, with an average prevalence increase of 1.4%.

Follow-up data showed that four practices had identified further additional patients; six had slightly fewer CKD patients coded. The maximum positive swing was 10, with a maximum negative of 30; no practices lost or found disproportionate numbers.

Overall 56 fewer patients were registered with CKD than at the project close, meaning that the change in average prevalence since September 2010 was a drop by 0.1% (Graph 3).



Graph 3: Changes in CKD prevalence between 2009 and 2011

Conclusion

Slightly fewer numbers coded with CKD in the ten practices compared to the final project figures in September 2010

Suggests that the fundamental identification processes are embedded as the drop has not been significant, but the emphasis on continued identification of further CKD cases is less intense

Lessons from project appear to be sustainable but facilitated engagement provides stronger framework for improvements. Sustained improvements should prevent or delay onset of renal failure or other vascular events

Study of more long-term data would provide further information to inform this conclusion

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

The **NIHR CLAHRC for Greater Manchester** is a collaboration of **Greater Manchester NHS Trusts** and the **University of Manchester**, and is part of the **National Institute of Health Research**
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