

Working Towards Improved Management of Patients Post AKI – Implementation and Planned Evaluation

This case study summarises the implementation and evaluation of the Bury Primary Care Management of Acute Kidney Injury (AKI) project. The National Institute for Health Research (NIHR) Collaboration for Leadership in Applied Health Research and Care (CLAHRC) Greater Manchester have partnered with NHS Bury Clinical Commissioning Group (CCG), one of 12 CCGs within Greater Manchester, to undertake a project focussed on the primary care management of patients who have had an episode of hospital care complicated by AKI. The local acute trust Pennine Acute Hospitals NHS Trust (PAHT) and Vision (a provider of information technology systems to general practice) are also involved with the project.

The main drivers for this project were raising awareness and interest in AKI in Bury CCG in response to increasing regional and national activity, and alignment with CLAHRCs expertise in this area (as an ongoing partner). The project is running between 2016 and 2018 and has two strands: **implementation** of initiatives to support best practice of the management of post-AKI care, in alignment with Bury’s Quality in Primary Care Contract (QIPC); and a mixed methods **evaluation**.

Implementation

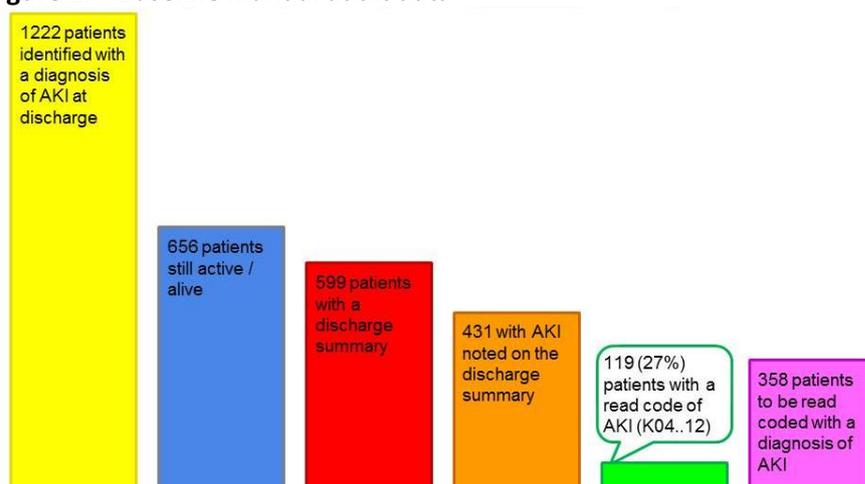
The aims are to put into practice interventions to enhance the management of patients who have had an episode of care complicated by AKI.

The intervention comprises:

- 1) Participation in an audit of diagnostic coding of AKI in general practice following hospital discharge.

NIHR CLAHRC GM has conducted a manual ‘pre-audit’, providing baseline information about patients who had a clinical diagnosis of AKI whilst in PAHT, between April 2015 and March 2016. 1,222 patients were identified, of whom 656 were still alive and of those, 431 had a discharge summary with AKI noted on it (see figure 1). However, only 27% (119/431) of these cases had been Read coded with AKI on general practice systems. It is anticipated that a further manual audit will be conducted following the intervention period, to assess changes in coding practice etc.

Figure 1: Baseline manual audit data



2) Attendance at an education training session.

NIHR CLAHRC GM worked with NHS Bury CCG to run educational events during November and December 2016. They focussed on outlining: the importance of AKI, clinical management of patients who have had AKI, baseline audit data; and an approach to developing practice level action plans. Various resources were provided, including those to support the development of practice-level action plans. Vision also outlined how their Kidney Manager tool could support the prevention and management of AKI in primary care.

The events were delivered to multidisciplinary audience including: GPs, Practice Managers, Practice Nurses, and the CCG's medicines optimisation team. They were well attended, with all 31 practices in the CCG represented. During the session, participants were given the opportunity to have a group discussion, and the team observed that participants generally seemed very engaged and the atmosphere open, with several questions and practical issues raised and discussed. The feedback from participants was very positive:

"As a nurse, the recap on exactly what AKI is was very valuable"

"I liked the case studies, helps to think of how to do things in our practice"

3) Development and implementation of a practice level action plan to improve the management of AKI in primary care.

Through the education events and on-going audit and feedback, NIHR CLAHRC GM in partnership with NHS Bury CCG will support general practices to develop a practice-level action plan to enhance the delivery of care for patients who have had an episode of illness complicated by AKI. Action plans will be designed by each practice themselves. In line with best practice guidance, key processes suggested to prioritise include:

- a) Coding: Has the AKI diagnosis been Read coded in primary care, post-discharge?
- b) Medication Review: Has the patient had a medication review within 4 weeks post discharge?
- c) Monitoring: Has kidney function been checked within 3 months?
- d) Communication: Has AKI risk been communicated to the patient (and carer)? (Documented through use of Read code 80AG).

Evaluation

The evaluation aims to contribute to the development of an evidence base surrounding the management of AKI in primary care. In doing so, the project also seeks to provide a platform for larger scale evaluation.

The **quantitative** evaluation will examine the effect of the audit, training and development of a practice-level action plan to improve management of AKI patients in primary care. In particular, the specific objectives of the quantitative study are to assess:

- Changes in/ impact on primary care activity, in terms of the processes of care relating to the management of patients who have had an episode of care complicated by AKI (coding of patients with AKI and management according to guidelines) and the subsequent changes in the primary care services delivered by GP practices (e.g. volume of appointments and tests carried out).

- Changes in/impact on secondary care activity and health outcomes including unplanned admissions, re-hospitalisation and in-hospital mortality.
- The overall cost for the CCG in the time frame covered by the study.

The aim of the **qualitative** study is to explore the process of implementing and following new processes to improve the post-discharge coding and management of patients who have had an episode of hospital care complicated by AKI. The objectives are:

- To describe and understand the structures and processes relevant to the implementation, delivery and use of interventions to improve the management of post-discharge post-AKI care in the primary care setting.
- To identify the barriers and enablers to the implementation of kidney health initiatives for people at risk of AKI in primary care, including use of audit and feedback mechanisms and the role of incentivisation.
- To explore the interface (including communication and coordination) between general practice, acute care and other parts of the NHS and other services regarding the implementation and use of kidney health initiatives in primary care to inform future care and research.
- To provide a platform for larger scale implementation and evaluation.

Next steps

Following the audit and educational events, NIHR CLAHRC GM will continue to work with Bury Practices to:

- Improve their coding of AKI patients.
- Support with developing and implementing action plans to identify and care for patients who have had an episode of AKI.
- Provide support with using the electronic audit tool and facilitate practices to self-audit.

Further details about this project can be found on the NIHR CLAHRC Greater Manchester website [here](#).

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