Interventions for managing Acute Kidney Injury in primary care: implementation and evaluation

Tom Blakeman[1,2], Sue Howard[2], Delphine Corgié[2], Sarka Grayson[2], Zoe Ashton [2], Rebecca Elvey[1], Anne-Marie Martindale[1], Laura Anselmi[1], Fin McCaul[3], Jeanette Tiltstone[3]
1 The University of Manchester, [2] NIHR Collaboration for Leadership in Applied Health Research and Care Greater Manchester (CLAHRC GM), [3] NHS Bury Clinical Commissioning Group (CCG)

Introduction

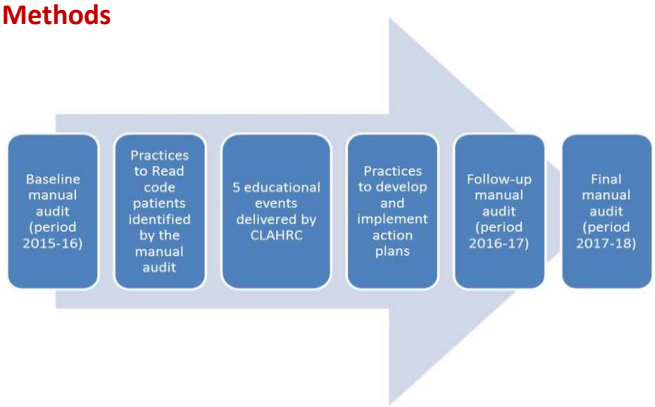
Acute Kidney Injury (AKI) is a major health priority. However, there is no comprehensive data about its prevention, detection and management in primary care.

NIHR CLAHRC GM has partnered with Bury CCG to undertake a project focused on improving the management of patients who have had an episode of care in hospital complicated by AKI. As part of a local Quality in Practice Contract, practices were incentivised to: 1) participate in a manual audit of post-AKI care; 2) attend an educational event; and 3) develop a practice level action plan

Aims

- To understand processes around the management of post-AKI care in the primary care setting
- To provide a platform for a larger scale evaluation
- To inform the design of a sustainable model of care to support better medicine management in primary care

Methods



Results

We identified all patients who had been admitted to any of the 4 hospitals in Pennine Acute Hospitals NHS Trust who had an episode of illness complicated by AKI, diagnosed using the ICD10 diagnosis code of AKI (N17.9).

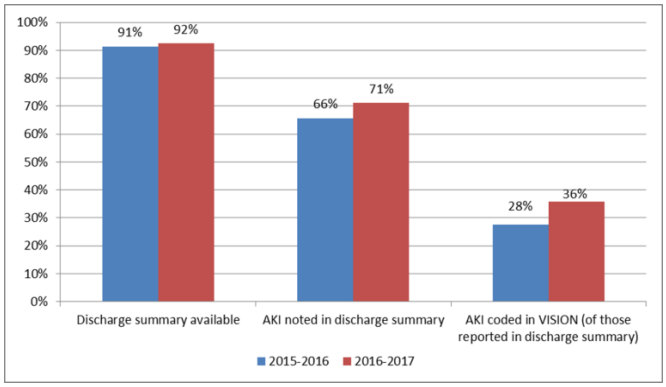
1222 patients were identified in the first audit (2015-16) and 1593 in the second audit (2016-17) . After applying exclusion criteria*, 35% (n=431) patients were included in the first audit and 40% (n=634) in the second audit.

**(exclusions included: patients who had died; no longer registered with the GP; a discharge summary from the hospital was not found; AKI was not indicated on a discharge summary*)

The key process indicators used in the second audit were:

- Record of AKI diagnosis in the electronic record of the patients
- Medication review undertaken within 1 month of discharge
- Serum creatinine check undertaken within 3 months of discharge
- Written information (about AKI) given to patients

36% of episodes with AKI on discharge summary were then Read coded in general practice in the second audit.



Interim findings suggest coding of AKI on practice systems is associated with better post-AKI care. Comparisons made between those not Read coded versus those Read coded with an AKI diagnosis include:

- 12% vs 23% in medication reviews within 1 month of discharge,
- 58% vs 79% in serum creatinine tested within 3 months of discharge,
- 1% vs 15% of patient provided with written information.

Next Steps

- A further final manual audit in 2018 (covering the period of April 17 to March 18) will be conducted to help determine the impact of the CLAHRC GM interventions. We are also carrying out a mixed methods evaluation, using quantitative and qualitative research methods:
- **Quantitative**: to investigate the effect of the audit and feedback on processes of care, service delivery and costs.
- **Qualitative**: to explore the processes of managing patients with AKI in primary care (interviews with commissioners, GPs, practice nurses, practice managers and pharmacists).