THINK KIDNEYS

NHS National Institute for Health Research

ACADEMIC HEALTH SCIENCE NETWORK NORTH EAST AND NORTH CUMBRIA

Kent Surrey Sussex Academic Health Science Network

RCGP Royal College of General Practitioners

AKI Shared Learning from case note reviews

Since the inception of NHS England's Think Kidneys Programme in 2014, key principles underpinning the implementation of AKI work into routine primary care include a need to:

- Maximise clinical utility of AKI as a driver of quality and safety whilst minimise treatment burden for patients and unnecessary clinician workload
- Develop evidence informed improvement interventions grounded in an in-depth understanding of routine clinical practice
- Support system resilience through collaborative working across the interfaces of care and through co-development with patients and family members

The RCGP AKI Improvement Project embraces these principles. Key steps taken to date include:

- 24 general practices across England and Scotland have conducted and reflected on case note reviews. These include practice in the following areas:
  - Greater Manchester: Bury CCG (3); Manchester CCG (3); Tameside CCG (4)
  - Kent Surrey & Sussex (4)
  - North East & Cumbria (6)
  - Scotland (4)
- Across the 24 practices, clinicians have conducted 148 case note reviews (median 5, range 2 to 16).
- In Manchester, the project has facilitated links between the local Foundation Trust and general practices. AKI nurse specialists working in the Trust have set up a mechanism to provide participating practices lists of patients eligible for case note review.
- Discussions have been held with participating clinicians and practices. In Central Manchester, this has included joint practice meetings with AKI Nurse Specialists based in secondary care. In Scotland, NHS Education Scotland hosted an AKI Workshop in November 2017 to generate learning from across the participating practices.
- Learning from practices conducting AKI case note reviews has been captured on:
  - Template 3 by participating clinicians
  - Structured notes taken during practice based discussions
  - Notes taken during feedback to the RCGP Steering Committee members
  - Notes taken at the workshop hosted by NHS Education Scotland
  - Reflections and meeting notes discussed at RCGP Steering Group Committee meeting on the 12th December, 2017
- Case studies and emerging themes framed discussions at a national RCGP Shared Learning Event held in Birmingham on the 27th February, 2018.

Table 1 and 2 outline key learning and suggested actions based on this approach:

1. Response to AKI warning stage test results

	Learning identified	Suggested actions
Key themes	➢ AKI and its association with frailty. Kidney function not necessarily considered as part of care ➢ Inconsistency of response with delays observed: Diagnosis AKI v Progressive CKD not obvious ➢ Information that enables result to be placed in clinical context reduces uncertainty of diagnosis and improve confidence in making diagnosis and subsequent management ➢ High proportion of false positive alerts ➢ Need hand over to OOH to enable place in clinical context: enriched summary care records, preparing the patient may get call ➢ Easy to miss alert: need systems to make more visible	➢ Actively code including cause would help others in subsequent management ➢ Need for clarity on responsibility for acting on the result – need for a protocol ➢ Need protocol and systems for reviewing bloods: involvement of team in learning to ensure agreed clarity, clear hand over within team and OOH, clarity on accountability and responsibility – clarity on Friday bloods ➢ Protocol and resources clear to Locums ➢ Labs to link alerts to Think Kidneys guidance and make more visible red. Ensure clarity on how alerts/stages will be communicated

	Learning identified	Suggested actions
Professional	➢ AKI and Frailty: Awareness that frail elderly patients and those with comorbidities/drugs at high risk of Aki ➢ Diagnosis AKI v Progressive CKD not obvious: Unlike secondary care, don't have consecutive bloods rather a set of routine bloods - ➢ Clinical context helps and recognition from colleague/info helps making diagnosis ➢ AKI not necessarily coded: "Renal function going off" or similar stated, rather than "AKI" or "CKD". ➢ Clinicians lack of confidence in making diagnosis and how to respond - GPs	➢ Actively looking for and recording cause would be useful for other clinicians, as would plan of action and subsequent reviews ➢ Need for clarity on responsibility for acting on the result ➢ Ensure up to date with guidance ➢ Ensure Locum pack include info about AKI ➢ Protocol to improve response to AKI alerts – and ensure robust methods for reviewing results

	➢ usually failed to recognise the significance of the AKI warning – leading to delays ➢ Kidney function not necessarily considered as part of care	

	Learning identified	Suggested actions
Practice team	➢ Reviewers surprise at inconsistency of response/management e.g. timeliness ➢ Majority of GPs on board with awareness and actions required ➢ System for reviewing bloods every morning and action if urgent – though not necessarily reviewed quickly if not picked up as urgent	➢ Need to view results in a timely manner ➢ Develop a system of how to look out for and respond to AKI alerts ➢ Need to include practice admin in protocol for responding to alerts ➢ Need clarity on hand over: to ensure timely review of results and response ➢ Aim for all relevant staff to have training around AKI ➢ Review how system working as missing cases

	Learning identified	Suggested actions
System	➢ alarms leading to less attention being paid to them ➢ Difficultly seeing all blood results – different labs reporting for same patient. ➢ Bloods sent on Friday afternoon not routinely seen until Monday morning. No way of "actioning" alert – unless bloods so bad that labs calls (unprepared) Out of Hours Service. ➢ Significant gap in timely review of lab results and response to alerts ➢ Easy to miss AKI alerts	➢ Make AKI Warning Stage Result more visible (PINK) ➢ Lab could also link the result to the Think Kidneys guidance - if not phoned, might prompt GPs to take result more seriously ➢ Need system to inform OOH and also inform patients to be prepared for call from OOH ➢ AKI alert needs clinical correlation ➢ Need to ensure locum staff aware of protocol and relevance of AKI ➢ Need to address Friday bloods: Clear guidelines on when results are telephoned to practice (and will be brought to the attention of the on-call GP) ➢ Need clear system for triage once AKI triggered – role OOH, practice tram, labs, patients ➢ Help OOH put result in clinical context: learned the importance of ensuring

		relevant info is shared - enhanced / enriched VISION record. ➢ Clear guidance on when labs phone –how to communicate results

2. Post discharge care

	Learning identified	Suggested actions
Key themes	➢ Workload Shift – additional work to manage uncertainty created by discharge process. ➢ Lack of evidence that patients aware of relevance of kidney health and AKI risk ➢ Uncertainty constructed from point of admission onwards. ➢ Coding AKI an important step to enhance subsequent primary care management	➢ Better Hand Over – To reduce uncertainty and help determine urgency of response. To achieve this, greater clarity required on AKI stage and cause(s); baseline and discharge SCr; changes and reasons for medication changes, blood pressure at discharge, communication c patients/carers ➢ Discharge planning to start earlier during admission. ➢ Establish a protocol for post-discharge care including patient communication ➢ Anticipate impact of action on others. ➢ Need for better professional understanding as to whether AKI or progressive CKD ➢ Consider primary care workload and treatment burden for patients: Secondary care organising follow-up bloods might allow more timely and helpful GP/Pharmacist review ➢ Consider how AKI fits with concept of frailty: evidence of some practices aligning with existing care planning practices including enrichment of summary care records

	Learning identified	Suggested actions
Patient	➢ Lack of clarity on patient awareness of AKI and Kidney health ➢ Patients with CKD unlikely to be aware of AKI risk ➢ Missed opportunities to communicate AKI risk/kidney health with patients including confusion over meds management	➢ Need to communicate AKI diagnosis with patients, provide written information and opportunity to discuss with a health professional. Need to check patient understanding ➢ Ensure info sheets embedded in IT software so easy to share and print off ➢ Consider how to frame conversations about AKI and kidney health: e.g. “Due to your illness your kidneys have been under a

	➢ The language of AKI and kidney failure is felt to be scary to patients	lot of stress lately. We need to protect them, keep an eye on you and check everything is OK."

	Learning identified	Suggested actions
Professional	➢ Culture of variation in coding ➢ Variation in awareness of AKI including awareness of GP Locums. ➢ AKI an acute problem but informs future management including prescribing ➢ Uncertainty on when or if to restart medication	➢ Address educational gaps/needs of GP knowledge in terms of definition of AKI, mortality, morbidity, aware association with increasing age. ➢ Illness complicated by AKI potential moments/prompt for a conversation about care/realistic. Think kidneys guidance and ➢ existing documents such as Scottish Government on Polypharmacy might help these conversations – medication management including consider de-prescribing

	Learning identified	Suggested actions
Practice team	➢ Importance of coding diagnosis: If AKI not coded – then clinician unaware of previous episodes. ➢ Care Planning: Link AKI into existing approach to care planning. Patients are reviewed and a care plan is initiated or updated with AKI information. ➢ Practice protocol: helps ensure coding and then a review. ➢ Pharmacist involvement: in process including invite/BP check/med review - Caution to ensure realistic medicine approach rather than protocol driven care	➢ Signpost team to resources. ➢ Need for team involvement and training: Read coders to be clear on protocol; locum training and resource pack. ➢ Need for a timely post discharge review: a) AKI is clearly flagged on timely discharge summary, allowing Practice team to initiate appointments for repeat bloods, BP, urine etc, without a delay for appointment with GP, and allow GP to review the results before seeing patient. A workflow would need to be set up at practice. ➢ Post-discharge plan could be implemented – adapt 'key information summary' and anticipatory care plans (ACPs) could fit here too which ticks other areas re prevention of hospital readmission

	Learning identified	Suggested actions
Secondary care	➢ Variable 'hit and miss' discharge information in terms of timeliness and variable content: reason/cause for AKI, stage, sharing of blood pressure, lack of SCr values, often lack of guidance on follow up including when to consider restarting stopped medication, lack of	➢ Timely and clear discharge summaries- addressing points above ➢ Discharge records to consider including what information has been provide to the patient about the AKI diagnosis – patient communication to happen

	information about what patient knew about AKI ➤ Disconnect: Those completing the discharge summary seemed to be unaware of the implications of the AKI. ➤ Some specialities better than others: renal > medicine >surgery ➤ Needed to go digging for information to piece it all together - takes time in practice ➤ Losing confidence/credibility: Examples of no confidence in AKI status e.g. CKD rather than AKI. ➤ Often when patients are discharged and they have meds at home they restart medications without guidance, further confusing the situation ➤ AKI likely to get coded in hospital if part of presentation at admission but may not be diagnosed/coded if a complicating factor during an admission.	during admission ➤ Good to have SCr value at admission at discharge - would create confidence in the diagnosis ➤ GP actions at top of discharge summary ➤ ➤ Ensure AKI listed in diagnoses list so effectively coded. Clear plan for monitoring ➤ Better communication following admission with AKI

	Learning identified	Suggested actions
System	➤ Clarity on responsibilities: Need clear communication on follow arrangements for patient s discharged to intermediate care ➤ AKI and issues of extreme age: learning opportunity and need to consider how relates to concept of frailty: is it associated with frailty or an indicator of frailty? Is AKI a 'Yellow Card'?	➤ Association of Sessional GPS (NASGP) updated about AKI management ➤ Primary care systems to accurately read code AKI diagnosis ➤ Patients often frail: If needed, secondary care to initiate blood tests on discharge & blood pressure (i.e. as per nurse follow for removal of sutures/dressing) to ensure timely follow-up, reduce patient burden as reduce visit, and ensure more timely and helpful review by GP/ pharmacist ➤ If AKI apparent to coding team then potential for more streamline follow-up review ➤ Introduce a protocol/template for AKI on our EMIS system ➤ Add an AKI section on the new community website with patient information ➤ AKI: Potential manageable focus of work to

	support establishment of GP Clusters in Scotland ➢ Consider AKI risk as part of routine annual reviews