Patient Safety Alert FAQs

1. **How did NHS England conclude that AKI was a challenge to patient safety?**

   The 2009 National Confidential Enquiry into Patient Outcome and Death (NCEPOD) Report demonstrated that a significant component of harm arises from poor standards of AKI care with limited access to specialist care and guidance. There was delayed diagnosis of AKI resulting in lack of treatment. In 2013, World Kidney Day focussed on AKI – common, harmful and potentially treatable – linked to more than 100,000 deaths per year and complicating illness for 20% of emergency admissions. At an event held to support World Kidney Day in 2013, the then National Clinical Director for Renal talked about the evidence which showed there were failures in recognising AKI, missed opportunities to treat AKI and potentially avoidable deaths associated with AKI. Working in partnership with the UK Renal Registry, and led by the National Clinical Director for Renal, Think Kidneys programme was established to provide the opportunity for national support to improve the detection, management, treatment and prevention of AKI. This was done through the development of patient safety alerts and commissioning levers, and new resources for health and social care professionals across the NHS, all with the aim of reducing incidence rates and improving outcomes for patients.

2. **Where can I see the Patient Safety Alerts?**

   The Patient Safety Alerts can be seen by clicking here for the first alert - **'Standardising the early detection of Acute Kidney Injury'**
   and here for the second alert - **'Supporting the care of patients with Acute Kidney Injury'**

3. **Who created the new algorithm to detect AKI warning stage test results used in the pathology labs reporting systems?**

   The original need to develop an alert system for AKI can be traced to the AKI Consensus meeting held in 2012 at the Royal College of Physicians of Edinburgh (RCPE). The RCPE has a tradition of holding multi-professional meetings to discuss how to tackle important clinical problems. The output of the meeting was the following consensus statement:

   > '*Identification of AKI in both primary and secondary care should be facilitated through introduction of e-alert systems. At present systems are being developed ad hoc.*
   > *A national group should be established to develop agreed standards for e alert systems recognising the need for some system dependent local flexibility. Components of the system should include an agreed definition of AKI based on the KDIGO classification and a standardised methodology for derivation of baseline serum creatinine. We recommend use of an enzymatic serum creatinine assay with an IDMS Traceable calibration to enable standardisation.'*

   Members of The Association for Clinical Biochemistry and Laboratory Medicine (ACB) suggested to its Council Executive that they (the ACB) should take these ideas forward by assembling stakeholders and developing a plan of action. A multi-professional group of renal physicians was established and charged with designing the algorithm. Representatives of the Laboratory

Information Management Systems (LIMS) were also included. They were crucial to the adoption of a system that would rely on electronic reports from pathology information systems to draw attention to patients who had already developed AKI, or who whose serum creatinine changes suggested that they could be in the early stages of AKI.

The algorithm was to be a standardised national implementation. Furthermore, the algorithm would reside in the LIMS rather than in any other information system to allow uniform reporting of AKI via the existing pathology test reporting systems.

4. What incentive was there for pathology labs to implement the new algorithm?

While reducing incidence rates of harm caused by potentially preventable episodes of AKI was not included in the system, the change required to detect and better manage AKI was system wide, across health communities. The first patient safety alert was -*Standardising the early detection of AKI.*

This Alert, issued by NHS England in June 2014, identified actions to support the implementation of the nationally agreed AKI algorithm into laboratory information management systems. This in turn provided the framework to ensure that a timely and consistent approach to the detection and diagnosis of patients with AKI can be taken across the NHS. The Alert also identified the requirement for warning stage test results identified by the algorithm, to be sent to a central point (UK Renal Registry) for national monitoring purposes. Pathology laboratories were required to switch on the alert for secondary care in March 2015 and for primary care in April 2016.

While there was no mandate to insist on implementation of the algorithm, over 70% of labs (May 2017) are no submitting test result data to the UK Renal Registry. Use of the algorithm and the submission of data is set to become part of the Clinical Pathology Accreditation Assessment during 2017/18, and will become a further driver for compliance and implementation.

5. Given a Master Patient Index on AKI is being developed, using the data submitted by labs to the UK Renal Registry, what will the data be used for?

The Master Patient Index will be a national database of all episodes of AKI treated by the NHS in England, held at the UK Renal Registry. It will allow the NHS to measure accurately for the first time the scale and severity of AKI, with information about recovery from AKI as well as mortality. Data is being added to the Master Patient Index monthly for 70% of pathology labs, and it is fast becoming the largest database on AKI in the world. The data provides a rich picture of the extent and impact of AKI on the population and will drive improvement initiatives and better outcomes for patients.
The data will be linked to other data sources and the UK Renal Registry will continue to work with NHS Digital to ensure it has appropriate permissions to access and link other relevant data to this Master Patient Index.

6. Where can I find the resources on implementing the AKI algorithm and transmitting the data?

All information and resources for clinical biochemists can be found here.

7. Is there a case study about where the CQUIN has been used successfully?

Southern Derbyshire CCG led a pathfinder project to implement both the national and a local CQUIN. Their work is described in this case study.
Other commissioning organisations involved in developing their services for AKI have published case studies here.

8. Where can I find more information about national patient safety initiatives?

Information on the NHS Patient Safety work is available by clicking here to NHS Improvement's website.