



Renal resource pack for adults

October 2021

Introduction

This pack has been put together with input from the Royal Cornwall Hospitals Trust (RCHT) and the NHS Kernow Clinical Commissioning Group (NHS Kernow) prescribing team.

This document aims to provide signposting for clinicians to important local and national resources when managing patients with renal conditions.

If you have any queries, please contact the NHS Kernow [prescribing team](#) or for specialist advice contact the renal team via the contacts below.

Document version control

Version	Changes	New version	Actioned by
1	New document	1	Pollyanna Bastian
2	Amended format as per accessibility guidelines, addition of renal resources and coronavirus, addition of appendix 2, addition of prescribing in patients with renal impairment at end of life, contact list updated. Addition of guidance from Royal College of General Practitioners, advice to contact renal transplant team for renal transplant patients with acute kidney injury, hyperkalaemia management of renal patients. Acute kidney injury hospital bundle removed. Addition of National Institute for Health and Care Excellence chronic kidney disease guidance.	2	Paige Rickard/ Pollyanna Bastian
2.1	Following suggestion from area prescribing committee and advice from Pollyanna Bastian renal association guidance hyperkalaemia replaced with link to acute GP guidance.	2.1	Paige Rickard

Renal team contacts and advice

The renal team can be contacted via [email](#).

This is a generic email address that provides an enquiry line for queries related to chronic kidney disease (CKD) for the attention of the renal team at RCHT. It is not for acute kidney injury (AKI) enquiries, the resources in this pack should be used in this

situation. If this doesn't help, please contact the on call renal consultant via RCHT switchboard.

This email address is only checked on normal working days so will not be checked at weekends or on bank holidays.

Enquires received via this email will receive a reply within 72 hours of the email being submitted.

Renal secretaries and consultants contacts

Dr Stephen Dickinson
Consultant in renal medicine
Secretary: Kathy Eldridge
Available Monday to Friday 8.30am to 5pm
Email: kathyeldridge@nhs.net
Telephone: 01872 253241

Dr Giorgio Gentile
Consultant in renal medicine
Secretary: Alisa Dray
Available Tuesday, Wednesday and Thursday 9.30am to 5.30pm
Email: Alisa.dray@nhs.net
Telephone: 01872 252831

Dr Paul Johnston
Consultant in renal medicine (including transplant)
Secretary: Sally Miners
Available Monday to Friday 8.30am to 5pm
Email: s.miners@nhs.net
Telephone: 01872 253264

Dr Rob Parry
Consultant in renal medicines (transplant lead)
Currently seconded to medical director
Secretary: Kathy Eldridge
Available Monday to Friday 8.30am to 5pm
Email: kathyeldridge@nhs.net
Telephone: 01872 253241

Dr Jon Stratton
Consultant in renal medicine (lead consultant)
Secretary: Donna Davies
Available Tuesday and Wednesday 8.15am to 6pm
Email: Donna.davies15@nhs.net
Telephone: 01872 252734

Address for correspondence:
Department of renal medicine
Royal Cornwall Hospital

Truro
TR1 3LJ

Renal pharmacist contacts

Pollyanna Bastian
Highly specialised pharmacist in renal (anaemia and transplant)
Available Monday, Tuesday and Friday 8:15am to 6pm
Email: Pollyanna.bastian@nhs.net
Telephone: 01872 253499

Renal dietitian contacts

Susan Kennedy
Lead renal dietitian
Telephone: Call RCHT switchboard on 01872 250000 and ask to be put through
Email: Susan.kennedy17@nhs.net

Stuart Gerty
Renal dietitian
Available Monday to Friday 9am to 5pm
Telephone: Call RCHT switchboard on 01872 250000 and ask to bleep 2888
Email: Stuart.gerty@nhs.net

Renal specialist nurses contacts

Home dialysis nurses can provide support for those patients undergoing home haemodialysis

Andrea Sullivan
Specialist nurse in home dialysis
Available Tuesday to Friday 8.30am to 5pm
Telephone: 01872 252863

Out of hours support
Grenville ward
Available 24 hours a day, 7 days a week
Telephone: 01872 252010

Renal anaemia management –support with managing anaemia in the renal population including predialysis, dialysis and transplant patients

Pollyanna Bastian
Specialist pharmacist in renal anaemia and independent prescriber
Available Monday, Tuesday and Friday 8:15am to 6pm
Email: Pollyanna.bastian@nhs.net
Telephone: 01872 253499 (answerphone outside of these times)

Predialysis nurses –support for those reaching end stage renal failure (ESRF)

Emma Trebilcock
Specialist nurse for predialysis education
Telephone: 01872 252065

Susan Durkin
Specialist nurse for predialysis education
Available Monday, Tuesday, Thursday and Friday 7.30am to 5.30pm
Telephone: 01872 252065

Transplant nurses –support and management of those patients who have either had or are being aimed to having a transplant

Emma Johns
Lead specialist nurse in transplant and independent prescriber
Available Monday, Tuesday, Thursday 7am to 7.30pm
Telephone: 01872 252292

Samantha Abbott
Specialist nurse in transplant
Available Monday to Wednesday 7am to 5pm, Friday 7am to 6pm
Telephone: 01872 252292

Renal social support nurse

Andrea Cabanig
Renal specialist practitioner
Telephone:01872 252081

Acute kidney injury resources and guidance

The National Institute for Health and Care Excellence (NICE) has produced a [guideline](#) on AKI covering prevention, detection and management.

Another helpful resource is the [think kidneys website](#); in particular the [guidance for primary care](#) around how to manage AKI. It has been noted that some of the think kidneys resources are overdue for review, this has been queried with the think kidneys team who confirm a working group is reviewing and revised versions should be updated soon.

Information about stages of AKI can be found in the guidance on [responding to AKI warning stage test results for adults in primary care](#)

There are 2 patient safety alerts which have been released around AKI which are displayed in appendix 1 and 2.

Acute kidney injury and primary care advice

The think kidneys website contains guidance aimed at primary care around [recommended response time to AKI warning stage test results for adults](#) and also information on [recognising and responding to AKI for adults](#).

The South West strategic clinical network has published [top ten tips for primary care](#) around the topic of AKI.

The Royal College of General Practitioners has developed an [AKI toolkit](#), including [post hospitalisation AKI guidance](#).

Acute kidney injury and medicines advice

Think kidneys also contains guidance on [potentially problematic drugs and actions to take in primary care](#).

There is also guidance for [medicines optimisation in patients with AKI](#) and information on [restarting medication after an AKI](#)

There is also a position statement from the think kidneys board relating to [sick day guidance in patients at risk of AKI](#).

RCHT have developed their own sick day guidance statement: RCHT renal department are in agreement with the current guidance whereby sick day guidance should be provided on an individual patient basis rather than as a set of specific rules. If a renal transplant patient should present with an AKI please contact the renal transplant Team.

Please be aware there are a number of other [think kidney publications](#) available which can support AKI management and provision of information to patients.

The renal drug handbook is also available and can be accessed using an open athens account via the library catalogue at the [Cornwall health library website](#), this is a helpful resource to review dosage of medication and whether it may need to be reduced if a patient's renal function has declined.

Please seek advice from the renal team or medicines optimisation team if any further support is required.

Acute kidney injury and patient resources

Information leaflets are available for [patients at risk of AKI](#) and also [patients with AKI](#) from the think kidneys website.

There are further resources for patients (including in easy to read format) on the [think kidneys website](#).

Chronic kidney disease guidance

NICE has produced guidance covering [CKD: assessment and management](#). This guideline covers care and treatment for people with, or at risk of, CKD. It aims to prevent or delay the progression and reduce the risk of complications and cardiovascular disease. It also covers managing anaemia and hyperphosphataemia associated with CKD.

Prescribing in patients with renal impairment at end of life

Guidance has recently been issued on [prescribing in patients with renal impairment at end of life \(estimated glomerular filtration rate less than 30\)](#). This guidance can also be found on the formulary website under palliative care.

Please seek advice if you have any questions at all about symptom control, side effects, management or prescribing advice via the following contacts:

- RCHT: specialist palliative and end of life care team on bleep 3055 via RCHT switchboard (hours of work daily 8am to 4pm)
- Community setting: Bodmin switchboard 01208 251300 (daily 9am to 5pm)

For advice outside of these hours contact Cornwall hospice care advice line on 01736 757707.

Renal resources and coronavirus

In response to the coronavirus (COVID-19) pandemic, NICE have produced several COVID-19 rapid response guidelines including:

- [Dialysis service delivery](#)
- [Renal transplantation](#)
- [Chronic kidney disease](#)

There is also guidance on AKI in people with COVID-19 within [NICE guideline NG191](#), including information on assessing and managing AKI, as well as follow up advice.

More guidance may be produced in future following publication of this resource pack; the full list of COVID-19 guidance is available from the [COVID-19 section](#) of the NICE website.

Hyperkalaemia management of renal patients

There is guidance on hyperkalaemia in primary care on the [acute GP service website](#). This may be helpful for practice teams although support can always be sought from the renal team for advice using the contacts above.

[Sodium zirconium cyclosilicate](#) (Lokelma) is a potassium lowering medication (hospital only on the formulary), prescriptions and monitoring will be managed by RCHT. Practice teams may need an awareness of medication for patients on therapy based in the community.

For information: [Patiromer](#) (Veltassa) is another medication used for treatment of hyperkalaemia in adults, this is also a hospital only drug and is not used in Cornwall.

References

- 1) Acute kidney injury: prevention, detection and management. NICE guideline [NG148]. Published 18 December 2019 [accessed 25 November 2020]. Available from: <https://www.nice.org.uk/guidance/ng148>
- 2) Think kidneys. UK renal registry 2020 [accessed 25 November 2020]. Available from: <https://www.thinkkidneys.nhs.uk/>
- 3) Acute kidney injury top ten tips for primary care. South West cardiovascular clinical network. Date unknown. Available from <http://www.swscn.org.uk/wp/wp-content/uploads/2016/04/AKI.-Top-Ten-Tips-for-Primary-Care-SWSCN.pdf>
- 4) Guidance for prescribing in patients with renal impairment at the end of life (estimated glomerular filtration rate <30). Adams S, Thomas E, Carey A, Hart A, Gibbins J, Scott K, Lanchbury L. September 2020. Available from: https://eclipsesolutions.org/UploadedFiles/508_CHA4472GuidanceForPrescribingInPatientsWithRenalImpairmentAtTheEndOfLife.pdf
- 5) COVID-19. NICE 2020 [accessed 25 November 2020]. Available from: <https://www.nice.org.uk/guidance/conditions-and-diseases/infections/covid19>
- 6) Acute kidney injury toolkit. Date unknown. Royal College of General Practitioners [accessed 20 August 2020]. Available from: [Acute Kidney Injury Toolkit \(rcgp.org.uk\)](#)
- 7) Guidance on the timeliness of post-discharge care for adults following acute kidney injury. Date unknown. Royal College of General Practitioners [accessed 20 August 2020]. Available from: <296A694BFB724DA497E17A656F5B392D.ashx> (rcgp.org.uk)
- 8) Lokelma 10 g powder for oral suspension. April 2021. AstraZeneca UK Limited [accessed 20 August 2020]. Available from: [Lokelma 10 g powder for oral suspension - Summary of Product Characteristics \(SmPC\) - \(emc\) \(medicines.org.uk\)](#)
- 9) Wallace, T. 2021. Email to Paige Rickard 25/8/2021.
- 10) Chronic kidney disease: assessment and management. NICE, August 2021. Accessed 6/9/2021. Available from: [Overview | Chronic kidney disease: assessment and management | Guidance | NICE](#)
- 11) Hyperkalaemia in Primary Care. Date unknown. Acute GP service Cornwall, Cornwall Partnership NHS Foundation trust. Accessed 5/10/2021. Available from: [Potassium | acute-gp \(acuteGPCornwall.com\)](#)

Appendix 1: patient safety alert- standardising the early identification of AKI



Patient Safety Alert

Stage Three: Directive Standardising the early identification of Acute Kidney Injury

9 June 2014

Alert reference number: NHS/PSA/D/2014/010

Alert stage: Three - Directive

National patient safety data tells us that patients are dying and suffering severe harm due to a delay in detecting Acute Kidney Injury (AKI). AKI often occurs without causing any symptoms or signs and its presence frequently goes unrecognised by patients and doctors alike.

"A patient with a complex physical and mental health background became unwell over a weekend. Despite persistent hypotension there was no record of fluid balance. Bloods were delayed until late Sunday night, indicating acute kidney injury. Acute kidney injury not recognised or commented on until mid way through the following day. Medications given to the patient over the weekend included drugs contraindicated in renal failure. The patient was admitted to ICU and on admission was unconscious/shocked. There were multiple systematic failures in the management of this patient including a life threatening delay in critical care of >12 hours and systems failure in the recognition of deteriorating patients."

Acute Kidney Injury (AKI) is a sudden reduction in kidney function. Complex long term medical conditions, medication and intercurrent illness are often complicated by AKI. It is estimated that 1 in 5 emergency admissions into hospital are associated with AKI, prolonging inpatient care and contributing to 100,000 deaths in secondary care. National Confidential Enquiry into Patient Outcome and Death (NCEPOD) estimated that one quarter to one third of cases have the potential to be prevented.

A national algorithm, standardising the definition of AKI has now been agreed. This provides the ability to ensure that a timely and consistent approach to the detection and diagnosis of patients with AKI is taken across the NHS.

This algorithm has been endorsed by NHS England and it is recommended that the algorithm is implemented across the NHS. When integrated into a Laboratory Information Management System (LIMS) the algorithm will identify potential cases of AKI from laboratory data in real time and produce a test result. The laboratory system will then send the test result, using existing IT connections to patient management systems.

NHS England in partnership with the UK Renal Registry has launched a National AKI Prevention Programme which will include the development of tools and interventions. A priority for the Programme is the development and adoption of e-alert systems, based on the test result, which will proactively notify clinicians when a patient has AKI, supporting implementation of AKI NICE guidance (CG169).

Although primary care is an important focus for detection and prevention of AKI, it is anticipated that AKI results will be sent to primary care in a second phase of the programme. Meanwhile Trusts are expected to discuss with primary care representatives the management of AKI test results, particularly at times when deputizing services are providing medical cover.

Further support will be provided by the National Programme as exemplar e-alerting system are developed: www.england.nhs.uk/AKIProgramme

The AKI detection algorithm can be found at the following link:
www.england.nhs.uk/aki-algorithm

Actions

Who: NHS acute trusts and foundation trusts providing pathology services

When: By 9 March 2015

- 1** Bring this alert to the Director of Pathology/IT with responsibility for the upgrading of LIMS systems
- 2** Work with local LIMS supplier to integrate AKI algorithm into LIMS system
- 3** Work with local LIMS supplier to ensure the test result goes to local Patient management systems and into a data message sent to a central point for national monitoring purposes
- 4** Communicate with appropriate primary care providers to ensure they seek advice if test results are received
- 5** Regularly access NHS England AKI website where additional resources and information will be provided as developed

Supporting information

For further information to support the implementation of this alert go to www.england.nhs.uk/aki-algorithm

Patient Safety | Domain 5
www.england.nhs.uk/patientsafety

Contact us: patientsafety.enquiries@nhs.net
Sign up for regular updates: www.england.nhs.uk/patientsafety

Publications Gateway Reference: 01702

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Appendix 2: patient safety alert - resources to support the care of patients with AKI



Classification: Official



Patient Safety Alert

Resources to support the care of patients with acute kidney injury

17 August 2016

Alert reference number: NHS/PSA/RE/2016/007

Alert stage: Two - Resources

Acute kidney injury (AKI) is a sudden reduction in kidney function. It is not a physical injury to the kidney and usually occurs without symptoms, making it difficult to identify. Late diagnosis can miss opportunities for early treatment, leading to prolonged and complex treatment and reducing the chances of recovery.

In England over half a million people develop AKI every year and 5-15% of all admitted hospital patients are affected.¹ Around 40,000 excess deaths per annum are associated with the condition, up to a third of which are thought to be preventable.² Older people and those with chronic conditions such as heart failure, diabetes and chronic kidney disease are particularly vulnerable at times of acute illness such as sepsis.

In 2013, to further raise awareness of key steps in diagnosing and treating AKI, a three year National AKI Prevention Programme was established in partnership with NHS England and the UK Renal Registry (part of the Renal Association) under the brand 'Think Kidneys'.

This Patient Safety Alert has been issued to continue to raise awareness of AKI and to signpost clinicians from all care settings, including GPs and community pharmacists, to a set of resources developed by Think Kidneys. The resources support the public and staff working in acute, primary and community care to better understand kidney health and to help prevent, identify and manage AKI.

The Think Kidneys resources for primary care should provide the necessary support for GPs so that the results of any AKI tests they request can be sent directly back to them from the laboratory.

The AKI resource set is available on the Think Kidneys website www.thinkkidneys.nhs.uk/aki/think-kidney-publications/

A previous Patient Safety Alert 'Standardising the early identification of Acute Kidney Injury'³ was issued by NHS England in June 2014 to draw attention to the safety implications of AKI. That alert made it a requirement that the AKI algorithm, endorsed by NHS England, was integrated into trust laboratory information management systems and data sent to the UK Renal Registry.

Actions

Who: Providers of NHS-funded care in all settings where patients may have AKI including acute, community and mental health care, general practice and community pharmacies

When: To commence as soon as possible and to be completed no later than 17 February 2017

-  Bring this alert to the attention of those holding leadership roles for AKI in your organisation (eg medical directors in secondary care, lead GPs and lead pharmacists in primary care).
-  Review the resources signposted in this alert and identify how they can be used to ensure care provided by your organisation is in line with guidance.
-  Develop an action plan to ensure any relevant resources are used to improve local systems and processes for the care of patients with AKI.
-  By either circulating this alert or through local alternatives (such as newsletters, local awareness campaigns etc) ensure that all frontline staff are aware of the key messages and any linked resources relevant to their practice.

See page 2 for references and details of stakeholder engagement

Patient Safety
improvement.nhs.uk/resources/patient-safety-alerts

Contact us: patientsafety.enquiries@nhs.net

NHS Improvement (August 2016)

Publication code: IT 05/16