

The University of Manchester



Collaboration for Leadership in Applied Health Research and Care (CLAHRC) Greater Manchester

NHS Salford Clinical Commissioning Group

Preventative Interventions for Acute Kidney Injury



Introduction

Tackling acute kidney injury in order to reduce avoidable harm is a national priority (www.thinkkidneys.nhs.uk). Acute Kidney Injury (AKI) is characterised by a rapid and recent reduction in a person's kidney function. AKI is common, harmful and costly. It is estimated to affect around 1 in 5 emergency hospital admissions. AKI is more common in older people and those with multiple long-term conditions. In order to prevent AKI, the National Institute of Health and Care Excellence (NICE) highlights the need to communicate about the risk of AKI with patients, including the need to ensure adequate fluid intake as well as consider temporarily stopping certain medicines during episodes of acute illness. Resources to support temporary cessation of medicines during acute illness have been termed 'sick day rules.' However, although sick day rules have been recommended, currently there remains limited evidence surrounding their implementation and effectiveness Building on work conducted by NHS Highland, who developed the sick day rules card, we seek to develop an evidence base surrounding their implementation, effectiveness and acceptability.

Listed medications

The list of medicines on the card is not exhaustive but they are highlighted because:

 Diuretics can cause dehydration or make dehydration more likely in an ill patient

Method

The project entails implementation of kidney health initiatives across general practices and community pharmacists within Salford CCG.

The project will entail two phases as follows:

- ACE inhibitors, angiotensin II receptor blockers and NSAIDs may impair kidney function in a dehydrated patient, which could lead to kidney failure
- Metformin dehydration increases the risk of lactic acidosis, a serious and potentially life-threatening side effect of metformin.

Delivery to patients and carers

Patients and/or carers are provided with information when they are given the card to ensure understanding and avoid medical problems. The information given includes the following:

- Some medicines should not be taken when losing fluid through illness as they can either increase the risk of dehydration, or dehydration can lead to potentially serious side effects of the medicine
- Illnesses that can cause dehydration include vomiting, diarrhoea and fever
- This advice does not apply to minor sickness or diarrhoea, which means a single episode
- The patient should be told which of their medications the card is referring to
- If the patient has heart failure, they should be told they may stop these medicines for a maximum of 48 hours but after that they need to contact the GP or heart failure team for further advice
- **Phase 1** A sick day rules card will be administered through general practices and community pharmacies to all patients in Salford CCG who are prescribed medication that may benefit from temporary cessation during episodes of acute illness.



 Phase 2 Facilitated implementation of kidney health initiatives by Medicine s Management Pharmacists see below:

> MM pharmacists visit each participating practice regularly

• If the patient's heart failure condition has been unstable recently they should contact the heart failure team for advice

Qualitative evaluation

The evaluation will use stakeholder interviews, to explore the process of implementation and delivery of AKI prevention initiatives - including the sick day rules card - and their acceptability to providers , patients and carers.





The evaluation will aim to: ascertain knowledge and understanding about AKI and medicines management; explore experiences of providing and using the initiatives; identify the barriers and enablers to implementing and using kidney health initiatives for people at risk of AKI, in primary care. The findings will provide an evidence base for the kidney health interventions implemented in Salford and lay the groundwork for future potential larger scale evaluations.

For more information please visit our website: <u>www.clahrc-</u> <u>gm.nihr.ac.uk/salford-sick-day-rules</u>

The CLAHRC Greater Manchester is part of the National Institute for Health Research and is a partnership between providers and commissioners from the NHS, industry, the third sector and the University of Manchester W: clahrc-gm.nihr.ac.uk E: clahrc@srft.nhs.uk T: @CLAHRC_GM