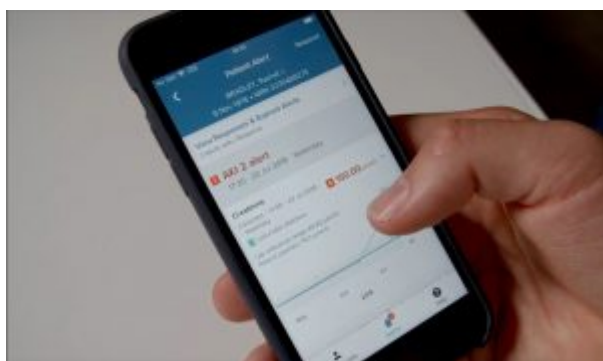


## ***New CLAHRC research shows the impact of the “Streams-AKI” app***

Detection of one of the biggest killers in the NHS - Acute Kidney Injury (AKI) - has been cut from hours to minutes thanks to the introduction of a new mobile app.

Working in partnership with Deepmind and the Royal Free London NHS Foundation Trust, CLAHRC researchers based at UCL evaluated the impact of the digital intervention- an App called Streams - and the clinical pathway it underpins - on safety and clinical outcomes for inpatients at risk of AKI.



***The STREAMs app sends an instant alert to NHS staff if a patients test results show they are is at risk of Acute Kidney Injury***

AKI is a sudden episode of kidney failure or kidney damage defined by changes in urine output or serum creatinine - a waste product filtered by our kidneys. AKI can affect other organs such as the brain, heart, and lungs. It is common in hospital inpatients, in intensive care units, and especially older adults. AKI is estimated to cause 40,000 deaths and cost the NHS over £1 billion every year.

We compared results between the hospital site using the app versus another site not using the app. The evaluation of Streams highlighted a significant improvement in the reliability of recognition, time to treatment and reduced costs.

A short film summarises the results of our evaluation which took place from May 2017 across

the Trust.

***Mary Emerson, lead nurse specialist for the patient at risk and resuscitation team, with patient Edgar Ferrante.***

The short film accompanies three papers published today (July 31st)

The research generated a great deal of media coverage which included an appearance on BBC Breakfast by CLAHRC Director Professor Rosalind Raine



..and a news item on the BBC website

Health

# Kidney condition detected in minutes by app

By Hugh Pym  
Health editor

🕒 1 August 2019

[f](#) [💬](#) [🐦](#) [✉️](#) [Share](#)



A nurse shows a patient with acute kidney injury his blood test results on her phone

Read the papers below

Connell A, Raine R, Martin P, Barbosa EC, Morris S, Nightingale C, Sadeghi-Alavijeh O, King D, Karthikesalingam A, Hughes C, Back T, Ayoub K, Suleyman M, Jones G, Cross J, Stanley S, Emerson M, Merrick C, Rees G, Montgomery H, Laing C

***Implementation of a Digitally Enabled Intervention to Detect and Treat Acute Kidney Injury Arising in Hospitalized Patients: Evaluation of Impact on Clinical Outcomes and Associated Health Care Costs***

J Med Internet Res 2019;21(7):e13147

<http://www.jmir.org/2019/7/e13147>

Connell A, Black G, Montgomery H, Martin P, Nightingale C, King D, Karthikesalingam A, Hughes C, Back T, Ayoub K, Suleyman M, Jones G, Cross J, Stanley S, Emerson M, Merrick C, Rees G, Laing C, Raine R

***A Qualitative Evaluation of User Experiences of a Digitally Enabled Care Pathway in Secondary Care***

J Med Internet Res 2019;21(7):e13143

<http://www.jmir.org/2019/7/e13143/>

Alistair Connell Hugh Montgomery, Peter Martin Claire Nightingale Omid Sadeghi-Alavijeh, Dominic King Alan Karthikesalingam, Cian Hughes, Trevor Back, Kareem Ayoub, Mustafa Suleyman, Gareth Jones, Jennifer Cross, Sarah Stanley, Mary Emerson, Charles Merrick, Geraint Rees, Chris Laing and Rosalind Raine  
***Evaluation of a digitally-enabled care pathway for acute kidney injury management in hospital emergency admissions***

npj Digital Medicine (2019) 2:67

<https://www.nature.com/articles/s41746-019-0100-6>