



June
2021

CURE

CENTRE FOR URGENT AND EMERGENCY CARE RESEARCH



WELCOME!

With the summer months finally creeping in we wanted to keep you updated with everything that has been happening here at CURE over the last quarter.

Thank you to everyone who contributed via email and Twitter and I hope you enjoy reading. Don't forget you can keep up to date on goings on via @CURE_SchARR on Twitter and on the CURE website.

WELCOME TO OUR NEW PHD STUDENT

My name is Naif and I'm a teaching assistant in the Faculty of Applied Medical Sciences at Jazan University in Saudi Arabia.

My PhD will be looking into the prehospital trauma assessment & management for older patients and their association with patient outcomes, challenges and barriers.

My background is as a paramedic with a BSc in Emergency Medical Services from Umm Al-Qura University and Msc Trauma Sciences from the University of Southampton.





PRESENTING AT HSR UK CONFERENCE 2021

The HSR UK conference will be taking place online between the 6th and 8th July and will feature many speakers including Rebecca Simpson from CURE who will be discussing a retrospective analysis exploring the characteristics of non-urgent ED attendances in children and young people. Below is a brief taste of what Beckie will be speaking on:

"Despite children and younger people being higher users of emergency department (ED) services, this usage of the urgent and emergency care system does not receive the same attention as those of adults. A better understanding of children's non-urgent attendances to ED is needed before possible solutions can be considered. Therefore we measured the number of non-urgent attendances in children to ED and explored who present in this way and when.

There was an overall rate of 21% for non-urgent attendances in children under 16. Those in the youngest age category were more likely to present with non-urgent attendances, with over half of all non-urgent attendances in children under 5 years. Those who were under 5 and a non-urgent attendance were more likely to arrive by ambulance, particularly out of hours. Non-urgent attendances are also seen more quickly in ED with both mean and the median total time in department well below the four-hour target."

Ticket registration is still open should you wish to attend, all details can be found on the HSR UK website [here](#)

CONTRIBUTE

If you have something to share in the next newsletter please email m.botting@shef.ac.uk.

For more immediate sharing tweet @CURE_ScHARR or tag us.

EXPLORING THE IMPACT OF PRE-ALERTS ON PATIENTS, AMBULANCE SERVICE AND EMERGENCY DEPARTMENT STAFF



A new study led by Fiona Sampson at CURE will explore how ambulance clinicians alert the Emergency Department (ED) that a critically ill patient is on their way. If used correctly, pre-alerts can help to provide earlier access to time-critical treatment and improved outcomes for patients. However, if pre-alerts are used inappropriately, or used too often, then the ED staff may not be able to respond properly or may stop taking them seriously. Use of pre-alerts is increasing, but little is known about how they are used, who they are used for or how the EDs respond to them. Given the potential importance of pre-alerts for patient safety it is vital that we understand the impact of pre-alert decisions on patients, ambulance staff and ED staff and develop recommendations for best practice.

This research will explore how pre-alert decisions are made and communicated, and the impact of pre-alerts decisions on receiving EDs and patients, using a mixed-methods study design. Researchers will carry out interviews with ED staff, ambulance clinicians, pre-alerted patients and their carers within 3 ambulance services, as well as a national survey of ambulance clinicians and observation of pre-alert practice within 6 different EDs. The findings will be discussed at a national feedback workshop, including ED and ambulance staff, key national stakeholders and members of the public, to co-produce recommendations for improving pre-alert practice.

The research is a collaboration between researchers in CURE/SchARR, co-applicants from Yorkshire, East Midlands and West Midlands Ambulance Services and PPI collaborators. The study has been funded by a grant of £555,740 from NIHR Health Services & Delivery Research Programme and will run from April 2021 – September 2023.

You can read the press release for the project as well as further information [here](#).

PRE-HOSPITAL LATERAL FLOW TESTING PILOT

CURE researchers are undertaking a service evaluation of a pilot Lateral Flow Testing and Direct Admissions pathway with Yorkshire Ambulance Service and Hull University Hospitals NHS Trust.

The pilot aims to identify COVID-19 positive patients who are likely to be admitted to hospital who can be admitted directly to a COVID ward, and bypass the Emergency Department.

Researchers will be interviewing paramedics who took part in the pilot, those who did not take part and staff who worked in the receiving hospital to understand barriers and enablers for undertaking lateral flow testing within the ambulance service. The project was funded by a £10k grant from Yorkshire Ambulance Service and is led by Fiona Sampson and Jo Coster.

PUBLIC HEALTH INTERVENTIONS WITHIN THE AMBULANCE SERVICE

Suzanne Ablard and Suzanne Mason worked with several researchers from across The School of Health and Related Research (ScHARR) and Yorkshire Ambulance Service NHS Trust (YAS) on a project funded by Public Health England. A rapid review of available evidence was undertaken to find out what the current role of the ambulance sector is in the delivery of public health / preventative interventions and what impact this activity has on population health and ambulance sector outcomes.

The review found there is potential for UK ambulance services to increase their involvement in public health activity through community outreach activities, health promotion activities, expanding alternative referral pathways / signposting to health and social care services, and supporting health intelligence using ambulance data. However, whilst many of the activities the ambulance service currently does can be categorised as public health; an ambulance-focussed demand management outcome measure was taken when evaluating these activities. Therefore, it is recommended future evaluations of public health initiatives introduced within the ambulance sector (and the wider health system) need to include data from multiple health sectors (e.g. ambulance services, social services, primary care) to assess the impact of the initiative both by, and beyond, the ambulance sector.

For further information and access to the full report please contact Suzanne Ablard (s.ablard@sheffield.ac.uk).

RECENT PUBLICATIONS

Predicting need for hospital admission in patients with traumatic brain injury or skull fractures identified on CT imaging: a machine learning approach.

Marincowitz C, Paton L, Lecky F, Tiffin P. Emerg Med J. 2021 Apr 8:emermed-2020-210776. doi: [10.1136/emermed-2020-210776](https://doi.org/10.1136/emermed-2020-210776). Epub ahead of print. PMID: 33832924.

Patient compliance with NHS 111 advice: Analysis of adult call and ED attendance data 2013-2017

Lewis J, Stone T, Simpson R, Jacques R, O'Keeffe C, Croft S, Mason PLoS One. 2021 May 10;16(5):e0251362. doi: [10.1371/journal.pone.0251362](https://doi.org/10.1371/journal.pone.0251362). PMID: 33970946; PMCID: PMC8109810.

Frequent attendance at the emergency department shows typical features of complex systems: analysis of multicentre linked data

Burton C, Stone T, Oliver P, *et al* *Emergency Medicine Journal* Published Online First: 26 May 2021. doi: [10.1136/emermed-2020-210772](https://doi.org/10.1136/emermed-2020-210772)