

Newsletter Winter 2022/ 23

Dr Greg Whitley: First paramedic in England to be awarded a HEE/NIHR Advanced Clinical and Practitioner Academic Fellowship

Dr Gregory Whitley, a paramedic research fellow for the East Midlands Ambulance Service NHS Trust and a lecturer in paramedic science at the University of Lincoln, has recently been awarded a prestigious Health Education England (HEE)/National Institute for Health and Care Research (NIHR) Integrated Clinical and Practitioner Academic (ICA) Advanced Clinical and Practitioner Academic Fellowship (ACAF). This makes Greg the first paramedic in England to receive this award.



Greg is a postdoctoral UK registered paramedic with over 12 years of experience in the ambulance service. He completed his PhD at the University of Lincoln in 2020 on the topic of pre-hospital pain management in children, funded by the NIHR Applied Research Collaboration (ARC) – East Midlands. He has recently completed a postdoctoral bridging award, delivered through the University of Nottingham, and funded by HEE and the NIHR ARC East Midlands. This bridging award provided Greg the resources to develop his successful ACAF application.

The ACAF award will fund a programme of research titled: “improving Pain mAnagement for childreN and young people attendeD by Ambulance (PANDA): A realist informed intervention development and feasibility study.”

The aim of this study is to explore the experiences of children and young people who have been attended by ambulance for a painful condition, along with their parents/carers and ambulance clinicians, and to develop and test a new method to improve pain management.



In addition to the PANDA project, the ACAF award will fund a bespoke programme of academic and professional training along with a research trip to Canada to learn from experts on the topic of pain management in children and young people. This award marks a significant step forward for the paramedic profession, demonstrating the commitment of paramedics to design and deliver high quality research to improve the quality of care for the patients they serve.

The project will be hosted by the East Midlands Ambulance Service NHS Trust in partnership with the University of Lincoln. The study will be supported by colleagues from the Community and Health Research Unit and the Lincoln Clinical Trials Unit, both based at the University of Lincoln. Colleagues from the University of Nottingham, University of Hertfordshire and Monash University will support the fellowship, along with colleagues from the NIHR ARC – East Midlands. The PANDA study will begin in September 2023 and is planned to complete in May 2027.

For further details on the PANDA study, please contact Dr Gregory Whitley: Email Gregory.whitley@emas.nhs.uk Twitter: [@gregwhitley7](https://twitter.com/gregwhitley7)

Improvement Science and Research Methods seminar December 2022: Challenges and pitfalls of ambulance service research

Dr Michael Smyth, Assistant Professor in Emergency and Critical Care at the University Warwick, gave the December Improvement Science and Research Methods seminar on the 'Challenges and pitfalls of ambulance service research'. Mike has had 25 years experience as a paramedic, and is currently a trainee Advanced Critical Care Practitioner at University Hospital Coventry and Warwickshire. Mike is vice-chair of the International Liaison Committee on Resuscitation (ILCOR) Basic Life Support Task Force and Science Chair of the European Resuscitation Council (ERC) Basic Life Support Science and Education Committee. He is also co-chief investigator for the PROTECTeD study,



addressing the challenges faced by paramedics relating to termination of resuscitation, and the PACKMaN study, a randomised controlled trial comparing ketamine and morphine for analgesia in trauma.



The presentation covered trial methods including parallel group, cluster and stepped wedge randomised and factorial designs, the challenges of consent, data collection and the national data opt-out.

CaHRU awarded Lincoln Policy Hub grant to shape policy on Community First Responders

In December 2022, Dr Gupteswar Patel and Prof Niro Siriwardena from CaHRU successfully secured funding from the Lincoln Policy Hub to engage decision- and policy-makers for ambulance services and CFR schemes at local, regional and national levels to co-create and inform policy relating to CFRs and to explore improvements and innovations in CFR schemes.

Community First Responder (CFR) schemes in the United Kingdom seek to involve communities in health care. CFRs have been providing emergency and prehospital care to communities for over a decade. The CFRs are community members or off-duty medical and allied health professionals, trained by ambulance services to reach a potential life-threatening emergency in the first vital minutes and provide appropriate care until more highly skilled ambulance staff arrive. They can also actively raise awareness of health issues, provide support to individuals impacted by them, and serve as a link between healthcare professionals and the general public.



Our recent study of 'Community First Responders' role in the current and future rural health and care workforce', led by Niro Siriwardena showed that CFRs contributed to a significant number and proportion of the most urgent emergency calls (Botan et al 2023), particularly in rural areas but also revealed problems and potential solutions for governance, deployment, recruitment and retention of CFRs (Patel et al 2023), and investigated actual and potential innovations that could be spread or introduced to support CFRs and CFR schemes across the country.

CaHRU has employed a range of innovative research approaches to investigate gaps in local and regional healthcare and to identify solutions through policy debates and engagement. These problems include but are not limited to a contribution to patient outcomes, clinical and operational practice, building the evidence base and informing policies. A series of stakeholder engagement activities will be undertaken to inform policies for improving the effectiveness and efficiency of CFRs and ambulance services, therefore impacting the lives of patients and the public accessing prehospital emergency care delivered by CFRs. This policy engagement activity will also enhance knowledge of the policy environment and enforce evidence-based decision-making.

This project will strengthen collaboration between CaHRU academics and national policy experts and co-produce policies on CFR schemes, especially governance, scope of practice, inclusivity, recruitment, retention and innovations. Collaboration and co-production between researchers and policy-makers will increase the policy impact. A crucial aspect of this project is to conduct a stakeholder workshop at the 999 EMS conference in June 2023 to understand the effect of the project on policy and practice.

Improvement Science and Research Methods seminar January 2023: Dealing with missing data: imputation or deletion?



Dr Vanessa Botan, Post-Doctoral Research Associate in Medical Statistics at CaHRU gave the first seminar of 2023 on the topic of ‘Dealing with missing data: imputation or deletion?’

Vanessa’s background is multidisciplinary and diverse. She has developed expertise in statistical data analyses and research methods across various fields including biomedical sciences, neuroscience, and psychology. Her ongoing academic interests include medical statistics and intervention-based research.

The seminar addressed the issue of missing data. Vanessa discussed the two main options available to deal with it: deletion and imputation, touching on the most common imputation methods. Vanessa also provided examples of situations in which they can be and had been used. The seminar was well attended online and in person, it was very well received and generated many questions. Contact Sue Bowler sbowler@lincoln.ac.uk if you would like details of future seminars.

Mental Health and Probation: Moving Towards Reform

Special Edition of the European Journal of Probation

Dr Coral Sirdifield (CaHRU, University of Lincoln) and Professor Charlie Brooker (Royal Holloway, University of London) have edited a special edition of the European Journal of Probation, which was published in December 2022.

The special edition was titled ‘mental health and probation: moving towards reform and can be accessed at: <https://journals.sagepub.com/toc/EJP/current>.

Alongside an [editorial](#) from Professor Brooker and Dr Sirdifield, it shares international descriptions of and learning from innovative probation practice for supporting people with mental illness on probation. Furthermore, it includes two papers describing the policy context within which work in this field is developing and key priorities for future practice development.



The following articles are included:

- [Identifying mental illness and monitoring mental health in probation service settings](#) (Brooker, C., Sirdifield, C., and Parkhouse, T.)
- [Mental health and probation supervision in Ireland](#) (Power, C., and McNally, G)
- [Psychological Services to support probation in Northern Ireland and Malta](#) (Avellino, C., O’Hare, G., and Scicluna, S)
- [The role of the specialist mental health probation officer](#) (Morick, Y., and Heitz, K)
- [The bridging program for social reinsertion. Early detection of people with serious mental illness who are prosecuted in Spain](#) (Alvarez-Crespo, R., Arroyo-Cobo, J.M., and Negredo-Lopez, L)
- [The thematic review of mental health in probation in England and Wales](#) (Buckley, L)
- [What does Dame Carol Black’s review of drug and alcohol misuse services mean for probation services?](#) (Ball, K)

We hope that the collection will be of interest to policy makers and criminal justice practitioners wishing to develop and refine processes for identifying and supporting people on probation with mental illness, and to those wishing to commission and evaluate innovative practice developments in this field.

Improvement Science and Research Methods seminar February 2023: 'Reaching the parts other surveys don't reach' – mixed methods surveys and their application



On 15th February 2023, Professor Niro Siriwardena gave the CaHRU seminar: 'Reaching the parts other surveys don't reach' – mixed methods surveys and their application'. Niro is Professor of Primary and Prehospital Health Care and Director of the Community and Health Research Unit, the research centre of the School of Health and Social Care.

Niro talked about mixed methods surveys and their application. The seminar covered relevant aspects of theory, design, analysis, and integration of quantitative and qualitative data as applied to mixed methods surveys, with examples of studies conducted by members of CaHRU and others. If you were unable to attend there is a link to watch the video of the seminar on the CaHRU blog with a copy of the slides <https://www.cahru.org.uk/>

The next seminar from 1100 – 1200 on 29th March will be given by Professor Anna Tarrant titled: Using cocreation in a qualitative longitudinal impact study to affect social change: methodological innovations in the Following Young Father Further study.

Publications

Kordowicz M, Siriwardena AN (2023). Quality improvement in healthcare: a guide for students and practitioners. Sage, London.

Whitley GA, Wijegoonewardene N, Nelson D, Curtis F, Ortega M, Siriwardena AN (2023). Patient, family member and ambulance staff experiences of prehospital acute pain management in adults: a systematic review and meta-synthesis. JACEP Open (in press).

Smith MD, Ridyard C, Botan V, Brewster A, Dunmore S, James J Khunti K, Laparidou D, Law G, Mountain P, Roberts L, Rowan E Spaight R, Spurr K, Siriwardena AN (2023). Model-based economic evaluation of the effectiveness of "Hypos' can strike twice", a leaflet-based ambulance clinician referral intervention to prevent recurrent hypoglycaemia. PLoS One (in press).

Baghdadi F, Bell F, Evans BA, Goodacre S, Khanom A, John A, Lloyd A, Lyons RA, Naha G, Porter A, Russell IT, Siriwardena AN, Watkins A, Williams J, Snooks H (2023). Building an understanding of Ethnic minority people's Service Use Relating to Emergency care for injuries: the BE SURE study protocol. BMJ Open (in press).

Kyle SD, Bower P, Yu LM, Siriwardena AN, Yang Y, Ogburn E, Begum N, Maurer L, Robinson B, Gardner C, Armstrong S, Pattinson J, Espie CA, Aveyard P (2023). Nurse-delivered sleep restriction therapy to improve insomnia disorder in primary care: the HABIT RCT. Health Technol Assess 26 (in press).

Siriwardena AN, Botan V, Williams N, Emerson K, Kameen F, Pope L, Freeman A, Law GR (2023). Academic performance of ethnic minority versus White doctors in the MRCGP assessment 2016-2021: cross sectional study. British Journal of General Practice (online first).

Brooker C, Sirdifield C, van Deirse T (2023). Serious mental illness in probation: A review. European Journal of Probation (online first).

Patel G, Phung V, Trueman I, Pattinson J, Botan V, Hosseini SMP, Ørner R, Asghar Z, Smith MD, Rowan R, Spaight R, Evans J, Brewster A, Mountain P, Siriwardena AN (2023). "It's like a swan, all nice and serene on top, and paddling like hell underneath"; Community First Responders' practices in attending patients and contributions to rapid emergency response in rural England, United Kingdom: a qualitative interview study. Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine 31:7.

Akanuwe JNA, Siriwardena AN, Bidaut L, Mitchell P, Bird P, Lasserson D, Apenteng P, Lilford R (2023). Practitioners' views on community implementation of point of care ultrasound (POCUS) in the UK: a qualitative interview study. BMC Health Services Research 23:84.

Potter C, Leggat F, Lowe R, Pallmann P, Riaz M, Barlow C, Edwards A, Siriwardena AN, Sevdalis N, Sewell B, McRae J, Fish J, de Sousa de Abreu MI, Jones F, Busse M (2023). Effectiveness and Cost-Effectiveness of a Personalised Self-management Intervention for living with long COVID: protocol for the LISTEN randomised controlled trial. Trials 24:75.

Ridyard C, Smith MD, Spaight R, Law, Siriwardena AN (2023). Optimising ambulance conveyance rates and staff costs by adjusting proportions of rapid response vehicles and dual-crewed ambulances: an economic decision analytic modelling study. *Emergency Medical Journal* 40:56-60.

Botan V, Laparidou D, Phung VH, Cheung P, Freeman A, Wakeford R, Denney ML, Law GR, Siriwardena AN (2023). Examiner perceptions of the MRCGP Recorded Consultation Assessment for general practice licensing during COVID-19: cross-sectional study. *BMC Medical Education* 23:65.

Patel G, Phung VH, Trueman I, Ørner R, Siriwardena AN (2023). Common hierarchies, varied rules - The problem of governing community first responders in prehospital care for quality standards: documentary discourse analysis. *BMC Health Services Research* 23: 38.

Botan V, Asghar Z, Rowan E, Smith M, Patel G, Phung V, Trueman I, Spaight R, Brewster A, Mountain P, Orner R, Siriwardena AN (2023). Community First Responders' contribution to Emergency Medical Service provision in the UK. *Annals of Emergency Medicine* 2023: 81(2): 176-183.

Botan V, Williams N, Siriwardena AN, Law GR (2022). The effect of specific learning difficulties on GP written and clinical assessments. *Medical Education* (online first).

Brooker C, Sirdifield C, Parkhouse T (2022). Identifying mental illness and monitoring mental health in probation service settings. *European Journal of Probation* 14(3): 179-203.

Rodgers S, Taylor AC, Roberts SA, Allen T, Ashcroft DM, Barrett J, Boyd MJ, Elliott RA, Khunti K, Sheikh A, Laparidou D, Siriwardena AN, Avery AJ (2022). Scaling-up a pharmacist-led information technology intervention (PINCER) to reduce hazardous prescribing in general practices: multiple interrupted time series study. *PLOS Medicine* (online first).

Poon D, Law GR, Major G, Andreyev HJN (2022). A systematic review and meta-analysis on the prevalence of non-malignant, organic gastrointestinal disorders misdiagnosed as irritable bowel syndrome. *Scientific Reports*; 12:1949.

Lewis C, Siriwardena AN, Laparidou D, Pattinson J, Sima C, Scott A, Hughes H, Akanuwe J (2022). Wellbeing in volunteers on Heritage at Risk projects. *Historic England*.

Funding

Whitley GA. Improving Pain mAnagement for childreN and young people attendeD by Ambulance (PANDA): A realist informed intervention development and feasibility study, September 2023, HEE/NIHR Advanced Clinical and Practitioner Academic Fellowship.