

## Newsletter Autumn 2021

### CaHRU receives university team achievement award for research 2021

The Community and Health Research Unit team received the team achievement award for research for the sixth successive year for 2021 at this year's team awards.

The team includes Profs Niro Siriwardena and Graham Law, Drs Murray Smith, Coral Sirdifield, Zahid Asghar, Stephanie Armstrong, Julie Pattinson, Joseph Akanuwe, Elise Rowan, Vanessa Botan, Greg Whitley, with Viet-Hai Phung, Despina Lapidou and Sue Bowler. It also includes visiting international and associate staff including Dr Indika Wanninayake, Dr Maria Kordowicz, and Prof Roderick Orner. Members of the team who have left recently include Drs Nimali Wijegoonewardene and Dr Colin Ridyard, while we have been recently joined by Dr Gupta Patel.

The team have had a busy year, made more difficult by the pandemic, but have managed to begin 12 new externally funded studies and continued more than 30 others, including major programmes on COVID and clinical trials through the Lincoln Clinical Trials Unit (LinCTU). The team have maintained bid success in competitive high-quality external research funding with 10 grants totalling over £1.8 million and over £800 thousand awarded to Lincoln, including prestigious funding from RCUK, NIHR and UKRI.

Dr Vanessa Botan, on behalf of the Ambu-HS2 team, was awarded the highest quality research at the 999 Emergency Medical Services annual conference and in addition to other conference presentations, 25 papers were published or accepted over the past year. The team have progressively built long-term collaborations with academia and health services in the UK and internationally including major new collaborations with McMaster Canada (EDGE consortium) and Kingston Universities. In addition, the team were major contributors to REF2021 through the Allied Health submission and also led the development of the Lincoln Clinical Trials Unit.



### 'Patient experiences and perceptions of receiving benzodiazepines and z-drugs: lessons for safer prescribing': international conference presentation



Dr Coral Sirdifield, Senior Research Associate at CaHRU, presented at the Society for the Study of Addiction annual conference – an international conference which was held online on the 4th and 5th of November 2021.

Coral's presentation was part of a special session held as a tribute to the contributions of the late Professor Malcolm Lader. Her talk focused on a systematic review and metanalysis of patients' experiences and perceptions of seeking and using benzodiazepines and z-drugs which was published online in *The Patient – Patient-Centered Outcomes Research* in 2016. Benzodiazepines and z-drugs can be prescribed short-term (four weeks or less) to support people experiencing insomnia, anxiety or pain. However, research has shown that they are often prescribed for longer than this, particularly in individuals aged 65+ years. This can have a number of adverse consequences including addiction.

The study that Coral presented identified and included nine studies of patients' experiences and created a model that contained seven core themes organised around the patient journey – from recognising that they had a problem, through to medical help-seeking, and on to experiences and perceptions of withdrawal or reasons for ongoing use. Three core recommendations were made to support safer prescribing in future practice:

1. Creation of educational resources: studies have shown that direct education can encourage discussion around discontinuing or reducing use. The research recommended resources that could include guidelines on use; and

information about self-help strategies, potential side-effects of medication, realistic expectations around 'good quality sleep', and effective alternative treatments.

2. Make alternatives such as CBT and CBT-I more widely available

3. Targeted conversations: open conversations between patients and healthcare professionals around how medication is being used and the need for staged withdrawal, ensuring that a patient feels that they are being taken seriously and is aware of the risks and the advice around short-term use.

For further details of the study please see: Sirdifield, C., Chipchase, SYC., Owen, S., and Siriwardena, A. (2016) [A systematic review and meta-synthesis of patients' experiences and perceptions of seeking and using benzodiazepines and Z-Drugs: towards safer prescribing](#). *The Patient – Patient Centered Outcomes Research*, 10(1): 1-15.

## Gupteswar Patel joins CaHRU as a postdoctoral research associate

Gupteswar Patel joined CaHRU in October 2021 as a Post-Doctoral Research Associate in Health Services Research. He will be working on a national NIHR funded study of Community First Responders role in the current and future rural and care workforce. He will contribute to this study and the wider work of CaHRU by drawing on his research experience in healthcare studies.



Prior to joining CaHRU, Gupteswar completed his PhD at the University of Newcastle, Australia, where he investigated the dynamics and determinants of Complementary and Alternative Medicine (CAM) integration into the biomedical based mainstream health system. His study also explored the way CAM practitioners practice holistic and patient-centred care in biomedical settings. Gupteswar has also completed his Master of Public Health, Certificate of Public Health and Bachelor of Pharmacy. He has been working on various areas including the health policy and health systems' governance, complementary medicine, mental health, holistic and patient-centred care, sustainable community engagement in health, and implementation research.

Gupteswar also has undergraduate and postgraduate teaching experiences from multiple countries like Australia and India. His research Interests include community engagement in health, health policies and systems research, social, institutional and political determinants of health, Complementary and Alternative Medicine and knowledge translation. His affiliations include the University of Newcastle, Australia, Health and Disability Research Group, University of Newcastle, Australia, Health Systems Global, Australasian Association of Bioethics & Health Law, The Australian Sociological Association and the Asia Public Policy Network.



## Primary care cancer risk assessment explored in recent CaHRU studies

A study led by Dr Joseph Akanuwa, Post-Doctoral Research Associate in CaHRU, as part of his doctorate, 'Barriers and facilitators to implementing a cancer risk assessment tool (QCancer) in primary care: a qualitative study' was recently published in the journal, *Primary Health Care Research & Development*. It explored the views of primary care practitioners and service users and found that supporting decision making, modifying health behaviours, improving speed of referral, and personalising care were facilitators to the use of the tool, whereas barriers included the need for additional consultation time, unnecessary worry or anxiety to patients, potential for over-referral, practitioner scepticism, the need for integration of the tool in general practice systems and training on use of the tool. The paper recommended further research for evidence that the use of QCancer improves diagnosis rates without leading to

unacceptable harm from unnecessary investigations and referrals.

Dr Joseph Akanuwa's work on cancer risk assessment tools in primary care included an earlier paper, 'Communicating cancer risk in the primary care consultation when using a cancer risk assessment tool: qualitative study', published in *Health Expectations*. Using a Risk Analysis Framework with eight stages for effectively communicating risk, the paper identified key strategies from the perspectives of primary care practitioners and service users, for communicating cancer risk to patients by personalising risk information, involving patients when using a risk assessment tool, being open and honest, and providing time for listening, explaining and reassuring patients. These strategies could help primary care practitioners to appropriately communicate cancer risk information to patients presenting to primary care with symptoms suggestive of cancer, and potentially minimise patient anxiety.



## Tom Parkhouse joins CaHRU

Tom Parkhouse joined CaHRU in October 2021 as a Research Assistant. He will be working alongside Dr. Coral Sirdifield on a NIHR funded project designed to measure and improve the health and quality of health care for people in contact with probation. The project will involve a systematic review of current practice, as well as survey and focus group data collection from people directly involved in probation, with the aim of developing reliable quality indicators to support healthcare improvements.

Prior to this role, Tom completed a PhD at the University of Sussex, with a project investigating factors that enhance or inhibit the ability of investigative interviewers to generate good quality, useful questions. Initially conducting a large-scale, two-part experiment assessing the efficacy of a specific investigative interview technique, the project later became more methodological in nature. One of the key outcomes of the project was the development of a three-dimensional scale for judging the quality of investigative interview questions, having realised during the project that no such scale currently existed. Tom also completed a Masters in Psychological Research and a BSc in Psychology at the University of Sussex, with dissertation projects focussed on facial mimicry of non-consciously processed visual stimuli.

Tom previously worked at the University of Bath on a project investigating the efficacy of machine learning algorithms to predict individuals' personality traits from their online behaviour. Before this, he worked for the University of Sussex as a statistician on a cross-cultural project investigating the mental well-being of young carers across Europe, as well as teaching and marking on undergraduate psychology modules.

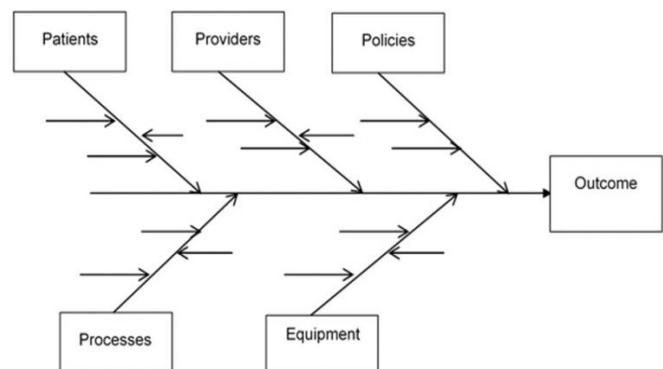
## Improvement Science and Research Methods Seminar September 2021: Prof Niro Siriwardena

The first Improvement Science and Research Methods Seminar of this academic year was given online via Teams on 27 October July 2021 by Professor Niro Siriwardena on the topic of 'Understanding and applying quality improvement methods.' Niro is Professor of Primary and Prehospital Health Care at the University of Lincoln and director of CaHRU. He trained in medicine at St. Bartholomew's Hospital Medical College London and in general practice in Lincolnshire, followed by research training at Nottingham and De Montfort Universities.



The seminar aimed to provide an introduction to quality and quality improvement, the methods used to improve and evaluate quality of care and how this has been applied to a range of studies. It was based on a forthcoming book, 'Quality in Health Care', co-authored by Niro and Dr Maria Kordowicz, visiting research fellow at CaHRU, and due to be published by Sage in 2022. It also featured work from the CaHRU team and NHS partners over the past two decades.

After introducing the topic of quality, quality improvement and the idea of improvement domains, the need for ethical quality improvement was emphasised and presented in terms of the triad of clinical effectiveness, patient safety and patient experience. The idea of quality improvement as 'troubleshooting' was explained and the importance of focussing on processes, together with techniques to analyse, present and improve processes discussed. The use of driver diagrams, logic models and programme theory was used to illustrate the need for theory based improvement. Frameworks including the model for improvement, clinical audit and plan-do-study-act cycles were presented and compared. This was followed by a brief overview of measurement using statistical process control (run, control charts and funnel plots).



Finally, the techniques were illustrated with examples from the the Resources for Effective Sleep Treatment (REST) and Ambulance Services Cardiovascular Quality Improvement (ASCQI) studies, funded by The Health Foundation. Please contact Sue Bowler sbowler@lincoln.ac.uk if you would like to view a recording of this or future presentations or if you would like to attend future CaHRU seminars. Dr Vanessa Botan is presenting on 24 November at 1100 on the topic of questionnaire validation and the following seminar will be on January 26th 2022 when Dr Alison Cooper, Clinical Research Fellow at Cardiff University will present: Realist methods used in the GPs in EDs Study.

## Funding

Nelson D, Moore H, Laparidou D, Siriwardena AN, Gussy M, Wanninayake IK, Ortega M, Jha M, McCranor T, Spaight R. A systematic review on interventional studies for people presenting with mental health symptoms to ambulance services in rural and urban settings. National Institute for Health Research Applied Research Collaboration East Midlands, April 2022, £32,212.

Moghaddam N, Law G, das Nair R, Evangelou N, Dawson D, Turton P, Hawton A-M, Roche B. Strengthening Mental Abilities with Relational Training (SMART) in Multiple Sclerosis (MS): A feasibility trial extension to mild cognitive impairment. National Institute for Health Research, November 2021, £37,206.

Khanom A, Snooks H, Porter A, John A, Watkins A, Lyons R, Goodacre S, Russell I, Williams J, Siriwardena AN, Evans B, Hettiarachchi T, Safari S. BE SURE - Building an understanding of Ethnic minority people's Service Use Relating to Emergency care for injuries. NIHR Health Services and Delivery Research, October 2021, £737,510.

Nanyonjo A, Siriwardena AN, Tetui M, Grindrod K Nelson D, Lall P, Sayers S, Wiens B, Heeg S, Tanser F. Diffusion of COVID-19 vaccines: Building vaccine confidence among diverse communities in Canada and the United Kingdom. British Academy COVID-19 Recovery: building future pandemic preparedness and understanding citizen engagement in the G7, October 2021, £66,921.

## Publications

Cooper A, Carson-Stevens A, Cooke M, Hibbert P, Hughes T, Hussain F, Siriwardena AN, Snooks H, Donaldson LJ, Edwards A (2021). Learning from diagnostic errors when GPs work in or alongside emergency departments: incorporating realist methodology into patient safety incident report analysis. *BMC Emergency Medicine* 21: 139.

Moore H, Hill B, Gussy M, Siriwardena AN, Tanser F, Spaight R, Law G, Thomas C (2021). An exploration of factors characterising unusual spatial clusters of COVID-19 cases in the East Midlands region, UK: a geospatial analysis of ambulance 999 data. *Landscape and Urban Planning* 2021 (in press).

Siriwardena AN, Akanuwe JNA, Botan V, Laparidou D, Curtis F, Jackson J, Asghar ZB, Hodgson TL (2021). Patient reported symptoms and experience following Guillain-Barré Syndrome and related conditions: questionnaire development and validation. *Health Expectations* (online first).

Siriwardena AN (2021). How to diagnose and manage sleep disorders in primary care: key advice from the NICE guideline on obstructive sleep apnoea/hypopnoea syndrome and related sleep disorders (2021). *Guidelines in Practice* 24(11): 20-26.

Roberts A, Rogers J, Mason R, Siriwardena AN, Hogue T, Whitley GA, Law GR (2021). Alcohol and other substance use during the COVID-19 pandemic: a systematic review. *Drug and Alcohol Dependence* 229: 109150.

Moore HE, Hill B, Siriwardena AN, Tanser F, Spaight R (2021). Rethinking the health implications of society-environment relationships in built areas: an assessment of the Access to Healthy and Hazards Index in the context of COVID-19. *Landscape and Urban Planning* 217: 104265.

Asghar Z, Wankhade P, Bell F, Sanderson K, Hird K, Phung VH, Siriwardena AN (2021). Trends, variations, and prediction of staff sickness absence rates among NHS ambulance services in England: a time series study. *BMJ Open* 0:e053885.

Curtis F, Jayawickrama WIU, Laparidou D, Weligamage D, Kumarawansa WKWS, Ortega M, Siriwardena AN (2021). Perceptions and experiences of residents and relatives of emergencies in care homes: A systematic review and metasynthesis. *Age and Ageing* 50 (6): 1925–1934.

Botan V, Law G, Laparidou D, Rowan E, Smith M, Ridyard C, Brewster A, Spaight R, Spurr K, Mountain P, Dunmore S, James J, Roberts L, Khunti K, Siriwardena AN (2021). The effects of a leaflet-based intervention, 'Hypos can strike twice', on recurrent hypoglycaemic attendances by ambulance services: a non-randomised stepped wedge study. *Diabetic Medicine* 38:e14612.

Botan V, Laparidou D, Phung VH, Cheung P, Freeman A, Wakeford R, Denney M, Law GR, Siriwardena AN (2021). Candidate perceptions of the UK Recorded Consultation Assessment for general practice licensing during COVID-19: cross-sectional data linkage study. *Education for Primary Care* (online first).

Schofield BJ, Andreani NA, Günther CS, Law GR, McMahon G et al. (2021). Livestock microbial landscape patterns: Retail poultry microbiomes significantly vary by region and season. *Food Microbiology* 101: 103878.

Garjani A, Hunter R, Law GR, Middleton RM, Tuite-Dalton KA, Dobson R, Ford DV, Hughes S, Pearson OR, Rog D, Tallan-

tyre EC, Nicholas R, Morriss R, Evangelou N, Das Nair R (2021). Mental health of people with multiple sclerosis during the COVID-19 outbreak: A prospective cohort and cross-sectional case–control study of the UK MS Register. *Multiple Sclerosis Journal* (online first).

Winston B, Law GR (2021). Great on scandals, useless on science. *British Journalism Review* 32 (3): 14-20.

Koly KN, Baskin C, Lata I, Rao M, Rasheed S, Law GR, Gnani S (2021). Protocol: Educational and training interventions aimed at healthcare workers in the detection and management of people with mental health conditions in South and Southeast Asia. *BMJ Open* 11 (7).

Edge C, Hard J, Wainwright L, Gipson D, Wainwright V, Shaw J, Davies M, Abbot L, Bennallik M, Sirdifield C, Mahay A, (2021) COVID-19 and the prison population (Working Paper) London: Health Foundation <https://www.health.org.uk/publications/covid-19-and-the-prison-population>