

Newsletter for Autumn 2018

CaHRU presented with team award for achievement in research 2018 by Niroshan Siriwardena

The Community and Health Research Unit team received the 2018 University of Lincoln Team Achievement Award for research which was presented to members of the team by the Vice Chancellor, Professor Mary Stuart at a ceremony at the Engine Shed on 21 November. The award recognised the strength and depth of research at CaHRU including new funding, publications, active projects, collaborations both within and external to the university. All our studies including aims, collaborators, outputs, and impact are detailed on the CaHRU website (<http://cahru.org.uk/research/>). This was the sixth team award over the past 7 years and the fifth time the team have received the team award for achievement in research. Members of the team, pictured here include Prof Niro Siriwardena (director), Prof Graham Law, Dr Murray Smith, Dr Zahid Asghar, Dr Coral Sirdifield, Dr Stephanie Armstrong, Dr Julie Pattinson, Dr Rebecca Marples, Dr Ravindra Pathirathna, Dr Pradeep Ratnasekare, Dr Mahendra Senivaratna, Dr, Joseph Akanuwe, Viet-Hai Phung, Despina Laparidou, Laura Simmons, Greg Whitley and Sue Bowler (administrator).



Staff are involved in around 50 active studies and sub-studies including 8 doctoral studies in progress. These cover the whole range of research methods from major clinical trials, e.g. investigating conditions such as hyper-acute care of stroke (RIGHT2), treatment of diabetes during pregnancy (CONCEPTT), early ambulance diagnosis of heart attack (PRESTO), ambulance hypoglycaemia pathways (Ambulance Hypo study) and primary care for insomnia (HABIT); observational studies, e.g. cross-sectional studies investigating diabetes emergencies in patients in care homes, prehospital paediatric pain management; qualitative designs, e.g. effect of psychological treatment for insomnia; and surveys, e.g. on healthcare for offenders on community sentences; to large-scale quality improvement programmes, e.g. prescribing safety (PINCER); and systematic reviews, e.g. psychological therapies for insomnia in autism, psychological therapies for insomnia related to tinnitus, perceptions of care in Guillain-Barre Syndrome sufferers.

Over the past year the team have led or co-authored 20 papers published or accepted for publication including landmark publications covering research developing new pathways and indicators for ambulance services and the effects of online treatments for insomnia in major journals such as *Circulation*, *JAMA Psychiatry*, *Lancet Psychiatry* and *Resuscitation*. Our research programmes and funding have enabled us to progressively build our collaborations year-on-year with academia in the UK and internationally, and also to strengthen our work with industry and the NHS in England. We have built extensive long-term academic collaborations. For example, internally at the University of Lincoln we have active collaborations with the Lincoln Institute for Health, and the Schools of Social and Political Sciences, Sport and Exercise Science, Psychology and Education. In the UK we have recent or active externally funded collaborations with the Universities of Oxford, Cambridge, Nottingham, Sheffield, Leicester, Warwick, Hertfordshire, Swansea, Anglia Ruskin, Central Lancashire (UCLAN), Liverpool, Surrey and Royal Holloway College and most recently Manchester and London (Kings, UCL, LSE).

Our impact derives primarily from our focus on studies that directly or indirectly make a difference to service users, carers and care provided by the health service. The work has increased the university's reputation, media interest in its research and standing across the region. This includes seven case studies in development, all based on current research or previous studies conducted at the University of Lincoln. These include our work on: improving primary care for insomnia; increasing influenza vaccination in risk groups and the role of influenza vaccination in preventing heart attack and stroke; development and implementation of new prehospital ambulance pathways and technologies; development of prehospital outcome measures; using large scale healthcare quality improvement (QI) initiatives and collaboratives to improve healthcare processes and outcomes; improving healthcare and outcomes for offenders; finding solutions to the problem of differential attainment in licensing examinations. This impact continues to have a positive effect on the University's reputation for research, its engagement with the public and the NHS, underlining the wider importance of research at Lincoln.

Dr Jenni Burt on mixed methods approaches in health services research

by Niroshan Siriwardena

The Community and Health Research Unit (CaHRU) and Lincoln Institute for Health (LIH) Seminar was given by Dr Jenni Burt from Cambridge University on 21 November. Jenni is Senior Social Scientist at The Healthcare Improvement Studies (THIS) Institute, where she leads a range of applied research programmes and contributes to the Institute's strategy and development. Her methodological work is concerned with the effective use of qualitative approaches; the design and delivery of complex mixed- and multi-method programmes of work; and developing innovative new methods in health services research.



Jenni gained a degree in Biological Anthropology from the University of Cambridge, an MSc in Public Health from the London School of Hygiene and Tropical Medicine (LSHTM), and a PhD in health services research from UCL. She convenes and lectures on the Qualitative and Mixed Methods module on the MPhil in Primary Health Care Research at the University of Cambridge, and supervises a number of PhD, MPhil, and medical students.



Jenni discussed mixed and multi method approaches, which are widespread in health services research. In her talk, 'Apples, oranges, and mixed methods approaches in health services research' she discussed the justification, design and benefit of mixed methods outlining the details of such approaches, when they might be used, and reflected on issues encountered in integrating designs and data within and between studies. The seminar was well attended by staff and students from CaHRU the LIH, other university departments and local health services. Jenni's presentation is available on the CaHRU website <http://cahru.org.uk>

Farewell to international visiting fellow Dr Nadeeka Chandraratne

by Niroshan Siriwardena

Members of the CaHRU team had the opportunity to hear firsthand the experiences and achievements of one of our first international visiting fellows from the University of Colombo during her time at the University of Lincoln, before she travelled back to Sri Lanka in November.



Dr. Nadeeka Chandraratne (pictured) spent the past 18 months here in Lincoln as part of her postdoctoral training in medicine: to acquire and update her knowledge on strengthening primary health care systems, focussing on quality and cost of care and comparing the UK NHS with the Sri Lankan primary care system; and to learn about monitoring and evaluation in primary care.

During her time here she experienced one-to-one support, self-directed learning, participation in CaHRU activities such as seminars and study review meetings, and undertook field visits with the local ambulance service and at a local general practice. She participated and contributed to CaHRU studies, for example the Prehospital Outcomes for Evidence Based Evaluation (PhOEBE) programme developing new quality measures for ambulance services, a study investigating diabetes emergencies in care homes involving ambulance services and a study investigating causes of differential attainment in the GP licensing examination.

One study she worked on, an international comparison of multimorbidity policies in Australia, UK and Sri Lanka, was published in the Australian Journal of General Practice. She also had a number of studies from her previous research published in PLoSOne, BMJ Tobacco Control, and Child Abuse and Neglect and has a number of other publications in peer review or near to submission. She also passed her Diploma in the Faculty of Public Health and became a Fellow of the Royal Society of Public Health during her attachment. She particularly valued learning about teamwork and the support she received from all of her colleagues at CaHRU. After an emotional exchange of gifts, the team celebrated Nadeeka's successful attachment with a meal at the Brayford and wished her well in her future endeavours.



Sleep and Health at the UK Parliamentary Office for Science and Technology

by Niroshan Siriwardena

Dr Julie Pattinson and Professor Graham Law from the Community and Health Research Unit (CaHRU) were recently invited and attended the Sleep and Health seminar hosted by the Parliamentary Office of Science and Technology on October 16th 2018. The seminar was held in collaboration with the Nuffield Foundation and invited experts from medicine, research and occupational sectors to highlight the latest research and discuss the implications for policy, with a special session focusing on shift work and sleep.



The Chair's welcome was delivered by Professor Lord Winston. In the first session Professors from the University of Oxford, including Professor Russell Foster, director of the Sleep and Circadian Neuroscience Institute, presented an overview of sleep biology and the consequences of sleep disruption. This was followed by Professor John Stradling, Emeritus Professor of Respiratory Medicine, who discussed sleep apnoea as a growing public health problem. Next, Professor Colin Espie, Professor of Sleep Medicine at the Sleep and Circadian Neuroscience Institute, talked about insomnia, highlighting this as a neglected public health problem with scalable evidence-based solutions. Understanding-sleep-and-improving-care-for-people-with-insomnia-He discussed how online programs can address some patients' needs, profiling online CBT-I options including Sleepio. Dr David Crepaz-Keay, Head of Empowerment and Social Inclusion at the Mental Health Foundation and Senior Mental Health Advisor, Public Health England, gave the final presentation in the first session focusing on sleeping well and translating evidence into public mental health messages.

The second session focused on shift work and sleep, with presenters discussing the health impacts of shift work, and evidence-based interventions to minimise them. Dr Rob Hunter Head of Flight Safety at the British Airline Pilots' Association represented the aviation sector. Dr Michael Farquhar, Consultant in Sleep Medicine at Evelina London Children's Hospital, Guy's and St Thomas' NHS Foundation Trust demonstrated how research can inform best practice, contribute to workplace policies and international regulation.

Making a positive difference at the EMDoc Annual Conference

by Niroshan Siriwardena

This year's Annual East Midlands Doctoral Network (EMDoc) Annual Conference which took place at Bishop Grosseteste University focussed on the theme of 'Impact and exchange – making connections beyond the academy'. The event was attended by over 100 doctoral students and it was a great opportunity to see and discuss posters of their work and hear presentations of their studies. It was also an opportunity to showcase CaHRU's research impact and how this was being developed.



Prof Siriwardena of CaHRU gave the keynote lecture during the afternoon of the conference on the subject of 'Making a difference through research'. In the lecture he explained that most researchers are trying to make a difference through their work, but questioned how effective we were at achieving this and what steps we can take to make research more relevant to the wider community. The talk described examples of work from the Community and Health Research Unit which sought to improve health care and outcomes, and what had been learned about doing research that makes a real difference.

The lecture covered definitions of impact, explaining the difference between journal impact factors and real-world impact. Key principles for impact-increasing the likelihood of impact were then presented including researching an important problem affecting many people significantly across a wide area while seeking to implement coherent solutions. A multidisciplinary approach with service user involvement and professional input can help to generate better solutions to problems. This could even be part of the research with patient and public involvement (PPI) and professional collaboration helping to define the problem and coproduce solutions. There were also advantages in working with others to Understanding-sleep-and-improving-care-for-people-with-insomnia-communicate impact in original and interesting ways, being open to generating impact, and trusting others to help or support by relinquishing control.

Finally, the recently developed CaHRU infographics were presented as a way of communicating research and impact in an interesting and engaging way for both the public and professionals.

Publications

Turner J, Siriwardena AN, Coster J, Jacques R, Irving A, Crum A, Gorrod HB, Nichol J, Phung VH, Togher F, Wilson R, O’Cathain A, Booth A, Bradbury D, Goodacre S, Spaight A, Shewan J, Pilbery R, Fall D, Marsh M, Broadway-Parkinson A, Lyons R, Snooks H, Campbell M (2108). Developing new ways of measuring the impact of ambulance service care: A mixed methods programme of research. Programme Grants for Applied Research (in press).

Coster J, O’Cathain A, Jaques R, Crum A, Siriwardena AN, Turner J (2018). Outcomes for patients who contact the emergency ambulance service and are not transported to the emergency department: a data linkage study. *Perhospital Emergency Care* (in press).

Vos J, Gerling K, Linehan C, Siriwardena AN, Windle K (2018) Understanding care navigation by older adults with multimorbidity: mixed-methods study using social network and framework analyses. *Journal of Medical Internet Research Aging* (online first).

Jones M, Smith MD, Lewis S, Parrott S, Coleman T (2018). A dynamic, modifiable model for estimating cost effectiveness of smoking cessation interventions in pregnancy: application to an RCT of self-help delivered by text message. *Addiction* (online first).

Funding

Williams M, Armstrong, S, Abrams K, Avery A, Brunskill N, Duley L, Grieve T, Khunti K, Martin G, Orrell M, Ryder S, Siriwardena AN. NIHR Research Design Service East Midlands. October 2018, £5,137,500.

Notingher I, Williams H, Varma S, Ratib S, Elsheikh S, Carr M, Kulkarni K, Smith MD: “Assessing the feasibility of implementing the Fast Raman device for testing tumour clearance during Mohs micrographic surgery of basal cell carcinoma”. NIHR Research for Patient Benefit PB-PG-0817-20019, £249,057, July 2018.

Moran G, Jairath V, Robarts Clinical Trials Unit, Smith MD: “Stopping aminosalicylate therapy in inactive Crohn’s disease (STATIC) study”. Rosetrees Trust, £75,000, December 2018.

Jones A, Robinson H, Siriwardena AN, Law G, Smith MD: “Active Steps Evaluation”. British Lung Foundation, £39,956, November 2018.