

Health and Social Care Institute NEWS

Issue Four 2013



Health and Social Care Institute:

- conducts applied research with real clinical and social impact
- synthesises and evaluates evidence
- translates evidence into policy and practice

Foreword from the Director

Welcome to the fourth edition of the Health and Social Care Institute research newsletter.

The Institute was established in 2008 and continues to provide a focus for research on health and social care topics across Teesside University.

**Professor Janet Shucksmith
Assistant Dean (Research)**



HSCI has a particular focus on applied research, and the two new appointments highlighted in this edition embody our determination to focus on the production of the best quality evidence but also to see it being both relevant to the needs of research users and seen through to impact. We are delighted to welcome back Dr Louisa Ells as our new Reader in Public Health and Obesity. Obesity is probably one of the biggest public health challenges now and in the coming decades, affecting daily living, use of clinical services and healthy ageing, amongst other topics. Louisa's connections with policy and practice partners bode well for a developing body of work grounded in real problems. Her enthusiasm and appetite for innovation mean that we hope to continue to develop new ways of working to make sure that practice is evidence informed – watch this space!

Our other new 'signing', Professor Greg Atkinson, has strong links with the world of professional football, civil aviation and even the odd rock star! What links them all is . . . lack of sleep! Greg's studies focus on circadian rhythms, disturbed body clocks and shift patterns, straddling the area between clinical concerns and public health.

What both bring also, in addition to their substantive topic areas, is a methodological strengthening of skills in the Institute.

Greg is an accomplished biostatistician, joining Professor Alan Batterham in complex interrogations of some of the taken-for-granted uses of statistics and formulae embedded in clinical judgements. The existing group of people undertaking work on evidence synthesis and review (epitomised by Dr Helen Handoll's Cochrane Review work for instance) is also enhanced by the new arrivals. Greg has strong meta-analysis skills; Louisa is embarking on a Cochrane Review early this year.

We have seen record numbers of PhD students completing their studies in the past year, providing the next generation of researchers. In this issue we profile one of our current students, Rebekah McNaughton, a staff member of CHASE, the Centre for Health and Social Evaluation in the Institute. An evaluation study undertaken in conjunction with the PCT, examining the development and uptake of the Healthy Heart programme of cardiovascular checks, spurred Becky to take her study further and deeper.

Please feel free to contact us if you wish to have further information about any of the projects examined in the newsletter.

For more information about HSCI:

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Weight of the evidence: obesity researcher aims to get the facts across

Louisa Ells has returned to Teesside to join the HSCI as Reader in Public Health and Obesity. Her interest in obesity and its impact on public health developed during her PhD in clinical nutrition at Newcastle University. This interest brought her to Teesside University, where she worked on a number of obesity-related research programmes before leaving in 2007 to lead the regional obesity work programme and manage the core analytical team at the North East Public Health Observatory based at Durham University. During this time Louisa also helped to establish the National Obesity Observatory (www.noo.org.uk), and has since spent two days a week as their specialist advisor, responsible for practitioner liaison, supporting the Department of Health obesity team, writing weekly Knowledge Updates and managing various research and evaluation work streams. Louisa, who will continue her commitment to the National Obesity Observatory (NOO), said, 'Working for the Public Health Observatories provided an invaluable opportunity to work across public health policy and practice, gaining an important insight into the pressures, constraints and areas requiring support.'

I am increasingly aware of the changing needs of public health, particularly around evidence translation, in order to better support the new public health structures.

Louisa is keenly interested in translational research, which seeks the best ways to package knowledge in order to make a practical difference to service. She plans to continue to use and develop her skills in systematically reviewing research evidence, and has set up a systematic reviewers' community within HSCI for like-minded colleagues. However, she is also very interested in working with others to develop new methods of evidence translation.

Louisa said, 'I am increasingly aware of the changing needs of public health, particularly around evidence translation, in order to better support the new public health structures.' She is consequently keen to develop and evaluate new, more engaging and effective methods of evidence translation, and looking to take this agenda forward with colleagues from

the wider University and other universities, Fuse (The Centre for Translational Research in Public Health, based in the five North East universities) and across practice. Louisa has worked with partners from across the NHS and local and central government, as well as various voluntary sector organisations, and would like to continue building and working with these important networks.

In collaboration with Newcastle University, University College London and NHS Choices, Louisa is also working on a new National Prevention Research Initiative to investigate, 'how can we help parents recognise unhealthy body weight in their children?' This study will collect and use new 3D surface body scan images and body composition measurements to develop new, simple tools to help parents assess their child's bodyweight.



Louisa is an associate member of Fuse and a steering group member of the North East Obesity Forum and North East Obesogenic Environment Network:
www.fuse.ac.uk
www.nepho.org.uk/obesity/resources/north_east_obesity_forum
www.neoen.org.uk

Time is of the essence in health research

Professor Greg Atkinson has been appointed to HSCI where he will continue to develop his research on the effects of the body clock on human health and performance.



Greg attended Whinney Banks Primary and Stainsby Secondary Schools in Middlesbrough and, like many school-leavers in 1982, started an apprenticeship as an instrument artificer at ICI Billingham. One night-class associated with this apprenticeship was at the then Teesside Polytechnic.

Greg collaborates with
scientists throughout
the world.

After being made redundant in 1986, Greg completed an undergraduate degree in 1990 and PhD at Liverpool John Moores University, where he has spent the majority of his academic life.

Greg said, 'It's fantastic to return to my roots, and I take great satisfaction that my work will hopefully allow closer collaboration with Teesside-based employers and employees, including of course health professionals. My research fits well into the Institute as there are public health and intervention aspects to it. For example, I am extremely interested in the health of shift workers,

who have to cope with disturbances to their body clocks.'

He has received prizes for his past research work in occupational contexts, including the President's Medal of the Institute of Ergonomics and Human Factors, as well as the 2010 Bupa award for excellence in occupational medicine. Greg is also a Fellow of the Royal Statistical Society and has published widely in research methods and statistics.

Greg is interested in the mechanisms surrounding the circadian variation in sudden cardiac and cerebral events,

particularly the role of the 'morning surge' in blood pressure in explaining why these events are up to three and a half times more common in the morning compared with other times of day.

He is also interested in travel health, with particular emphasis on the disturbance of the body clock by jet-lag, general exercise science, particularly the relationships between physical activity and cardiovascular health, as well as issues relating to world class cycling performance. He said, 'I think I can offer expertise in how circadian rhythms can influence almost every aspect of human health and I am experienced in biostatistical analysis and meta-analysis

techniques. These may be useful to other members of the Institute and Fuse.'

Greg collaborates with scientists throughout the world, including the University of Otago (New Zealand), University of British Columbia (Canada), University of Nijmegen (Netherlands), Harvard University (USA) and several Universities in Australia. He also collaborates with his former colleagues at Liverpool John Moores University on the topics of sleep disturbances in spinal cord injured people, polycystic ovary syndrome, menopausal hot flush, and various biostatistical applications to elite soccer, via consultancy work for Premiership football clubs.

Another of Greg's interests is the health issues relating to rock and pop musicians, particularly those health problems relating to fatigue and sleep disturbances during long tours. He collaborates with the University of Chichester on the Clem Burke project, which was initiated by the drummer of the rock group Blondie, specifically to investigate the health of rock musicians.

Greg said, 'I have spent the first few months of my post delivering invited talks to various bodies in many different countries, including Denmark, Germany and Spain. I hope to really put Teesside on the map in terms of research on the body clock and health.'



Top anaesthetist 'delighted' at visiting professor appointment

Professor Gerard Danjoux, a consultant in anaesthesia and research lead in the Department of Anaesthesia at South Tees NHS Trust, says he is 'delighted to be bestowed with the honour of being appointed as a visiting professor' at HSCI.

Gerard has special interests in helping high-risk patients to physically prepare for surgery (prehabilitation), anaesthesia for patients undergoing major vascular surgery, and sleep problems.

He has had links with the Institute for six years, recently collaborating with Professor Alan Batterham on a number of exciting studies which have led to several publications in the anaesthetic literature. Their research has mainly focused on improving patients' fitness and quality of life using aerobic fitness training. Gerard was chief investigator for our recently completed flagship Post Icu eXercise (PIX) study which showed significant fitness benefits of exercise training after critical illness, and was funded through a £220,000 grant from the National Institute for Health Research (NIHR).

In collaboration with Teesside University, Sheffield Teaching Hospitals and Sheffield Hallam University he has recently secured a £245,000 NIHR grant to start a study looking at preoperative exercise training in patients undergoing abdominal aortic aneurysm surgery. These two studies have cemented our team at the forefront of international research in this exciting area.

Gerard said, 'With all this exciting collaborative work on-going and under development, I look forward to continuing working with Teesside University for many years to come.'



North East Medical Sociology group goes from strength to strength



Co-convened by Professor Janet Shucksmith (HSCI) and Dr Sally Brown (Durham University), The North East Medical Sociology group (North East Med Soc) has seen a highly successful first year.

North East Med Soc was established under the aegis of the British Sociological Association by a steering group of sociologists from the five North East universities. It aims to enhance the profile of medical sociology in the region, to provide a forum where people interested in the critical sociology of health can collaborate and discuss topical issues, and to offer a dynamic and friendly environment for mentoring early career researchers and postgraduate students.

The group has hosted three successful events. Two half-day events attracted a number of delegates from across the

region, with high profile keynote speakers Rose Barbour (Professor of Sociology, Open University) and Gareth Williams (Professor of Sociology, Cardiff University).

Researchers from the region have also been offered the opportunity to share their research at these events through short-paper sessions. In the summer the group also hosted a smaller seminar led by Linda McKie, the newly appointed Professor of Sociology at Durham University.

The group looks forward to its next year of activities, with a half-day event planned for spring 2013.

Speakers at a half-day Med Soc event at Northumbria University, Newcastle.

Left to right are Dr Stephanie O'Neil (Newcastle University, Fuse), keynote speaker Professor Gareth Williams (Cardiff University), Dr Susan Peake (Teesside University) and Dr Richard Lee (Newcastle University).

You can find out more about North East Med Soc at:

britsoc.co.uk/study-groups/north-east

and if you would like to be added to the mailing list, please email Sarah Russell:

s.russell@tees.ac.uk

Meet Rebekah McNaughton

Research Associate, Public Health | part-time PhD student



Rebekah is a full-time Research Associate in Public Health and a part-time PhD student.

After studying textile design and surface pattern in Newcastle, Rebekah decided she needed a change and joined Teesside University as a psychology undergraduate in 2002. Since then she hasn't looked back, graduating with a BSc (Hons) and going on to complete an MSc Social Research Methods.

Rebekah began working for the University in 2006 as a Research Assistant in Public Health and has since been involved in a range of projects, mainly relating to children's and young people's health. In 2009, based on her ongoing key role in evaluating a brand new screening programme, NHS Health Checks (NHS HC), she commenced a part-time PhD.

Rebekah said, 'The NHS HC programme offers screening to people aged 40-74 years old to identify early risk factors for cardiovascular (CVD) events like heart attacks or strokes and to pick up underlying, undiagnosed conditions like hypertension and diabetes.

People identified as high risk are offered lifestyle advice on eating, physical activity, smoking and alcohol consumption. In most cases at risk people are also offered medication to reduce their CVD risk.'

The first phase of the evaluation was reported in the first edition of the *Health and Social Care News*. It focused on the way that NHS HCs were rolled out in community pharmacies, GP practices and community settings across the Tees Valley.

This phase of evaluation was completed in 2011. But it soon became clear that, for NHS HC to work, it was important to explore how patients viewed the programme and whether, once they had been identified as 'at risk', they had made sustainable changes to their lifestyles. This formed part of a second phase of evaluation which has just come to completion in 2012.

Rebekah's in-depth exploration of these data forms the core of her PhD. She hopes to submit her thesis by the end of 2013.

A selection of recent staff publications

Public Health

Boddy, L.M., Fairclough, S.T., Atkinson, G., Stratton, G. (2012) Changes in cardiorespiratory fitness in 9- to 10.9-year old children. *Medicine & Science in Sports & Exercise*, 44, 3, 481-486.

Hall, D., Shucksmith, J. S. (2012) Towards a good death: creating a compassionate community. *European Journal of Palliative Care*, 19, 1, 42-44.

Vidoni, C., Azevedo, L., Eberline, A. (2012) Effects of a group contingency strategy on middle school physical education students' heart rates. *European Physical Education Review*, 18, 1, 78-96.

Rehabilitation

Atkinson, G., Batterham, A.M. (2012) The use of ratios and percentage changes in sports medicine: time for a rethink? *International Journal of Sports Medicine*, 33, 7, 505-506.

Romano, M., Minozzi, S., Bettany-Saltikov, J., Zaina, F., Chockalingam, N., Kotwicki, T., Maier-Hennes, A., and Negrini, S. (2012) Exercises for adolescent idiopathic scoliosis. *Cochrane Database Systematic Reviews*, 8, Art. No. CD007837.

Sinclair, R.C.F., Batterham, A.M., Davies, S., Cawthorn, L., Danjoux, G.R. (2012) Validity of the 6 min walk test in prediction of the anaerobic threshold before major non-cardiac surgery. *British Journal of Anaesthesia*, 108, 1, 30-35.

Cross-over

Bettany-Saltikov, J.A. (2012) How to do a systematic literature review in nursing: a step-by-step guide. Maidenhead: Open University Press.

Hatton, A.L., Dixon, J., Rome, K., Martin D. (2011) Standing on textured surfaces: effects on standing balance in healthy older adults. *Age and Ageing*, 40, 3, 363-368.

Hatton, A.L., Dixon, J., Rome, K., Newton, J.L., Martin D. (2012) Altering gait by way of stimulation of the plantar surface of the foot: the immediate effect of wearing textured insoles in older fallers. *Journal of Foot and Ankle Research*, 5, 1, 11 [Online], <http://hdl.handle.net/10149/224594>.

Verheggen, R.J., Jones, H., Nyakayiru, J., Thompson, A., Groothuis, J.T., Atkinson, G., Hopman, M.T., Thijssen, D.H. (2012). Complete absence of evening melatonin increase in tetraplegics. *The FASEB Journal*, 26, 7, 3059-3064.



Events

In addition to special events, HSCI hosts or jointly hosts a number of regular events which are presented by internal and external speakers.

Monthly

HSCI seminar series

on wide-ranging health and social care research topics
tees.ac.uk/health&socialcareinstitute

contact

c.gee@tees.ac.uk

Qualitative Researchers' Forum

r.mcnaughton@tees.ac.uk

Quarterly

fuse quarterly research meeting

Centre for Translational Research in Public Health

fuse.ac.uk

Regularly

North East Medical Sociology Group

(North East Med Soc) events
britsoc.co.uk/study-groups/north-east

s.russell@tees.ac.uk

HSCI Sociology Group

r.mcnaughton@tees.ac.uk

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