



**UKCRC Public Health Research Centres of Excellence**

**4<sup>th</sup> Annual Conference**

**Abstracts for workshops**

**Towards a shared communication and knowledge exchange plan for the  
PHRCoEs and the SCPHRP**

**Professor Kevin Balanda (CoEIPHNI) and Professor Linda Bauld (UKCTAS)**

***Aim***

The aims of the workshop are to:

- Update participants about the shared draft knowledge exchange plan being developed for the centres;
- Gather feedback and other input from staff and partners of the six centres;
- Identify a panel of centre staff who would act as a 'sounding board' for later drafts.

A report of the workshop will be produced and circulated to encourage further discussion.

Programme (1 hour, 15 minutes)

An overview of the draft plan (10 mins) - Professor Linda Bauld, UKCTAS

Small group roundtable discussions (45 minutes) - Facilitated by members of the Knowledge Exchange Group

Points for discussion:

- Are the plan's objectives the right ones?
- Is anything missing? Should anything be deleted?
- How can the shared plan support the knowledge exchange activities of the individual centres?
- What is needed to make it happen?

Summary and outline of next steps (15 minutes) - Professor Linda Bauld, UKCTAS

## **Developing guidance for process evaluations of complex public health interventions**

**Dr Graham Moore (DECIPHer), Dr Suzanne Audrey (DECIPHer)  
and Dr Lawrence Doi (SCPHRP)**

Process evaluation of complex public health interventions is crucial in understanding what was actually delivered in practice and why, clarifying a programme's causal mechanisms, and understanding how the intervention interacts with its context. Recognition of the need for process evaluation is growing, as reflected by updated Medical Research Council (MRC) guidance, which recommends combining process and outcomes evaluations at definitive evaluation stages. However, there is currently limited guidance for the design, conduct and reporting of process evaluations, with substantial inconsistency in their aims and methods. The MRC Population Health Sciences Research Network (PHSRN) is currently funding a working group to develop process evaluation guidelines. Drs Moore and Audrey are members of this working group.

The aims of the session are to explore i) *why* we need process evaluations of complex interventions, ii) *what* process evaluation is, current theories and frameworks that inform process evaluation, iii) *how* and *when* to do process evaluation, common challenges and solutions. It will be suitable both for junior researchers with little prior experience of process evaluation, and those with significant experience of evaluation research.

The session will begin with a brief presentation providing a background to current MRC-funded work to develop guidance for process evaluations, an overview of the approach being adopted to guideline development, and progress to date in developing the guidance. The presentation will discuss 'why' we need process evaluations of complex public health interventions, definitions of 'what' process evaluations are and challenges in deciding 'how' to conduct a process evaluation. This will be followed by plenary discussion of participants' experience of process evaluation, common challenges encountered and solutions. Groups of up to eight participants will then examine, and comment upon, a case study from the draft MRC guidelines, before the session concludes with a plenary discussion focused on the proposed content of the MRC guidelines. Attendees will be given the opportunity to comment on the draft structure and potential content of MRC guidance for process evaluations.

## **Using GPS in physical activity and diet research Emma Coombes (CEDAR) & Andy Jones (CEDAR)**

Research on the putative environmental determinants of diet and physical activity behaviours has been limited by two major assumptions. First, researchers have assumed that the activity spaces of individuals can be appropriately represented by the delineation of 'neighbourhood' boundaries around their homes. Within defined neighbourhood boundaries, a second assumption has been that the presence of food outlets and opportunities for physical activity represents a valid measure of their accessibility and can thus be taken as a proxy for their likely use. These assumptions are driven by the fact that information was often not available on the actual movement patterns of study participants and their use of the environment. To overcome these limitations, studies are beginning to use Global Positioning Systems (GPS) to record the spatial activity patterns of individuals, as well as Geographic Information Systems (GIS) to map the locations of opportunities for food purchase and for physical activity. The output from GPS devices can be linked with data on food purchasing and consumption and also with physical activity measured by accelerometry. However, the use of GPS is a novel field and there are a number of methodological and practical issues associated with their application. This workshop is intended for participants who are potentially interested in using GPS in their research but have no previous experience of their application. We will provide a short introduction to the technology before heading out and collecting some data ourselves using physical activity as our case study. The second part of the workshop will cover data management and will combine a practical demonstration of the processing of a sample of data collected by the group along with a discussion of a set of 'best practice' guidelines for data management. Given the limited time available for the workshop it will be advantageous if participants have done some reading in advance. We suggest the following two papers as providing a suitable overview of the topic:

[Krenn, P., Titze, S., Oja, P., Jones, A.P., Ogilvie, D. \(2011\). Use of Global Positioning Systems \(GPS\) to study physical activity and the environment: a systematic review. \*American Journal of Preventive Medicine\*, 41\(5\): 508-515.](#)

[Oreskovic, N.M., Blossom, J., Field, A.E., Chiang, S.R., Winickoff, J.P., Kleinman, R.E. \(2012\). Combining global positioning system and accelerometer data to determine the locations of physical activity in children. \*Geospatial Health\*, 6\(2\): 263-272.](#)

## **Public involvement**

**Hayley Reed (DECIPHer), Dr Ruari-Santiago McBride (CoEPhNI), Dr Mark Tully (CoEPhNI) and Helen Elizabeth Brown (CEDAR)**

Public involvement in research is defined as an active process where research is carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them. Advocates of public involvement believe some of the best research involves those who are affected by its outcomes, as the public can provide 'knowledge in context' which is different but equal to that of scientific experts. Within health research, the most commonly cited public involvement model has been proposed by Hanley and colleagues and delineates three levels of public involvement; consultation, collaboration and user control.

This workshop will commence with three of the workshop facilitators presenting a short case study example, one of each level of involvement, to the group. The case studies will include: Ruari-Santiago McBride showcasing his consultation work with community members and with prisoners; Hayley Reed showing how she facilitates ALPHA, the young people's research advisory group; and Dr Mark Tully detailing a project which involved local community members in data collection.

The second part of the workshop will focus on the barriers and facilitators of involving the public in research. This will take the form of small group discussions with half the participants discussing the question 'What do you need to make public involvement a reality (the facilitators) and do you know any ways to obtain these facilitators?', and the other half discussing 'What challenges are there to undertaking public involvement (barriers) and how could you overcome these?'. Time will be allocated for groups to feedback and for questions to be posed to the facilitators. Participants will not need previous experience of involving the public or to do any advanced reading.

**Conducting public health systematic reviews: challenges and practical tips. A  
knowledge-exchange workshop**

**Ruth Turley (DECIPHer), Dr Beki Langford (DECIPHer), Dr Ruth Jepson (SCPHRP),  
Dr Sarah Brennan (CoEPhNI)**

Undertaking public health systematic reviews can be daunting! The complex, often multi-disciplinary, nature of interventions, together with a broad scope of relevant outcomes and study designs, presents challenges for identifying and synthesising key evidence in a useful way.

This workshop will provide an open forum to discuss and share lessons learned, in order to help identify and address potential pitfalls in the review process. Researchers, using examples from their own work, will also present three short talks on their personal experiences of undertaking systematic reviews and practical tips that have helped them:

- My first systematic review and how I survived it (Dr Beki Langford)
- Systematic reviews of qualitative evidence (Dr Ruth Jepson)
- Using logic models to guide the review process and communicate findings (Ruth Turley)

The workshop is suitable for those new to systematic reviews along with more experienced reviewers interested in emerging methodologies in the field.

**Health economics and population health: emerging methodological and policy issues for the public health and health economics communities**  
**Rhiannon Tudor-Edwards (Bangor University) & Will Hollingworth (DECIPHer)**

The PHSRN 'Economics of population health' workshop held in Glasgow in May 2012 identified a tension between the dominant focus of economic evaluation on 'downstream', NHS-delivered, individual behaviour change interventions and the emerging evidence that population health is most likely to be improved through environmental change, government legislation and opportunities in other sectors to address the 'upstream' social determinants of population health. This debate poses challenges for economic evaluation. Specifically, the need to consider equity and/or the opportunity cost of focussing on equity, the context-dependence of cost-effectiveness estimates (which may limit the generalisability of findings), and the challenges of communicating results to cross-sectoral government, public health policy makers and practitioners.

This workshop explores these issues further, reflecting on:

- sources of available published guidance for health economists involved in the design, conduct and reporting of economic evaluation of population health interventions;
- resources needed to undertake such economic evaluations;
- statistical considerations such as power calculations, missing data and study design;
- equity audit, and methods for modelling the long term costs and benefits of population health interventions.

We draw on a number of recently published studies to illustrate the opportunities and challenges in this field. Whilst acknowledging the strengths and limitations of alternative economic evaluation methods, we explore approaches taken by other public sector economists (e.g. education, housing and transport) that have been used to bridge the gaps between evidence, policy and practice.

Workshop participants will have an opportunity to discuss the tensions between the need for rigour in economic evaluations of population health and the needs of policy makers for rapid and clear-cut evidence to inform decision making.

## Meet the funders - career development in population/public health research

### Dr Ghada Zoubiane (MRC)

***Please note that this workshop takes place at 12.15 on Wednesday 10 July, not at 11.00 with the other workshops.***

Dr Shannon Amoils  
Senior Research Advisor  
British Heart Foundation

Dr Nicola Armstrong  
Programme Manager  
HSC Research & Development Division  
Public Health Agency

Nidhee Jadeja  
Science Portfolio Adviser  
Wellcome Trust

Dr Anne Helme  
Research Funding Manager  
Strategy and Research Funding  
Cancer Research UK

Rachel Tyrrell  
Deputy Team Head, Health & Human Behaviour  
ESRC

Dr Ghada Zoubiane  
Programme Manager for Public Health Partnerships  
Medical Research Council

Dr Birgit Obermuller,  
Programme Manager  
National Institute for Health Research (NIHR) Trainees Coordinating Centre

Need advice on funding for the next step in your career? This workshop is an opportunity for early career researchers in population/public health research to meet representatives of seven funding organisations to gain an overview of the funding schemes relevant to their career progression. Presentations will include top tips for a successful grant proposal and how to be prepared for a positive interview. A Q&A session will follow the presentations.

You will have the chance to meet representatives from the British Heart Foundation; Cancer Research UK; the Economic and Social Research Council; Health and Social Care Research & Development Division, Public Health Agency, Northern Ireland; the Medical Research Council; National Institute for Health Research/The Department of Health; and the Wellcome Trust.