

# UK Society for Behavioural Medicine 19th Annual Scientific Meeting

## Title

A framework for using natural experiments to evaluate population health interventions

## Workshop Leader & other facilitators / convenors

Workshop leader: Peter Craig. Facilitators: Mhairi Campbell (+2 facilitators tbc)

Natural experimental evaluations for assessing the impacts of public policy on population health are needed to ensure decision makers can use the best research evidence available. There has been a substantial increase in the conduct of natural experimental evaluations since original guidance was published. There have been advances in relevant methodologies, greater availability of big datasets, and a rise in demand for 'what works' evidence amenable to natural experimental evaluation. Therefore, it is important that researchers, publishers, funders, and users of intervention research are aware of all the recent developments and of the strengths, weaknesses, applicability, and limitations of the full range of methods now available.

A framework that updates and extended original guidance has been developed for using natural experiments to evaluate population health interventions. The framework was developed from three international workshops and an online consultation with researchers, journal editors and end users of natural experimental evaluations. The project was funded by The UK Medical Research Council and the National Institute for Health and Care Research, and the project team comprised researchers with expertise in natural experimental evaluations. In addition, the project had a funder-assigned oversight group and advisory group of independent experts, including researchers, journal editor, and practitioners with experience of commissioning natural experimental evaluations.

In this workshop the framework for natural experimental evaluations will be used. The framework provides an integrated guide to the use of natural experimental methods, offering a range of tools to support its use and detailed, evidence-based information for researchers, funders, publishers, and users of evidence. We will provide an overview of key concepts of natural experiment evaluations, designing and planning evaluations, including stakeholder involvement and selecting appropriate methods. Guided by prompts from the new framework and using an example vignette, participants will work in small groups to design an evaluation of a natural experiment. This will focus on key issues: identifying evaluation opportunities, developing the evaluation, and assessing evaluability and feasibility of the evaluation. Throughout the session there will be opportunities for feedback, raising questions and discussion.

## Objectives

In this workshop we will provide practitioners and researchers with an overview of natural experimental evaluations, including recent advances in designing, analysing and reporting natural experimental evaluations. During the session participants will learn about concepts and definitions of natural experiment evaluations; design and planning evaluations (including co-production with stakeholders); and integrated designs and mixed methods. They will work in small groups to design a natural experiment evaluation to consolidate the learning. Workshop participants should come with research questions in their mind relating to undertaking natural experiment evaluations in their own research areas. Throughout the workshop there will be opportunities to ask questions and discuss any issues that arise during the session.

## Rationale

The use of natural experimental evaluations has proliferated in recent years, but key concepts and definitions remain contested. The Medical Research Council and National Institute of Health Research in the UK have commissioned an international expert group to update the MRC's Guidance for Natural Experimental Evaluations. There is a need for researchers and policy makers to understand what a natural experimental evaluation can offer for policy evidence and how to design, analyse and report the findings from a natural experimental evaluation.

