

## Action research

Systematic reviews are essential components of the research funded by NIHR and other organisations. By summarising the literature for a treatment or therapy, whether a single drug or complex intervention, a well-designed systematic review can strengthen the overall evidence base, pooling results from small studies which may in themselves be inconclusive or at odds with results of other studies. This is helpful for identifying which interventions are effective but can also uncover areas for which further RCTs are unlikely to change the evidence base.

Increasingly, researchers are extending beyond the traditional quantitative synthesis of data from groups of clinical trials. Syntheses of qualitative data can provide useful information on the patients' experience of their treatment or illness, and many evidence syntheses now seek to incorporate both qualitative and quantitative evidence, using a mixed methods approach. Many grant applications can benefit from considering how such information could enhance the overall evidence synthesis.

Overviews of reviews are progressively more common, aiming to pull together information from several related systematic reviews. For example, it may be of interest to see how self-management approaches have been used in a variety of different chronic conditions, each of which has its own systematic reviews and literature. In this case, an overview of reviews can be a useful way of identifying common themes and summarising the effectiveness of similar kinds of interventions or approaches to disease management. Such an approach could be of interest to research funders who may be developing policy or best practice guidelines.

## Funding a systematic review

The NIHR Systematic Reviews Programme offers two funding streams specifically for systematic reviews. The Cochrane Collaboration Programme Grant Scheme runs every three years and aims to support high quality systematic reviews of direct benefit to users of the NHS in England. Cochrane Incentive Awards are available to Cochrane Review Groups and are offered via an annual call for proposals. They are designed to facilitate or accelerate activity that is already planned or in progress.

In addition, several of the NIHR streams will consider funding an evidence synthesis: Health Services and Delivery Research (HS&DR), Health Technology Assessment (HTA), Programme Grants for Applied Research (PGfAR), Programme Development Grants (PDG), Public Health Research (PHR), Research for Patient Benefit (RFPB). Calls may be advertised as either researcher-led calls (where investigators can suggest their own project), commissioned calls (where applications are invited for a specific research question), or themed calls, which run across programmes and tackle priority research areas, for example an NIHR-wide call for applications to support research in antimicrobial resistance. It may also be worth approaching charities for funding for systematic reviews.

## Making the case for a systematic review

In the case of a commissioned call, the NIHR team will already have identified the need for a systematic review and conducted its own brief investigation into previous research and on-going studies in related areas. For researcher-led calls, justification for a systematic review would include a scoping search to identify any previous systematic reviews which may be out of date, and any new and on-going studies published since they were carried out.

The [Cochrane Library](#), [DARE](#), and [HTA database](#) are the most useful ways of identifying published systematic reviews. Databases such as Medline, Embase, and The Cochrane Central Register of Controlled Trials (CENTRAL) would usually be searched for relevant studies for a full systematic review. Although it will not always be feasible to search all these at the application stage, a scoping search of at least Medline will give an indication of the likely number of studies that would be included in the systematic review, to justify the potential time and resources required for carrying out the full review.

A background section on the literature and relevant current debates amongst clinicians may provide useful justification for the research question. Researchers will also need to include a summary of epidemiological issues and the importance of the disease/treatment under consideration to the NHS and population.

It is also vital to check that there is not a similar systematic review already being planned or undertaken by another group. Applicants should check the [Cochrane library](#) for current protocols, and also [PROSPERO](#), the Centre for Reviews and Dissemination's prospective register of on-going systematic reviews.

#### **Patient and public involvement**

As with applications for funding for primary research, patient and public involvement (PPI) needs to be considered from the outset. Organisations such as [INVOLVE](#) and [People in Research](#) can be useful sources of information and potential patient experts in your research. There may be charities or patient groups who are keen to identify important outcomes, contribute to the systematic review, or give an insight into patients' experiences and priorities for research.

**Andrea Takeda,  
Research Design Service London,  
Queen Mary University of London**