

Specification Document (11/1015)
Responsive funding in the NIHR SDO programme: call for proposals for quasi-experimental evaluations of organisational interventions in healthcare
Closing date 1.00pm on 17 March 2011

1. Introduction

The National Institute for Health Research (NIHR) Service Delivery and Organisation Programme (SDO) has established a responsive funding workstream; this is the fourth call for proposals. The SDO Studies Panel (<http://www.sdo.nihr.ac.uk/thesdstudiespanel.html>), chaired by Professor Lorna McKee assesses proposals submitted to this workstream.

This workstream provides a mechanism by which researchers can bring ideas, topics and areas of research need to the attention of the SDO programme which might not otherwise be addressed by our commissioned research programme. The selection process will be shorter than the commissioned programme where needs are identified through extensive liaison and dialogue with evidence users in the NHS.

The SDO Studies Panel funding workstream is not wholly open. Each call identifies a number of areas in which we are seeking proposals. These will include particular research topics, or research approaches, or other targeted areas of work.

This fourth call is particularly focused on evaluations of organisational initiatives or interventions. The aim is to encourage studies which adopt a quasi-experimental design. This could include methods such as an interrupted time series (ITS) or a controlled before and after (CBA) design, to test the effects or impacts of those initiatives or interventions. We are seeking both to encourage the use of such methods in evaluating organisational initiatives and interventions in healthcare and to encourage the development of expertise and capacity in the research community¹. **Please note that the unit of analysis is the organisation and not interventions/initiatives primarily directed at the patient level.**

We have provisionally allocated £2 million to this call for proposals and anticipate funding a number of projects. **The cost and duration of a proposed project must be clearly set out and justified (further details in section 5.7) and applicants must demonstrate that they have the research-user in mind particularly as regards the timely production of research findings, processes for knowledge mobilisation and the relevance, generalisability and utility of the findings.**

Examples of previously funded SDO projects using quasi-experimental design include:

08/1304/044 - Evaluation of IT modernisation in the NHS (Professor Naomi Fulop)
<http://www.sdo.nihr.ac.uk/projdetails.php?ref=08-1304-044>

08/1201/138 - Systematic review of the literature on diffusion, spread and sustainability of innovations in health service delivery and organisation (Professor Trisha Greenhalgh)
<http://www.sdo.nihr.ac.uk/projdetails.php?ref=08-1201-038>

¹ Examples/explanations of ITS

<http://www.biomedcentral.com/abstractS/COCHRANE/1/PA008>

<http://www.ncbi.nlm.nih.gov/pubmed/15095767>

<http://www.csulb.edu/~msaintg/ppa696/696quasi.htm#Interrupted%20Time%20Series>

All proposals submitted to this responsive funding stream will be assessed in the same way as those submitted to the two other workstreams in the SDO programme; firstly for importance to the NHS, secondly for scientific quality. More details of this process are given in section 7. Researchers are advised that unless a proposal fits the criteria of this specific call **and** reflects the broad objectives of the SDO programme addressing the primary audiences for SDO commissioned research as detailed below, it will not be considered. In addition, proposals will be judged for their competitiveness².

Proposals must be tailored to this call. Proposals which have been submitted elsewhere and have failed to be funded can be considered but researchers must give full details. Applicants also need to clarify whether their proposal is currently under consideration by another research funder. If so, applicants are asked to contact NETSCC-SDO.

2. The SDO programme objectives

The NIHR Service Delivery and Organisation programme is funded by the NIHR, with contributions from NISCHR in Wales. Researchers from Scotland and Northern Ireland should contact NETSCC to discuss their eligibility to apply.

The NIHR SDO Programme improves health outcomes for people by:

- Commissioning research and producing research evidence that improves practice in relation to the organisation and delivery of health care, and
- Building research capability and capacity amongst those who manage, organise and deliver services – improving their understanding of the research literature and how to use research evidence.

The primary audience for the research which the SDO programme commissions, is decision makers in the NHS in England and Wales – particularly managers and leaders in NHS organisations. We focus our research commissioning on topics and areas where we think research evidence can make a significant contribution to improving decision making, and so to improving the organisation and delivery of healthcare to patients.

Further information on the SDO programme, including a list of past, current and recently commissioned projects, can be found on the SDO website: www.sdo.nihr.ac.uk.

3. Background to this call

Responsive funding programmes can be a positive way of identifying neglected areas of research, enhancing underdeveloped methods or supporting researchers wishing to build a related body of evidence in key areas. They are useful for stimulating research in important but less high profile areas of health need and they allow the research community to bring new ideas, novel methods and topics to the forefront. We hope to stimulate some innovative approaches through this responsive mechanism in terms of topics; methods; research teams; and stronger collaborations /partnerships between researchers and the service. .

We wish to avoid some of the common problems associated with responsive mode funding such as a high volume of heterogeneous and poorly constructed proposals and a low success

² 'Non-Competitive' means that a proposal is not of a *sufficiently high* standard to be taken forward for further assessment in comparison with other proposals received and funded by the SDO programme because it has little or no realistic prospect of funding. This may be because of scientific quality, cost, scale/duration, or the makeup of the project team.

rate for researchers – both of which represent a poor use of resources for the research funder and the research community. The Panel will therefore put an emphasis on the need in the NHS for the research, scientific rigour and quality, fit with call criteria and alignment with the mission of the SDO programme. The use of a two stage process with an outline submission will in part help to ensure the coherence and quality of those bids chosen to advance to full proposal stage.

4. This call for proposals

For this responsive call, our focus is on commissioning evaluations of organisational initiatives or interventions which primarily use a quasi-experimental design to evaluate and assess the effects or impacts of those initiatives or interventions. We do not specify the organisational initiatives or interventions to be evaluated nor their stage of delivery/implementation, though clearly they must be of importance to the NHS and relevant to the management and leadership community in NHS organisations who constitute the primary audience for SDO-funded research. Examples might include initiatives/interventions concerning quality improvement, service redesign, information systems/usage, workforce changes, or the use of incentives. This list is illustrative and not prescriptive. Please note studies which examine the effects or impacts of patient-level interventions are usually more appropriately submitted to other NIHR programmes such as the health technology assessment (HTA) programme. Those with a predominantly patient-level focus are likely to be deemed out of remit for this call.,(even if they use a quasi-experimental design).

Evaluations of the impact or effectiveness of clinical, educational or other interventions used at the level of the patient often make use of a randomised controlled trial (RCT) design, where random allocation and experimental intervention are both feasible and ethically acceptable. However, it is rarely feasible and may be inappropriate for other reasons to use RCTs to evaluate the impact of organisational interventions which are used at the level of an organisation as a whole or a sub organisational unit (such as a department, service or team). In these circumstances, researchers may turn to a number of quasi-experimental designs more suited to the nature of these research questions. For example, an interrupted time series (ITS) design may be used, in which a number of observations of the dependent variable(s) are collected before, during and after the intervention is applied to the organisational unit, and statistical methods are used to test the significance and magnitude of any change and to take account of any underlying temporal trends. A controlled before and after (CBA) design may be used in which observations are made before and after the implementation of an intervention, both in a group that receives the intervention and in a control group that does not, and statistical methods are used to adjust for known differences between the two groups. The Cochrane Collaboration Effective Practice and Organisation of Care (EPOC) group have produced useful definitions of such quasi-experimental designs³. Guidance will be available from the MRC in the new year.

5. General guidance for applicants

Our main concern is to commission research which is well designed; will be effectively carried out by the research team; will provide findings which meet the needs of the NIHR SDO programme and the NHS management and leadership community it serves; and will be used to improve health services. With these aims in mind, we offer the following general guidance to applicants. For this call we are encouraging quasi-experimental approaches to evaluating organisational level- initiatives/interventions. with evidence of NHS need and engagement. Other approaches may be combined with quasi- experimental designs in this call but should not be the dominant approach. The SDO Panels and Commissioning Board will take account of this guidance when they assess and select proposals.

³ <http://epoc.cochrane.org/epoc-register-studies>

5.1 Research team makeup and expertise

Our key concern is that projects should have a research team with the right skills to undertake the research. It is important that the team has the necessary expertise, but is not so large that project management will be difficult. Projects are likely to use a team with significant input from diverse disciplines appropriate to the content and methods of the project. All applicants need to show that they will commit appropriate time and effort to the project, and the use of large teams of applicants with little or no apparent time commitment to the project is discouraged. Full proposals should make it clear what responsibilities and roles will be fulfilled within the project by each team member.

The chief investigator or principal applicant should generally be the person who has contributed most to the intellectual and practical development of the proposal, and who will take lead responsibility for its implementation. This is not necessarily the most senior investigator in the research team. Where the principal applicant has a limited past track record in holding grants, we will look for evidence that they will be supported and mentored by more experienced co-applicants.

5.2 NHS management engagement

Our key concern is that NHS managers should be directly engaged or involved with SDO research projects because this will produce research that is more closely grounded in and reflective of their concerns and makes the subsequent uptake and application of research findings more likely.

We particularly welcome project proposals in which the involvement of at least one NHS manager is clearly evidenced. This could be to enlist an NHS manager as part of the project team as a co-applicant, and to involve them in all stages of the research cycle. Other models of involvement might be: as members of a project advisory/steering group; or as members of an expert user group; or through letters of senior management support for the research. It must be clearly shown how managers will contribute and the significance of their role to the delivery of the research. Their contribution may be to facilitate or enable research access to organisations, to be directly involved in research fieldwork, to comment on and contribute to emerging findings, and to be involved in knowledge mobilisation (see below). The active involvement of NHS managers will ensure commitment to and support for the research from the NHS organisations involved. Please note the time of NHS manager(s) as co-applicants can be costed into the proposal, as part of the NHS Support Costs.

5.3 Gains for the service

Not all research will individually result in potential savings or direct gains for the service. However it may lead to a better understanding of organisations, systems or services and contribute to that body of knowledge. Where it is appropriate, studies should include a cost-effectiveness component with a view to helping managers and service providers make decisions and identify potential for savings. As a publicly funded programme in a time of restraint, researchers should look to demonstrate potential savings and gains for the service, where appropriate. This includes setting out in broad terms the likely impact and implications of this work for the wider service at outline stage.

5.4 Research methods

Our key concern is that the research proposed is well designed, will be well conducted, and will add to knowledge in the area. In this call priority is given to quasi-experimental approaches but other methods within this broad approach can be used or combined.

Here we highlight some necessary watchpoints derived from past experience. Proposals need to make proper use of relevant theory and of the findings in the existing literature to frame their research questions. Although at outline stage, comprehensive referencing is not required,

illustrative sources and indication of the grounding in a body of literature should be given. Theoretical, descriptive evaluations, proposals which appear not to be informed by the existing literature and projects which appear to replicate rather than add to existing research are unlikely to be funded. Research questions need to be very clearly stated and framed – in terms which are sufficiently detailed and specific. This includes a clear description of the intervention which is being assessed and articulating the objectives and aims of the research.

The research methods proposed must be appropriate to the nature of the research question(s) and to the theoretical framework for the project. It is important that the proposal makes a clear link between the research questions and the intended empirical approach and fieldwork, showing what data will be gathered and how it will be used. The approach to data analysis must be clearly explained. The proposal needs to show that the research team has considered and addressed the logistics and practical realities of undertaking the research – gaining ethical and research governance approval, securing access, recruitment, data collection and management, etc. Studies should be realistically costed and timed to take account of these activities.

Researchers should be mindful of the need for broader applicability of findings and the need to draw generalisable conclusions from their findings.. Emphasis must be given to the relevance of the outputs for the service as a whole. This may affect the study design – for instance, single case studies are likely to be supported only exceptionally.

The plan of investigation should set out clearly and in some detail the proposed methodology. It should include a Gantt chart or project timetable showing clearly the planned dates of different project phases and of project outputs.

5.5 Public involvement

It is a core concern of the SDO programme that all commissioned projects should pay appropriate attention to the needs and experiences of all relevant stakeholders (including local communities, lay people, service users and patients, carers and minority ethnic communities as well as healthcare practitioners and managers) during the design, execution and communication of the research. Proposed projects should be explicit in describing their arrangements for public and patient involvement and in communicating how the proposed work has potential implications for service delivery that could lead to enhanced public and community engagement. The application includes a section for the non-expert and care should be given to ‘pitching’ the proposal at a lay audience, avoiding jargon and explaining clearly the expected benefits of the research.

5.6 Research governance

Applicants should show that they understand and that their proposal complies with, the Research Governance Framework for the NHS. Successful applicants will be required to provide proof of research ethics committee approval for their project, if it is required, before funding commences. The project plan should take realistic account of the time required to secure ethics and governance approval. Any risks associated with organisational restructuring should be addressed where anticipated and factored into the project design and timelines.

5.7 Costs and value for money

Project costs will be carefully scrutinised and must always be well justified and demonstrate value for money. NIHR programmes currently fund Higher Education Institutions (HEI) at a maximum of 80% of Full Economic Cost (except for equipment over £50,000 – 100%). For non-HEI institutions, NIHR may fund 100% of costs. However, the NIHR SDO programme reserves the right to award a grant for less than this maximum and for less than the amount sought by applicants.

6. Research outputs and knowledge mobilisation

Our key concern is to ensure that projects funded by the SDO programme are designed from the outset to produce useful, timely and relevant research findings which are then well-disseminated and taken up. Involvement of managers at all stages of the research life-cycle process is likely to enhance both relevance and knowledge mobilisation.. Such engagement will be also likely to ensure a focus on varied and diverse outputs aimed at different audiences, especially managerial audiences...

All full proposals submitted to the SDO programme must include a detailed section on research outputs and knowledge mobilisation in the full plan of investigation which is attached to the proposal when it is submitted. We would expect to see that section and the project plan detailing the outputs and knowledge mobilisation activities which are planned across the life of the project, and the resources section of the proposal showing that sufficient resources have been allocated within the project budget to undertake these knowledge mobilisation activities. In general terms, all projects which are longer than 12 months are expected to produce some interim outputs during the life of the project as well as those at the end of the project.

The outputs and knowledge mobilisation activities shown in the project proposal are likely to include some or all of the following:

- A final and full research report detailing all the work undertaken and supporting technical appendices (up to a maximum 50,000 words), an abstract and an executive summary (up to 2000 words). This is a required output. The executive summary must be focused on results/findings and suitable for use separately from the report as a briefing for NHS managers. Care should be given to using appropriate language and tone, so that results are compelling and clear. The report must use the layout template provided. Following scientific peer review and editing/revision, the report will be made available on the SDO programme website. This is a required output from all projects.
- A set of Powerpoint slides (up to 10 maximum) which present the main findings from the research and are designed for use by the research team or others in disseminating the research findings to the NHS. The slides must use the template provided. They will be made available alongside the report on the SDO programme website. This is a required output from all projects.
- Journal papers for appropriate academic peer reviewed journals, designed to ensure the research forms part of the scientific literature and is available to other researchers.
- Articles for professional journals which are read by the NHS management community and which will be helpful in raising wider awareness of the research findings.
- Seminars, workshops, conferences or other interactive events at which the research team will present and discuss the research and its findings with NHS managers
- Guidelines, toolkits, measurement instruments or other practical methods or systems designed to enable NHS managers to use the research findings in practice. We are looking for practical, innovative ideas – such as questions arising from the research that non-executive directors could raise at Board meetings or similar.

This list is illustrative rather than comprehensive, and we will welcome project proposals which include other forms of output and knowledge mobilisation activities. All projects are encouraged to collaborate in knowledge mobilisation with the SDO Network, which is hosted by

the NHS Confederation and exists to enable managers to improve and develop the services they manage by facilitating their access to and use of the latest health services research. (<http://www.nhsconfed.org/networks/sdonet/Pages/SDONetwork.aspx>).

7. Process for proposal selection

The NIHR Service Delivery and Organisation programme is funded by the NIHR, with contributions from NISCHR in Wales. Researchers from Scotland and Northern Ireland should contact NETSCC to discuss their eligibility to apply.

Whilst we have not set a maximum duration or cost for projects, value for money will be scrutinised and all costs must be justified. Applicants should be aware that changes to costs between outline and full proposal will have to be fully explained, and we therefore encourage applicants to be as realistic as possible when costing their outline proposals. Realistic costs are also very important at commissioning of full proposals as the SDO programme does not normally accept requests for variations to contracts for additional time or funding once projects have been contracted.

Applications for this call will be assessed in two stages. Outline proposals will be sought. Once remit and competitiveness checks have been made, they will then be reviewed by the SDO Studies Panel. The primary criterion against which the Panel assesses outline proposals is that of **NHS need for the research** – in other words, whether the proposed research will be useful to research users in the NHS, and is likely to contribute to improving decision making. It will use four main criteria to make this judgement:

- Relevance of the proposed research to the needs, interests and current and future challenges for the management community in the NHS.
- Likelihood that the proposed research will produce findings which are timely, useful to and capable of application by the management community in the NHS
- Likelihood that the proposed research will promote the greater engagement between the academic research community and the health management community in the NHS, and will encourage development of links between academic institutions and NHS organisations.

Applicants whose proposals are shortlisted will be asked to develop a full proposal for assessment by the SDO Commissioning Board meeting. This board's primary concern is the **quality of the proposed research**. It uses two main criteria to make this judgement:

- Scientific rigour and quality of the proposed research, and the expertise and track record of the research team.
- Value for money of the proposed research, taking into account the overall cost and the scale, scope and duration of the work involved.

8. Application process and timetable

Should you have any questions or require any further clarification please refer to the NETSCC FAQs at <http://www.sdo.nihr.ac.uk/faqsnetssc.html>, if the answer to your question cannot be found please email your query to sdofund@southampton.ac.uk with the reference number (11/1015) and title for the call for proposals as the email header. Applicants should be aware that while every effort will be made to respond to enquiries in a timely fashion, **these should be received at least two weeks before the call closing date**.

The process of commissioning will be in **two stages** and applicants should submit **outline proposals** via the SDO website by **1pm on 17 March 2011**. No late proposals will be considered. No paper-based only submissions will be considered.

Applicants will be notified of the outcome of their outline application in mid-May 2011.

Shortlisted applicants will be invited to submit a full proposal via the SDO website (a link will be sent to shortlisted applicants). Applicants will be notified of the outcome of their full proposal application in October 2011. Please note these dates may be subject to change.