Institute of Education



JUNE 24, 2016

TERMS OF REFERENCE FOR SYSTEMATIC REVIEWS

FUNDED BY THE UK DEPARTMENT FOR INTERNATIONAL DEVELOPMENT SUPPORTED BY THE EPPI-CENTRE





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INTRODUCTION

The Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre) has been enhancing the policy relevance of systematic reviews since the mid-1990s and with a particular focus on developing country concerns since 2007. Much of this has been done with the Department for International Development (DFID), which leads the UK's work to end extreme poverty and commissions world-class research that directly improves people's lives. The DFID Systematic Review Programme aims to strengthen evidence-informed policy making through the production of high quality and policy relevant evidence synthesis products.

Box 1: Definition of a systematic review

A systematic review is a comprehensive, rigorous and policy relevant synthesis of the evidence base, which includes the following aspects:

- A structured literature search
 - The literature search should be exhaustive and should follow a clear protocol.
- Quality appraisal
 - The quality of the evidence included should be assessed according to clear criteria.
- A synthesis of the evidence base

A key element of DFID's definition of a systematic review is being 'policy relevant' (Box 1). We consider systematic reviews relevant to policy (and policy makers) when they present, in a clear and timely manner, findings for policy audiences in order to: illuminate policy problems; challenge policy assumptions or develop policy interventions; or offer evidence about the impact or implementation of policy options; and take into account diversity of people and contexts (Oliver and Dickson 2015). Policy relevant systematic reviews present challenges because policy makers tend to ask broad questions which can only be answered by reaching both across and beyond academic disciplines.

This programme is developing methods to integrate knowledge that transcends academic disciplines by combining the interests of the policy and research communities throughout the systematic review process, from setting the question to sharing the findings. It will build on what we have learnt about how systematic reviews are seen from the different worlds of policy and research (Oliver and Dickson 2015). Policy and research teams working with the EPPI-Centre will, together, accrue experience of systematic reviews that reach across and beyond academic disciplines. The methods developed in the course of conducting substantive research will be shared in the academic literature, through policy networks and in guidance for producers of systematic reviews – both funders and systematic reviewers.

CALL FOR SYSTEMATIC REVIEWS

ROLE OF THE EPPI-CENTRE

The EPPI-Centre has worked with DFID policy teams to identify appropriate systematic review questions that align with gaps in the existing evidence important for policy. For each systematic review question the EPPI-Centre will:

- Commission systematic reviews and provide a grant management function.
- Liaise with DFID policy team and the review team to facilitate policy input through discussion and comments on the draft protocol and draft review report.
- Liaise with the DFID Evidence into Action team to (a) invite their comments on the draft protocol and draft review report; and (b) agree approval of the final protocol and final report.
- Assess the training and support needs of selected review groups', and deliver training and bespoke technical assistance to address these.
- Provide a quality assurance function for the selected reviews.
- Provide a project management function, ensuring that reviews are completed to an agreed timeline and reporting back to DFID on progress at agreed milestones.
- Support the communication of review findings.
- Note and discuss with policy and research teams challenges encountered and solutions developed in the course of the review process.

SYSTEMATIC REVIEW TEAMS

Producing policy-relevant systematic reviews raises challenges for working across academic disciplines and with partners beyond academia. Systematic reviews combine: understanding of the topic from direct experience of working in, or potentially affected by, policy or services; understanding of the topic from an academic perspective, how it has been or could be studied; systematic review methods drawing on information science, statistics or qualitative analysis; and project management skills. Therefore, review teams should include:

• Members with sector experience and good familiarity with specific issues covered by the research question;

- Members with experience in conducting systematic reviews (including systematic searching, quality appraisal, data extraction and data analysis);
- An information specialist or experienced librarian to undertake and supervise the searching;
- Members with statistical expertise for quantitative analysis / statistical meta-analysis;
- Members with expertise in qualitative synthesis methods and theory of change analysis.

Depending on the requirement of the review, only quantitative or qualitative expertise will be required. Thus, review teams should propose methods experts depending on the scope of review questions, nature of evidence and proposed methodology.

Applicants are encouraged to collaborate with other competent organisations including academic institutes, research organisations, NGOs and research groups as well with individual researchers, systematic reviewers and sector experts to achieve a high quality team.

In the case of a consortium, contracting will be done with the lead organisation of the consortium, while the lead organisation may have sub-contracting arrangement with collaborating institutes or researchers.

It is important that members of the systematic review team have substantial dedicated time to complete the work. This requirement includes sufficient staff time to ensure systematic searching of the existing literature, the independent double reading of full text articles, data extraction and quality appraisal of included studies, with third party referral in case of disagreement.

Teams should describe in their proposal their relevant links with policy-makers, practitioners and development community as potential users of their systematic review.

METHODOLOGY

Successful review teams are expected to conduct their review using approaches that will maximise both the rigour and relevance of their work to policy challenges. They will be expected to choose their approach to suit the review question and the likely availability of primary studies¹. They will discuss the options with the quality assurance team before making a decision.

¹ You may refer to these links for various systematic review approaches and study designs-<u>http://www.systematicreviewsjournal.com/content/1/1/28</u>;

All systematic reviews will be conducted in **two stages**. The first stage will identify and describe the research available in terms of the focus, design and context of studies (see figure 1). The findings from this stage of the work will be presented to the review's Advisory Group (in the form of a presentation and working papers) for a discussion about the most useful and productive focus for the second stage. The second stage will involve studying the selected evidence in detail to answer the research question.

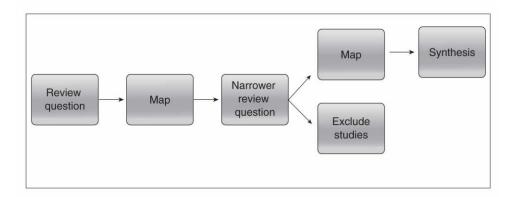


Figure 1: Review with map and synthesis with narrowing of inclusion criteria

(NB the 'scope' of a map or a review describes its boundaries, or its criteria for including or excluding studies. A map describes the focus and type of studies within that scope. A map of stage I offers the details required to make a decision about the scope of stage II.)

Review teams are expected to conduct their work in line with internationally recognised standards and procedures such as those advocated by:

- The PRISMA statement (<u>http://www.prisma-statement.org/statement.htm</u>) for transparent and complete reporting of systematic reviews and meta-analysis
- AMSTAR (<u>http://amstar.ca/index.php</u>) A Measurement Tool to Assess Systematic Reviews

The review teams may choose to draw on resources and guidance elsewhere, such as:

- A checklist (<u>http://www.3ieimpact.org/media/filer_public/2012/05/07/quality_appraisal_checklist_srdatabase.pdf</u>) – used by DFID and 3ie for the quality appraisal of systematic reviews in the 3ie database.
- EPPI Centre (<u>https://eppi.ioe.ac.uk</u>) part of the Social Science Research Unit at the UCL Institute of Education, focusing on systematic reviews in education, health and social policy;

- Campbell Collaboration (<u>http://www.campbellcollaboration.org/</u>) Independent organisation producing systematic reviews on what works for education, health and social policy to build healthy and stable societies;
- Cochrane Collaboration (<u>http://www.cochrane.org/</u>) Independent organisations producing systematic reviews for health interventions;
- International Initiative for Impact Evaluation (3ie) (<u>http://www.3ieimpact.org/</u>)

REFERENCES

Gough D, Thomas J, Oliver S (2012) Clarifying differences between review designs and methods. *Systematic Reviews* 2012, 1:28. <u>http://www.systematicreviewsjournal.com/content/1/1/28</u>

Gough D, Oliver S, Thomas J (2013) Learning from Research: Systematic Reviews for Informing Policy Decisions: A Quick Guide. A paper for the Alliance for Useful Evidence. London: Nesta. http://www.alliance4usefulevidence.org/publication/learning-from-research/

Oliver S, Dickson K (2015) Policy-relevant systematic reviews to strengthen health systems: models and mechanisms to support their production. *Evidence and Policy. 19 August* <u>http://dx.doi.org/10.1332/174426415X14399963605641</u>

TASKS FOR PREPARING EACH SYSTEMATIC REVIEW

Systematic review teams will:

- Organise at least one face-to-face or virtual meeting with DFID staff to understand their motivation for addressing the systematic review question and agree with them and the EPPI-Centre an overall approach that will deliver a policy relevant systematic review within the required timetable.
- 2. Complete training needs assessments when requested by the EPPI-Centre, then select in discussion with the EPPI-Centre, and attend, 10 hours of virtual training tailored to the needs of the team.
- 3. Convene a group of advisors who between them bring experience of the problems, contexts and options underpinning the question.
- 4. Maintain interaction with the DFID policy team and other advisors throughout the review process in order to draw on their expertise to design and execute the review, and to interpret and share the findings.

- Assemble a review team that brings knowledge of the substantive focus and the appropriate systematic review methods (for identifying, appraising and synthesising studies) and experience in managing research projects to maintain high standards and timely delivery.
- 6. Choose, apply and justify systematic review methods appropriate for the review question and the literature available, taking into account internationally recognized standards.
- 7. Set up project management and information management systems to safeguard their review data, manage allocation of review tasks within the team and support timely delivery of reports. EPPI-Reviewer 4², the EPPI-Centre's comprehensive online software tool for research synthesis, is available without charge along with technical support.
- 8. Submit to the EPPI-Centre for peer review a systematic review protocol that responds to all the elements of the protocol outlined below and makes use of DFID's template for reporting systematic reviews.
- Respond to comments from DFID, peer reviewers and the EPPI-Centre about the protocol, and send these responses to the EPPI-Centre. Upon agreement by the EPPI-Centre and DFID that a satisfactory protocol has been completed, the 1st disbursement (30%) will be made.
- 10. Execute the systematic review following the protocol and carefully document the search, appraisal and synthesis process.
- 11. Maintain regular contact with the EPPI-Centre, particularly during preparation of the protocol, for peer review, when the available literature has been identified, and when preparing and finalising the review report.
- 12. When relevant studies have been identified discuss with the EPPI-Centre and DFID how to balance the scope, timescale and funding for the project appropriate to the nature and scale of the literature.
- 13. In order to clarify the findings emerging from the review, deliver a seminar to draw out the key messages as the work is approaching completion. Agree with the EPPI-Centre the forum, participants and content of the seminar.

² http://eppi.ioe.ac.uk/cms/Default.aspx?alias=eppi.ioe.ac.uk/cms/er4

- 14. Develop a full draft systematic review that responds to all elements of the final systematic review laid out below and makes use of DFID's template for reporting systematic reviews. This includes an accessible summary/abstract, prepared with support from the EPPI-Centre. This draft review will initially be reviewed by the EPPI-Centre and DFID. The 2nd disbursement (40%) will be made when they consider a satisfactory draft has been submitted.
- 15. Incorporate comments from DFID, the EPPI-Centre and external reviewers into the draft to produce a final systematic review. When the EPPI-Centre and DFID agree the final content is satisfactory the 3rd disbursement (15%) will be made.
- 16. Respond promptly to queries from copyeditors, designers and the EPPI-Centre to produce a high quality, attractive report and summary text for web publishing.
- 17. The final disbursement (15%) will be made on publication of the systematic review report.
- 18. Reflect on the technical and collaborative challenges and solutions for producing policy relevant systematic reviews.
- 19. Provide DFID with a full reference list of studies reviewed to be included in their evidence mapping database.
- 20. Carry out communication and dissemination activities as described in the proposal, including ensuring DFID policy teams are aware of the outputs.

GUIDANCE AND SUPPORT FOR CONDUCTING SYSTEMATIC REVIEWS

Appropriate systematic review methods vary with the nature of the question addressed and the literature available (described briefly by Gough et al 2012, 2013). If the nature and scale of the literature is unclear when the question is first posed there is a risk of either being overwhelmed by studies or having too few studies to answer a useful question. One solution is to approach the literature in two stages, by quickly mapping what is available before discussing with potential review users which sub-set of studies to review in depth. Sometimes it is on reaching the second stage that the final review question is framed and the most appropriate review methods become apparent.

Training and support is available from the EPPI-Centre throughout the review process, from engaging with policy makers about the question to interpreting and sharing the findings. The EPPI-Centre will provide training and support tailored to the needs of each review team. This will include:

- 1. A web space for distance learning and support where teams can find resources and guidance (Moodle http://moodle.org/)
- 2. Training for conducting systematic reviews using Blackboard Collaborate for real-time, interactive distance learning
- 3. IT solutions for information management from downloading the outputs of electronic searches to preparing final reports
- 4. On-line review software to support qualitative, quantitative and mixed methods reviews
- 5. Tools for screening search outputs, deleting duplicate citations, critical appraisal, statistical meta-analysis and qualitative synthesis
- 6. Advice about involving potential review users, in addition to the DFID policy team, in shaping the focus of a review and interpreting the emerging findings, either through one to one consultation or through convening an advisory group.
- 7. On-going distance support, by email, Skype and telephone
- 8. Organising peer review of protocols and final reports

Review teams are strongly advised to make use of EPPI-Reviewer 4³ the EPPI-Centre's comprehensive online software tool for research synthesis which they can use without charge for reviews conducted under this programme. It is a web-based software program for managing and analysing data in literature review and has been developed for all types of systematic review such as meta-analysis, framework synthesis and thematic synthesis. Technical support is available.

DELIVERABLES

Review teams will deliver:

A protocol which should be submitted for review within 10 weeks of commencing the contract. The protocol will include- (1) Background, (2) Aims and rationale for review, (3) Definitional and conceptual issues, (4) Objectives of the systematic review; (5) Conceptual framework; (6) Methods for identifying and briefly describing studies to assess the literature available.

³ http://eppi.ioe.ac.uk/cms/Default.aspx?alias=eppi.ioe.ac.uk/cms/er4

- 2. An initial scoping of the literature (as part of a protocol) identified from a systematic search. Scoping of the literature should include: (1) details of the systematic search strategy; (2) a record of the search strategy implemented so far; (3) an initial analysis of the topic focus and study designs identified so far. The analysis can be presented as a series of tables or PowerPoint file, sufficiently detailed to inform a discussion and decision about the most productive focus for subsequent review activity to complete the contract.
- A final protocol informed by the decisions made in light of the scoping of the literature, and which is subject to external review and approval by the EPPI-Centre and DFID. Protocols should include: (1) Background; (2) Objectives; (3) Review team; (4) Methods (inclusion criteria, search strategy, methods of data collection and analysis); (5) Timeline; (6) Sources of funding; (7) Statement of conflicts of interest; (8) References; (9) Names and contact details of primary investigators.
- A draft report, 12 months after commencing the contract, which is also subject to external review and approval by the EPPI-Centre and DFID, including an accessible summary (no more than 4 pages). Reports should include: (1) Structured abstract (background, methods, results, conclusions). (2) Accessible summary; (3) Background; (4) Objectives; (5) Methods; (6) Search results; (7) Details of studies included, including their quality, and studies excluded after inspecting their full report; (8) Synthesis results; (9) Strengths and limitations; (10) Conclusions and recommendations; (11) References (included and excluded studies).
- 5. A final report which responds to comments made during the peer review process.
- 6. **Systematic review summary document** (not more than 4-5 pages, using the template provided), to be submitted along with the draft report, in a language accessible to non-specialists, and including:
 - Key messages for policy-makers, practitioners and/or researchers which provide the headline findings of the review;
 - The purpose of the systematic review and the question(s) it seeks to answer;
 - Summary of main findings of the paper(s);
 - Broad findings relating to the body of evidence as a whole;
 - Reflections on the assumptions and quality of the evidence;
 - Specific gaps in the evidence relating to important policy concerns;

- Visual representation of key evidence to attract readers' attention help their understanding;
- An overview of the evidence more detailed than is given in the short summary above, relevant for policy-makers and development practitioners, and referring to policy implications wherever appropriate.
- 7. Quarterly status reports, to be submitted to the EPPI-Centre describing progress.
- 8. Training need assessment and evaluation forms, to be submitted to the EPPI-Centre as requested
- 9. A presentation on key findings from the final report to DfID at the end of the study. This will include presentation at an external or virtual meeting/seminar or any other event/conference that will be decided and agreed with DfID in due course.
- 10. The systematic review teams will be encouraged to produce various types of **dissemination** products, which may include, but not limited to popular columns, blog postings, leaflets, newsletters, etc. for different types of audiences to encourage debate and uptake in the region to a larger extent. Review teams will also organise a dissemination workshop towards the end of the study.

All deliverables must be provided as word documents or equivalent using appropriate templates that incorporate a standardized front page and submitted to <u>ioe.eppi.systematicreviews@ucl.ac.uk</u>, all deliverables must include DFID branding, EPPI-Centre branding, acknowledgement of funding and a disclaimer setting out that they are independent research products.

Researchers should be aware that the final contracts will contain an element of flexibility. Following the completion of the search stage, if a particularly large number of studies are found to be synthesised then additional funding may be available following a discussion with the DFID team. Correspondingly if no studies, or a very small number are found, then the size of the contract may be reduced. Alternatively, in discussion with DFID and the EPPI-Centre, the scope of the review or the detail of analysis may be amended to suit the type of literature identified and the staff time available.

Researchers should note that 5% of the contract budget is dependent on timely completion of outputs and invoicing. This payment will only be withheld when failure to achieve the agreed milestones is the sole responsibility of the Research Team.

MILESTONES AND PAYMENT TERMS

The systematic review is expected to be completed **within 15 months** from contract signing to submission of final reports.

Payment for the reviews will be tied to the deliverables that meet agreed timelines and will be given in four tranches, as following:

Milestone/deliverables	Payment Terms
Protocol completed following peer review to be published on EPPI-Centre website	Satisfactory completion of protocol following peer review according to the agreed timeline (30%), as judged by EPPI-Centre and DFID
Draft report submitted for peer review using the DFID template, 12 months after contract signed	Satisfactory completion of draft review according to the agreed timeline (40%), as judged by EPPI-Centre and DFID
Final report: content agreed following responses to peer review	Satisfactory content of final report (15%), as judged by EPPI-Centre and DFID
Final report published and dissemination activities initiated	Satisfactory presentation of final report and dissemination plan according to the agreed timeline (15%)
	5% of the contract budget is dependent on timely completion of outputs and invoicing throughout. This payment will only be withheld when failure to achieve the agreed milestones is the sole responsibility of the Research Team.

Appendix 1. Quality assurance support to be provided under the programme

The EPPI-Centre support group (EPPI-SG) will provide on-going support and quality assurance to review teams throughout the review process. The key quality assurance support to be provided under the programme include following:

- Welcome / introductory emails: Welcome letter will be sent via emails at the beginning of the projects to review teams. It aims to give information about what the teams can expect and where to get advice in terms of support from the EPPI-SG team.
- **Title registration:** Support to teams in registering their reviews with EPPI-Centre;
- **On-going methodological advice for review teams**: This will be done through training as well as through offering the use of standardised tools and systematic review software. In particular, the EPPI-SG team will provide support and quality assurance through:
 - Two interactive, long distance training sessions using Skype or Blackboard *Elluminate!* covering topics where teams need further guidance and methodological support.
 - The EPPI-Centre will support review teams in developing search strategies. Their information scientist will provide support to review teams to identify regional databases/websites that are relevant to the topics and different contexts.
 - Detailed feedback to review teams on protocols and final reports.
 - On-going guidance and support to review teams via emails, phone, and Skype at key stages of preparing the systematic reviews including during development of research question, search strategy, inclusion/exclusion criteria, mapping tool, quality assessment framework, critical appraisal, synthesis, etc.
 - Web-based resource interface where training materials and sources of information and supplementary materials can be freely available to review teams.
 - Information management support through EPPI-reviewer, including free of charge access to EPPI-reviewer for the purpose of systematic reviews under the programme. Support will be provided in using EPPI-reviewer (information management software of the EPPI-Centre) to manage review information from the start of the review: e.g. handling citations from initial searches through the screening for relevant studies, data extraction, and data analysis.
- **Standardised research tools** (e.g. systematic review protocol and report templates, study mapping tool) will be provided to trainee teams; support will be provided in understanding and using these tools;

- **Contextual analysis**: Support will be provided in developing methodology for taking into account the contexts of studies included in the review;
- **Peer review:** The EPPI-Centre will support the peer review processes for draft of a) stage II protocols and b) final reports. Review teams will be supported in inviting peer reviewers to assess the protocols/reports in terms of their merit in defining the review question, their methods for addressing the review question, and their involvement of potential users in the work;
- **Publishing:** The EPPI-Centre will copyedit, format and publish the systematic review on the EPPI-Centre website and make it available for DFID's website.