

# Appendix 2: Guidelines for preparing a research review

## Purpose

This paper contains interim guidelines on the requirements for reviewers undertaking a systematic knowledge review for SCIE. The guidelines are intended to assist in clarifying the conduct of knowledge reviews for SCIE, and constitute part of SCIE's remit to set out an agreed methodology for systematic reviews in social care. These interim guidelines will be replaced with a revised version in 2006.

The guidelines should act as a framework — and not a straitjacket — for good practice in systematic reviews. While they establish certain minimum requirements, they do not attempt to dictate precise methodology or other review conduct. They will also need to be adapted to the precise circumstances of the review, including the time and other resources available: decisions about adapting the criteria will be made in negotiation between reviewers and SCIE.

Accordingly, the guidelines require that reviewers negotiate with SCIE a methodological plan (or *protocol*) before work starts, and that the plan must take account of the issues raised in these guidelines.

The guidelines apply to both scoping reviews and evaluative reviews. Scoping reviews may not examine all relevant material, but will cover all *significant* material, and may indicate the need to fill gaps in knowledge. Their primary purpose is to clarify the nature of a research question, to identify the range of relevant material and to make a broad assessment of the coherence and quality of that knowledge. Scoping reviews may make recommendations for policy and practice, but they may be heavily qualified in the light of the initial nature of the search for and analysis of relevant material. Evaluative refers to reviews designed to locate, as far as possible, *all* relevant material, to evaluate the strength of evidence it contains and to make recommendations for policy and practice. The decision whether a review is primarily undertaken at the scoping or evaluative level will be taken in negotiation between the reviewers and SCIE.

## Review process

Define review question



Define search terms and scope



Define inclusion criteria



Define data recording and appraisal forms



Agree protocol with SCIE



Search and select studies



Quality assess studies



Synthesise messages



Report, with technical appendix

## Stakeholder involvement

The principle of stakeholder involvement (particularly of service users), described in the commissioning brief, applies equally to the stages of a systematic knowledge review: reviewers should consider how stakeholders, particularly those receiving the specific service which is the subject of the review, can be involved in setting the terms of the review, in evaluating the evidence, and making in the recommendations.

## The review question

SCIE knowledge reviews must be underpinned by a review question, that is, a succinct and clear statement of the question or issue the review is intended to clarify. The review question is the touchstone for deciding how to construct criteria for including and excluding material from the review.

## Sources of material

SCIE knowledge reviews are intended to be broader than reviews that consider research alone, and should draw on materials from other sources such as users' and carers' accounts, reports from managers and practitioners, audit and inspection reports, and policy documents.

## Search strategies

The search strategy developed to underpin electronic or other searching should be included as part of a technical appendix to the eventual report. In addition to specifying the terms used, the search strategy should cover any general limitations (such as English language materials only, or materials from a restricted time period).

## Databases for SCIE systematic knowledge reviews

### General databases

The following databases should always be considered for searching. It is not intended that *all* reviews will search *all* databases, but reasons should be given for any exclusions.

HMIC (all 3 databases)	Medline
IBSS	CINAHL
SIGLE	Cochrane Library (CDSR, DARE, CCTR)
Social Work Abstracts	Dissertation Abstracts
NASW Clinical Register	Social SciSearch
ASSIA	Wilson Social Science Abstracts
ERIC	Social Services Abstracts
British Education Index	Sociological Abstracts
PsycInfo	ZETOC
CareData (may be accessed at SCIE in order to use full search facilities)	Campbell SPECTR

### Specific databases

In addition, any databases specific to the topic should be considered, such as ChildData, or AgeInfo.

### Additional searches

Additional searches of specific journals should be considered (*hand searching*), together with the results from following up references in retrieved material (*citation tracking*) and from personal contacts and personal databases.

Existing sources on systematic reviews do not offer agreed guidelines on hand searching, and a range of criteria and practices are operated. Ultimately, criteria for hand searching is for reviewers to decide, but one approach that should be considered is to restrict it to recent issues of key journals, on the basis that there may be delays in their contents reaching the electronic databases. Selecting key journals is again a task for the reviewers, but one technique that should be considered is to use the results from the searches of electronic databases to identify the most frequently sourced journals. It is perfectly legitimate to include material identified through these means, provided that the method of locating the work is clearly described and provided it meets the standard inclusion criteria.

## Inclusion criteria

Reviewers should outline clear criteria, derived from the original review question, about which materials were selected for retrieval and for eventual inclusion in the review. Examples of marginal cases should be given, and records kept about what is excluded at what stage. In-/exclusion decisions should normally involve two reviewers. If time or resources do not permit this, a second reviewer should examine a 10 per cent or greater sample of the abstracts.

## Reporting results

The results of searches and of decisions whether to include retrieved material in the review should be clearly reported. The report should include (as part of the technical appendix) tables showing the number of materials identified by each method, the number retrieved for more detailed examination, and the number included in the review. The material may be classified into different categories (such as evaluative studies, narrative accounts, background papers etc), and a table showing the numbers in each category should be given. It is highly likely that some material will have a primary and a secondary classification: for example, evaluative studies may contain accounts of the theoretical background. Classification by the primary category is, however, sufficient for reporting numbers in tables.

Review authors should bear in mind that the purpose of such detailed reporting is to allow external scrutiny of the relationship between the search/inclusion criteria and the review findings.

## Data recording and quality appraisal

The review should use a format for recording information about the material included in the review, and about the assessment made of the quality of the material.

Two approaches are possible — to keep the information separate from the appraisal of its quality, or to combine the two in one format. Information about sampling, for example, may be distinguished from an assessment of whether the sampling was appropriate, or alternatively may be reported under one heading giving the information and an assessment of its quality.

Whichever approach is adopted, reviewers should include a copy of the data recording and quality appraisal format(s) as part of the technical appendix.

Reviewers may elect to combine the use of a long and a short form of the data recording and quality appraisal format: where the review includes a wide variety and a great number of materials, reviewers may choose to record in detail only those materials deemed critical to the review (such as key user accounts, or evaluative studies). In such cases, the short form should be a subset of the headings used in the long form.

After the core material has been identified, and data recording and quality appraisal format(s) decided, each piece of work should normally be read and analysed by two reviewers (*duplicate data extraction*). If time or resources do not permit this, a second reviewer should examine a 10% or greater sample of the records.

The reviewers should consider including short summaries of key materials (perhaps using the short form of data recording and quality appraisal) as an appendix to the final report.

## Quality appraisal

There is no single method or overarching framework for quality appraisal of the materials likely to be included in a SCIE systematic knowledge review. However, the purpose of quality appraisal should always be to enable the reader of the review to make an informed judgement about the value of knowledge gained from different sources. Reviewers should therefore be explicit and transparent about the criteria for their appraisals, and should consult the following resources to decide their approach.

- In relation to formal outcome research (such as ‘experimental’ or ‘quasi-experimental’), reviewers should consult the assessment criteria and examples developed by the Campbell Collaboration ([www.campbellcollaboration.org/](http://www.campbellcollaboration.org/)), by the NHS Centre for Reviews and Dissemination<sup>1</sup> ([www.york.ac.uk/inst/crd/](http://www.york.ac.uk/inst/crd/)) and by the Eppi-centre ([eppi.ioe.ac.uk/EPPIWeb/home.aspx](http://eppi.ioe.ac.uk/EPPIWeb/home.aspx)). Where reviewers propose to pool quantitative data from outcome studies, they should be explicit about the model and methods underpinning such pooling. A SCIE report on quality appraisal of outcome studies is available<sup>2</sup>.
- In relation to other kinds of research studies and other material (‘narrative accounts’, ‘diverse study designs’, ‘qualitative studies’), reviewers should consult guidance offered by the NHS Centre for Reviews and Dissemination guidance ([www.york.ac.uk/inst/crd/](http://www.york.ac.uk/inst/crd/)), the Cochrane Qualitative Research Group ([mysite.freeserve.com/Cochrane\\_Qual\\_Method/index.htm](http://mysite.freeserve.com/Cochrane_Qual_Method/index.htm)), the Eppi-centre ([eppi.ioe.ac.uk/EPPIWeb/home.aspx](http://eppi.ioe.ac.uk/EPPIWeb/home.aspx)), and the Cabinet Office (report on the quality of qualitative research available from [www.number-10.gov.uk/su/qual/downloads/qqe\\_rep.pdf](http://www.number-10.gov.uk/su/qual/downloads/qqe_rep.pdf)). Again, a SCIE report on quality appraisal in this field is available<sup>3</sup>.

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<sup>1</sup> NHS Centre for Reviews and Dissemination (2001) *Undertaking systematic reviews of research on effectiveness: CRD's guidance for those carrying out or commissioning reviews: CRD report number 4 (2nd Edition)*, York, University of York.

<sup>2</sup> Macdonald G., *Using systematic reviews to improve social care*, London, Social Care Institute for Excellence, 2003.

<sup>3</sup> Popay J. and Roen K. (2003) *Synthesis of evidence from research using diverse study designs: a preliminary review of methodological work*, London: Social Care Institute for Excellence.

Given that there is no single approach to quality appraisal, and that the appraisal of material from diverse study designs is particularly under-developed, SCIE is *not* expecting that reviewers will solve these problems as well as undertake the review. What *is* expected is that reviewers will have consulted the sources noted above and will report on how their own approach relates to them.

As part of this, reviewers may wish to examine the examples of the data extraction format and quality appraisal attached as an Appendix to these guidelines, and the example attached to the previously cited report by Macdonald.

## Two promising approaches

SCIE is also recommending that reviewers consider the application of the following two complementary principles in quality appraisal.

First, one of the most promising approaches to quality appraisal is to seek the interplay of principles from different knowledge sources. Thus, the principle of generalisability (or *external validity*), deriving from methodological thinking in research, is a key issue in assessing whether reports or material from other sources gives a good basis for policy and practice recommendations. Thus, reports from inspection and monitoring agencies (such as SSI or the Audit Commission), or narrative accounts of users' or practitioners' experiences, may be appraised in terms of their generalisability.

Similarly, a principle deriving from the user constituency, that users' views are critical in defining appropriate outcomes, may be applied to material from the research community: intervention studies may be evaluated, for example, in the light of whether they contain evidence of having involved users in designing the study and in defining outcome measures. (This principle underpins the appraisal category 'user-/carer centredness' in the example in the appendix by Moriarty<sup>4</sup>.)

Secondly, the question of what weight to attach to knowledge claims from different sources may sometimes be usefully approached by establishing a *dialogue* between findings from different sources – an approach developed by the Eppi-centre (see [www.hda-online.org.uk/evidence/sandyo\\_phesg\\_0203.pdf](http://www.hda-online.org.uk/evidence/sandyo_phesg_0203.pdf)) In this dialogue approach, findings from user accounts may be set against those from, for example, intervention studies: where an issue is identified in both kinds of studies, the reviewer may elect to place greater weight on the finding in question than if no such correspondence can be identified. The approach is also valuable in identifying research and development priorities: findings from intervention studies not matched by user accounts suggests the need for investigation of the issue by means of user studies or by means of better designed intervention studies that incorporate user involvement.

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<sup>4</sup> Moriarty J. (2002) *Research review: Assessment of the mental health needs of older people*, London, National Institute for Social Work Research Unit, Kings College.

## Protocol

The research proposal should show how such a methodological plan or protocol will be developed, and should propose a timetable for the first draft of this protocol. Proposers may wish to attach an example from previous work, if available.

If commissioned, the reviewers will be asked to confirm a date for the draft protocol, on which SCIE will comment prior to continued work.

Experienced reviewers, and those with an interest in developing the methodology of systematic reviews, will be encouraged to seek to register their protocol with the Campbell Collaboration.

## Examples of classification systems and quality appraisal frameworks<sup>5</sup>

Helpful sources in drawing up this are listed below. Some studies use both quantitative and qualitative methods. Where this was the case, a decision was made depending on the balance between the two both in the methods of data collection and the presentation of results. The real difficulty lay in adapting qualitative studies, studies of service organisation and delivery, and studies describing the process of developing and validating a standardised instrument to traditional hierarchy of evidence models. In reaching a rating, account was taken of whether or not it dealt with a hard to research topic or was of a seminal nature.

### Primary quantitative studies

PQUANT 1	<ul style="list-style-type: none"> <li>• Primary research studies.</li> <li>• Mainly quantitative, almost always using a randomised or quasi-experimental design but also includes studies with random stratified population samples or across multiple sites where clear attempts have been made to achieve comprehensive coverage.</li> <li>• Contains detailed information about techniques for sample selection, data collection, and appropriate analysis of data.</li> <li>• Also includes studies reporting on the development of a standardised instrument where detailed information on reliability and validity is reported.</li> </ul>
PQUANT 2	<ul style="list-style-type: none"> <li>• Primary well-designed non-experimental studies, controlled statistically if appropriate.</li> </ul>

<sup>5</sup> Moriarty, J. (2002) *Assessment of older people with mental health problems*, National Institute for Social Care Institute for Excellence, Work Research Unit, Kings College, London.

	<ul style="list-style-type: none"> <li>• Includes studies using case control, longitudinal, cohort, matched pairs, or cross-sectional random sample methodologies.</li> <li>• Contains detailed information about techniques for sample selection, data collection, and appropriate analysis of data.</li> <li>• Also includes studies reporting on development of standardised instrument but with limited information on reliability and validity or where tested with a limited sample.</li> </ul>
PQUANT 3	<ul style="list-style-type: none"> <li>• Individual well-designed study but limited in scope, either because it is based upon a single area or is examining a hard to research area.</li> <li>• May also include studies with limited analyses and/or reporting.</li> </ul>
PQUANT 4	<ul style="list-style-type: none"> <li>• Individual study, weak methodology and analysis.</li> </ul>

### Primary predominantly qualitative studies

PQUAL 1	<ul style="list-style-type: none"> <li>• Primary research studies.</li> <li>• Mainly qualitative.</li> <li>• Evidence of theoretical or purposeful sampling, adequate description, data quality, theoretical and conceptual adequacy, potential for assessing typicality.</li> </ul>
PQUAL 2	<ul style="list-style-type: none"> <li>• Well-designed study but where there is greater descriptive analysis.</li> <li>• Limited potential for assessing typicality.</li> </ul>
PQUAL 3	<ul style="list-style-type: none"> <li>• Adequately designed primary study but limited to a single method and/or lacking information on analysis.</li> </ul>
PQUAL 4	<ul style="list-style-type: none"> <li>• Individual study, weak methodology and analysis.</li> </ul>

### Reviews

REVIEW 1	<ul style="list-style-type: none"> <li>• Review which describes deliberate procedures for locating, appraising, and analysing primary study results.</li> <li>• Also includes reviews by acknowledged expert in the field which show awareness of comprehensiveness (e.g. international literature, literature from different disciplines, seminal and recent studies) and contribute to the development of theoretical concepts.</li> </ul>
REVIEW 2	<ul style="list-style-type: none"> <li>• Comprehensive review drawing together evidence.</li> <li>• Identifies 'what works' and where information is lacking.</li> <li>• May include systematic reviews where only a single database or source of information was used.</li> </ul>
REVIEW 3	<ul style="list-style-type: none"> <li>• Comprehensive review but limited to descriptive accounts of the</li> </ul>

	literature.
REVIEW 4	<ul style="list-style-type: none"> <li>Review limited in scope and understanding of the topic.</li> </ul>

### Other examples of classification systems

DESCRIP	<ul style="list-style-type: none"> <li>Descriptive study e.g. service development or programme, often published before final evaluation.</li> <li>Case studies and practice guides.</li> </ul>
PRACTICE REVIEW	<ul style="list-style-type: none"> <li>Article primarily aimed at practitioners which discusses the literature but is more of a commentary, aimed at identifying practice issues.</li> </ul>
OPINION	<ul style="list-style-type: none"> <li>Professional opinion based on author's evidence and that of others aiming to identify problems or themes, e.g. editorials.</li> </ul>
AUDIT	<ul style="list-style-type: none"> <li>Information from audit and inspection reports.</li> </ul>

#### References

- Department of Health (2001). *National service framework for older people*. London: Department of Health. <http://www.doh.gov.uk/nsf/olderpeoplemaindoc.htm>.
- Long, A., Godfrey, M., Randall, T., Brett, A. and Grant, M. (2000) *Feasibility of undertaking systematic reviews in social care*, Leeds, Nuffield Institute for Health.
- Nicholas Mays, Emilie Roberts and Jennie Popay (2001), *Synthesising research evidence in studying the organisation and delivery of health services*, Naomi Fulop, Pauline Allen, Aileen Clarke, and Nick Black (Editors). London: Routledge: 188-220.
- Jennie Popay, Anne Rogers and Gareth Williams (1998), *Rationale and standards for the systematic review of qualitative literature in health services research*. *Qualitative Health Research* 8 (3): 329-340.
- Angela Scott, Mike Shaw and Carol Joughin, Eds. (2001), *Finding the evidence: a gateway to the literature in child and adolescent mental health*, London, Gaskell.

### Templates for extracting and summarising data from studies

This template is based upon the evaluative tool for qualitative studies developed by Long et al. (2000).

<b>Type of study</b>	Qualitative. Rated as: <input type="checkbox"/> PQUAL 1 <input type="checkbox"/> PQUAL 2 <input type="checkbox"/> PQUAL 3
<b>Topic area</b>	Which of the four main areas of the review does it cover? <input type="checkbox"/> Users' and carers' experiences of assessment <input type="checkbox"/> Standardised measures and good practice <input type="checkbox"/> Improving user and carer participation <input type="checkbox"/> Sharing information.



## Overview

<b>Bibliographic details</b>	<ul style="list-style-type: none"> <li>• Author, title, publication, year.</li> </ul>
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• What are the aims of the study?</li> <li>• What are the aims of the paper/book/chapter being reviewed?</li> </ul>
<b>Key Findings</b>	<ul style="list-style-type: none"> <li>• What are the key study findings?</li> </ul>
<b>Evaluative summary</b>	<ul style="list-style-type: none"> <li>• Draw together brief comments on the study as a whole and its strengths and weaknesses.</li> <li>• Is further work required?</li> <li>• What are its implications for policy, practice and theory, if any?</li> </ul>

## Study

<b>Study</b>	<ul style="list-style-type: none"> <li>• What type of study is it?</li> </ul>
<b>Intervention</b>	<ul style="list-style-type: none"> <li>• What, if any, is the intervention?</li> <li>• Is there a comparison intervention?</li> </ul>
<b>Outcome criteria</b>	<ul style="list-style-type: none"> <li>• What outcome criteria are used in the study?</li> </ul>

## Setting

<b>Area and care setting</b>	<ul style="list-style-type: none"> <li>• What is the geographical and care setting for the study?</li> </ul>
<b>Rationale</b>	<ul style="list-style-type: none"> <li>• What is the rationale and appropriateness for this choice?</li> </ul>
<b>Detail</b>	<ul style="list-style-type: none"> <li>• Is there sufficient detail about the setting?</li> </ul>
<b>Time period</b>	<ul style="list-style-type: none"> <li>• Over what period did the data collection take place?</li> </ul>

## Sample

<b>Inclusion criteria</b>	<ul style="list-style-type: none"> <li>• Who was included in the study?</li> </ul>
<b>Exclusion criteria</b>	<ul style="list-style-type: none"> <li>• Who was excluded?</li> </ul>
<b>Selection</b>	<ul style="list-style-type: none"> <li>• How was the sample selected?</li> </ul>
<b>Size</b>	<ul style="list-style-type: none"> <li>• What is the size of the sample and groups comprising the study?</li> </ul>

<b>Appropriateness</b>	<ul style="list-style-type: none"> <li>Is the sample appropriate in terms of its ability to meet the aims of the study, the depth of data that it is enables to be collected, and its breadth?</li> </ul>
<b>Ethics</b>	<ul style="list-style-type: none"> <li>Was ethical committee approval obtained?</li> <li>Was informed consent obtained?</li> <li>Does the study address ethical issues adequately?</li> </ul>
<b>User/carer centredness</b>	<ul style="list-style-type: none"> <li>Are there any other indications of responsiveness to the needs of users and carers beyond ethical committee approval (e.g. carer/user involvement in study, ways of feeding back study data or findings)?</li> </ul>

### Data collection

<b>Methods</b>	<ul style="list-style-type: none"> <li>What data collection methods were used?</li> </ul>
<b>Role of researcher</b>	<ul style="list-style-type: none"> <li>What is the role of the researcher within the setting?</li> </ul>
<b>Fieldwork</b>	<ul style="list-style-type: none"> <li>Is the process of fieldwork adequately described?</li> </ul>
<b>Data analysis</b>	<ul style="list-style-type: none"> <li>How are the data analysed?</li> <li>How adequate is the description of the data analysis?</li> <li>Is adequate evidence provided to support the analysis? (e.g. use of original data, iterative analysis, efforts to establish validity and reliability.)</li> <li>Is the study set in context in terms of findings and relevant theory?</li> </ul>
<b>Researcher's potential bias</b>	<ul style="list-style-type: none"> <li>Are the researcher's/researchers' own position, assumptions and possible biases outlined?</li> <li>Indicate how they could affect the study in terms of analysis and interpretation of the data.</li> </ul>

### Policy and practice

<b>Generalisation</b>	.To what extent are the study findings able to be generalised? .Are the conclusions justified?
<b>Implications for policy</b>	.What are the implications for policy?
<b>Implications for practice</b>	.What are the implications for practice?

## Other comments

<b>Format</b>	.Comments on study format (book, journal article, report etc.) and how this may have implications for style and presentation of the text.
<b>Links to other references</b>	.List any potentially useful references to be followed up.
<b>Timing</b>	.Approximately how long did it take to read the text? .How easy or difficult was it to find the information that was required for completing the template?
<b>Reviewer</b>	.Name of reviewer and date.

- (2) I. Walter et al. (2003) Research Impact: A Cross-Sector Review: Literature review, Research Utilisation Research Unit, University of St Andrews.

## Selection criteria

Selection of papers for inclusion in the review should be a two-stage process. Initial broad selection criteria were used with the titles and abstracts of papers retrieved from searchers. Criteria for including papers at this stage were:

- located within the education, healthcare, criminal justice or social care sectors, or policy making in general
- refers to research utilisation or to implementing evidence-based policy and/or practice. Where there was any doubt from the abstract as to whether a paper should be included at this stage, the full text was retrieved and these initial criteria applied to the whole paper.

## Selection criteria for full text papers

### Conceptual papers

Included papers had to contain:

- discussion of the theories, models or conceptual frameworks used to guide the development of a practical strategy to enhance research impact
- explicit consideration of a theory, model or conceptual framework to support research utilisation or implementing evidence-based policy/practice
- construction of a framework or model for developing evidence-based practice across a broad sector, sub-sector or professional area (e.g. social care, nursing)
- a theoretical or conceptual review of ideas about research utilisation or implementing evidence-based policy and practice.

## Empirical papers

Included papers had to be empirical studies of:

- interventions designed to enhance the impact of research-based evidence on policy/practice
- what inhibits and what enables the use of research-based evidence in policy and practice
- empirical studies of the use of research-based evidence in policy/practice
- reviews of the above.

Where a paper simply provided a descriptive account of a research impact intervention, it was coded as a "background paper" to provide information on the nature of interventions which have been developed and for further searching.

## Methodological papers

Included papers had to be:

- conceptual or empirical papers which consider issues of how to measure and assess the impact of research.

Checklist of selection criteria for empirical papers.

- must be concerned with implementing research-based evidence, not other forms of evidence
  - populations studied must be one or more of:
    - practitioners
    - service managers
    - policy makers (at any level)
    - clients or service users *only* where the intervention aims indirectly to target one of the three groups above
  - researchers
- enhancing the impact of research-based evidence must be a primary objective of any intervention studied.

## Data extraction forms

### Data extraction categories for mapping exercise

ID reference number

Date

 /  / 

#### Bibliographic details

Author (list first author only)

Year

Title of paper

Source

Sector

#### Type of paper

Type of paper

Publishing status

 Published

 Not published

Content of paper

#### Conceptual frameworks

Models/theories of research use

Models/theories of measuring research use

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**Empirical studies**

Topic

Study/review type

Country

Study setting

Study design

Study population

Name of  
intervention/project

Type of intervention

Intervention population

Intervention provider

Intervention theories

Outcome measures

Methods for measuring  
research use (where  
relevant)

## In-depth data extraction form for empirical papers

**Publication details (use those from mapping exercise)**

Author (list first author only)

Year

Title of paper

Reference number

**Indexing categories**

Content of paper

Sector area

Sub-sector area

Study type

**Nature of the study**

Aims of the study

Any further research questions

Study type and design

Study date and duration

Any research tools used

Analysis used

Country study was done in

Location of study

Study site(s) (describe setting and details of key characteristics e.g. of organisation)

Target population

Sampling/recruitment procedures

Numbers of participants

Characteristics of participants e.g. type of policy makers, practitioners, types of job roles, age, sex, etc.

Details of any theory referred to or conceptual models used.

### **Nature of intervention (where applicable)**

Aim of intervention

Country

Location/setting	
Target population	
Intervention process (delivery and providers)	
Details of development of intervention e.g. reasons for development, any 'needs assessment' or involvement of target population.	
Any theoretical frameworks drawn on to develop the intervention.	
<b>Outcomes</b>	
Outcome measures used	
Details of outcomes/findings	
Any details of strengths/limitations of the study	

## Limited data extraction form

### Publication details

Author (list first author only)

Title of paper

Focus:  
country, setting,  
population studied, etc  
details of the  
intervention.

Aims of the study

Methods including any  
limitations of the study

Findings

## Quality assessment criteria

### Quality assessment criteria: qualitative studies

#### Aims

- are the aims of the study clearly stated?

#### Conceptual framework

- is there an explicit account of the theoretical framework and/or
- inclusion of a literature review which demonstrates how the study
- is informed by or linked to an existing body of knowledge?

#### Study design

- is the study design appropriate to the stated aims?
- are the study design and data collection processes adequately described?
- is the researcher's perspective clearly stated and taken into account?

#### Sampling

- is there a clear description of the context of the study?
- is the sampling strategy clearly described and justified?

#### Analysis

- is the analysis described?
- if so, to what extent is the analysis systematic and externally replicable?
- are efforts made to establish the validity of the findings?

#### Conclusions

- are important influences on the observed outcomes considered?
- is sufficient evidence provided to demonstrate that the results and conclusions are grounded in the data?
- are the findings clearly linked to the original aims of the study?

### Quality assessment criteria: quantitative studies

#### Aims

- are the aims of the study clearly stated?

#### Conceptual framework

- is there an explicit account of the theoretical framework and/or inclusion of a literature review which demonstrates how the study is informed by or linked to an existing body of knowledge?

#### Study design

- is the study design appropriate to the stated aims?
- are the study design and data collection processes adequately described?

#### Sampling

- is the sampling strategy clearly described and justified?

#### Results

- what outcomes are measured?
- are the outcome measures likely to be sufficiently a) valid and b) reliable for the purpose?
- are the basic data adequately described?

- are important outcome measures ignored?

### Analysis

- are the statistical methods used adequately described?
- is statistical significance assessed?
- where details are given, do the numbers add up?

### Conclusions

- are important influences on the observed outcomes considered?
- are the findings clearly linked to the original aims of the study?

### Additional assessment criteria for quantitative studies employing control/comparison groups

- Were the control/comparison groups equivalent?
- Were the groups treated equally aside from any intervention?
- Was follow-up of all participants complete?
- Are data reported for all groups both pre- and post-intervention?
- Are results analysed by original group allocation?

### Additional assessment criterion for surveys

- Is the survey response rate adequate?

### Quality assessment criteria: reviews

#### Aims

- Is the review topic clearly defined?

#### Sampling

- Is it likely that important, relevant studies were missed in the search for papers?
- Are the inclusion and exclusion criteria appropriate to the review topic?
- Is the quality of included papers adequately assessed?

#### Results

- Are results of all included studies adequately described?
- Are the reasons for any heterogeneity in results considered?

#### Synthesis

- Are the methods used for synthesising results adequately described?
- Are attempts made to address the effects of any missing information?
- Are attempts made to take into account the effects of important biases?

Conclusions

- Are the overall findings of the review clear?
- Are the major relevant outcomes considered?
- Are the conclusions drawn by the review justified?