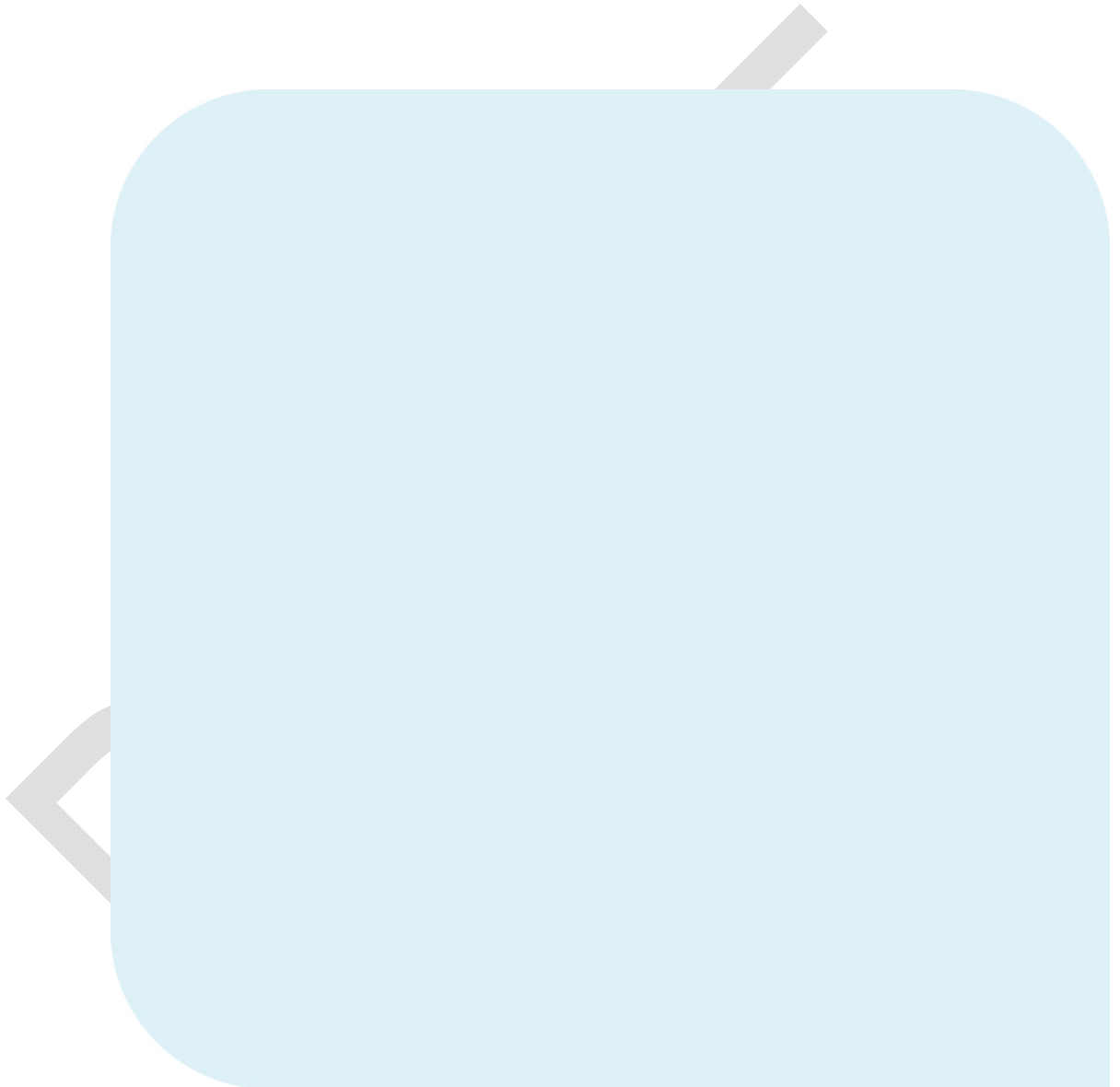


SCIE Systematic mapping guidance

April 2009



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Introduction

These guidelines are designed to be a step-by-step guide to the systematic mapping process at SCIE. They record the procedures we have developed over the past three years of conducting systematic maps and are intended to be a working document. Therefore, while some sections give a general overview of purpose and process, other sections give a more technical and specific account of SCIE processes.

Section 1 covers an overview of systematic mapping, and important aspects. Section 2 covers the technical aspects of systematic mapping in more detail.

This document represents a snapshot at the date shown in the title and will be updated. It is intended for use both by SCIE staff, and by external academics and providers of knowledge services. We have decided to make it available for external use in draft format because there is considerable interest in the academic community in the methodology.

Health warning

- The guidance captures procedures and lessons learned so far, rather than being definitive and prescriptive;
- It is based on SCIE experience, and functions as a methodological guide for SCIE staff, so may appear over-prescriptive in some parts. References to SCIE may function as a synonym for the organisation carrying out the mapping work;
- The needs of each project are different;
- The guidance is in draft, and will need updating on a regular basis.

Section 1: Systematic mapping overview

DRAFT

1.1 History of systematic mapping

With new developments in evidence-based policy and practice in social care, it is becoming apparent that the availability, quality and diversity of studies may need to be examined before deciding how to proceed with developing the evidence base in specific areas. One method of exploring the literature in a broad topic area is known as systematic mapping. The methodology for systematic mapping was originally developed by the EPPI-Centre (Evidence for Policy and Practice Information and Co-ordinating Centre, part of the Institute of Education, University of London) (Peersman, 1996; Oakley et al, 2005) and has been adapted by SCIE for use with social care topics in consultation with the EPPI-Centre.

SCIE's decision to embark on systematic mapping arose from the experience of conducting or commissioning systematic research reviews in areas where there was frequently a lack of empirical data to answer specific outcomes-focused questions. In one example, a knowledge review on teaching and learning communication skills in social work education, the searches found 8,023 references, of which only 150 were relevant to the topic. Of these, six studies reported outcomes and none were conducted in the UK (Trevithick et al, 2004).

Systematically mapping a topic enables the development of a comprehensive database of literature that includes, but is not necessarily limited to, empirical studies (Bates, Clapton & Coren, 2007). SCIE and the EPPI-Centre are not alone in seeking to develop methods to capture and describe the literature in a broad field. Researchers including CANKnow (Abrami et al, 2006) and Greenhalgh and colleagues (2005), have developed similar methodologies but none so far in the field of social care.

SCIE has now completed three pilot systematic maps. The first covers literature on the extent and impact of parental mental health problems on families, and the acceptability, accessibility and effectiveness of interventions (Bates and Coren, 2006a,b). The second examines the recovery approach in day services in adult mental health care (Carr and Clapton, 2007). The third systematic map concerns the extent and impact of depression in older people from black and minority ethnic (BME) communities (Sharif, Brown & Rutter, 2008). The map reports can be accessed at <http://www.scie.org.uk/research/maps.asp>. SCIE staff involved in developing these maps over a three year period documented the mapping procedures described in this document.

1.2 Aims of systematic mapping

SCIE project work has traditionally been initiated by conducting scoping overviews of the topic. This project scoping identifies key resources or 'headline' material. In contrast, systematic mapping identifies the majority of the readily available resources. Systematic maps aim to describe the existing literature, and gaps in the literature, in a broad topic area, and the literature quality and content can be analysed in depth or more superficially as appropriate to individual projects. The resulting overview offers policy makers, practitioners and researchers a means to identify narrower policy and practice-relevant research and review questions which can be addressed through the literature (Bates, Coren, Homewood and Kavanagh, 2006; Bates and Coren, 2006c). Alternatively, where research is lacking and a review is not feasible, a map can suggest areas for further empirical research.

The following aims apply to all maps but were drawn from the example of the first pilot systematic map (Bates and Coren, 2006a):

1.2.1 To describe the nature and coverage of research in the topic area

The map's objectives are to systematically and transparently describe the extent of research in the field, to identify gaps in the research base, and to provide direct links to the evidence base for those wishing to locate relevant research. The map provides a tool for anyone interested in interrogating the evidence base in relation to all or an aspect of the topic. It is important to note in this regard that the map itself does not constitute evidence, as only limited, descriptive appraisal of the quality of records included has been conducted, and no synthesis has been undertaken.

1.2.2 A specific resource from which to inform and commission reviews, briefings and/or primary research by identifying gaps in the research literature

The map can inform topic selection for a number of SCIE products, including systematic or knowledge reviews. For example, three research reviews and three research briefings have been commissioned from the first map. Where such work is commissioned, the map provides a route through the complexity of the search task and enables timely and straightforward identification of relevant research, allowing researchers to focus on later stages of a research report.

The map can also identify gaps in the research where further primary research is needed, and areas where no systematic reviews have been conducted and there is scope for future review work.

The map does not involve the quality appraisal, data extraction and synthesis of findings stages undertaken in a systematic review. However, quality assurance is carried out throughout all stages of mapping.

1.2.3 A searchable bibliographic database

In addition to informing specific systematic review questions, the map can also be used as a tool for research tasks where it is useful to have access to a searchable overview of the existing literature. The map can be interrogated and statistics such as frequency and cross-tabulation reports can be generated. The first map contains over 700 carefully screened bibliographic references and is freely available via the SCIE website to those interested in this field of work (see link at bottom of page at <http://www.scie.org.uk/publications/map/map01.asp>). The map provides an organised key to the literature in the field, and it is easily searchable using free text and keywords.

1.2.4 A resource for a range of audiences

The resulting map database and report can be freely used by a range of practitioners, academics, policymakers, students and the public. This improves access to knowledge for service providers and users by supporting identification and dissemination of good practice.

1.3 Overview of the mapping process and critical points

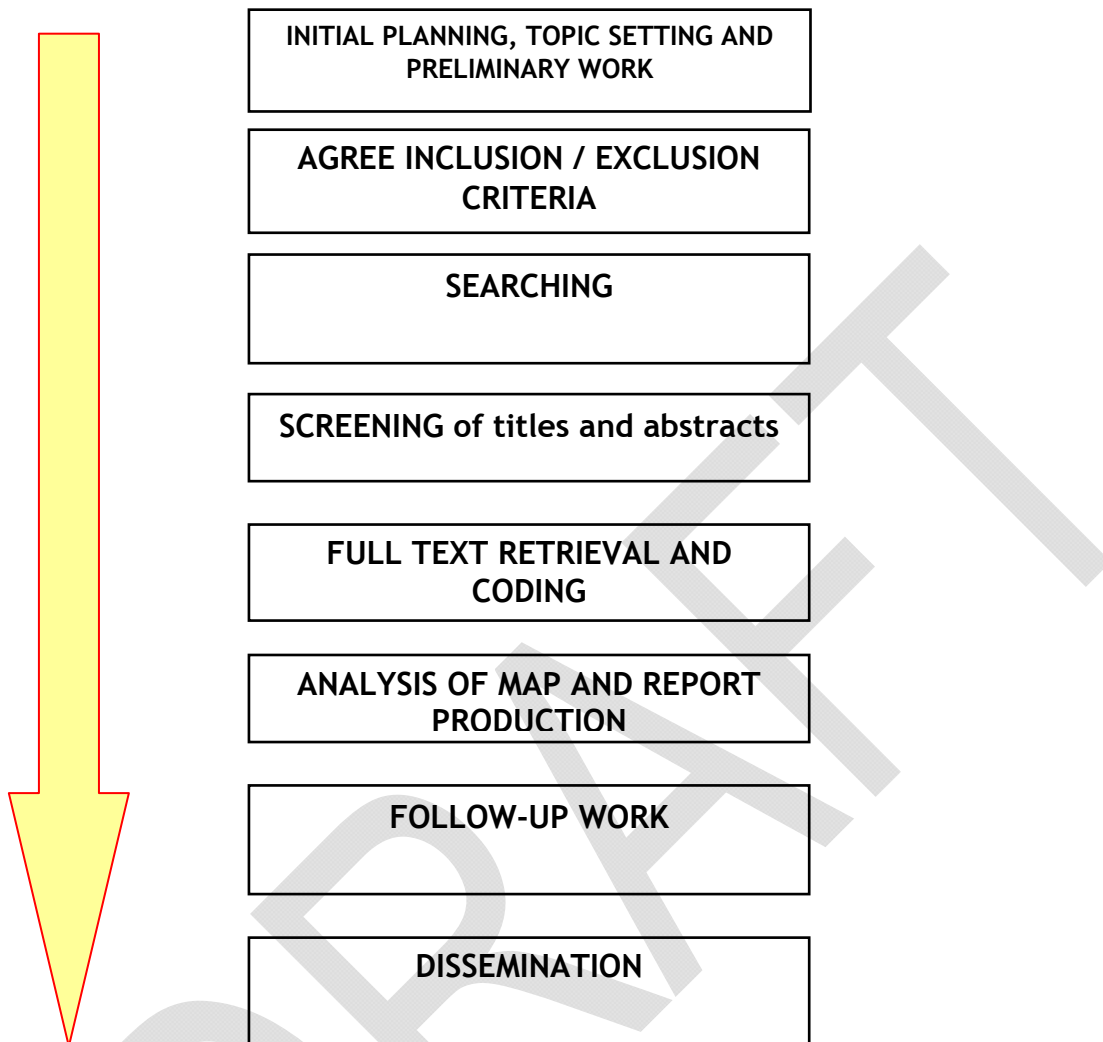
The purpose of this document is to provide a simple guide to the mapping process including who and what is involved at each stage. Functions are described in relation to SCIE organisational structure, as the document is a guide to SCIE internal process, though clearly other organisations will employ different personnel to deliver various functions.

1.3.1 Mapping project team

Each map will have:

- A project manager (PM) responsible for overall project management. At SCIE, this is usually a research analyst who provides input on research methodology and coordinates subject expertise.
- An information scientist from the Project Information Team (PIT) team, responsible for information management throughout the map process, including searching, screening, retrieval, software expertise, and record management.
- There must be at least one subject expert who may be the project manager (PM) or a registered provider (RP).
- Quality assurance (QA) input from a senior analyst with an understanding of research and systematic review methodology.
- A registered provider team (RP) who feeds into the development of the map and is responsible for delivering subsequent reviews and other products from the finished map.

1.3.2 Flow chart outlining the mapping process



Systematic mapping is conducted in sequential stages. However, there are non-sequential overarching aspects of mapping such as quality assurance, checking and recording mechanisms and project meetings. Some of the processes can be carried out in parallel and not all stages are dependent on the previous stage being completed.

1.3.3 Outline description of process for each stage

The following stages are generally progressive, but can overlap or occur in parallel or be revised as part of an iterative process.

a. Initial planning, topic setting and preliminary work

Preliminary work is advisable, e.g. definitional work with subject experts and a pre-map scope. Scoping can start at different points depending on the needs of the particular map, and can be informed by subject expert input.

The initial planning meeting is arranged by the PM and attended by the whole project team. The aim of the initial planning meeting is to set the scene and highlight major areas for consideration. The meeting may last up to 3 hours and the agenda should include the following:

- Background to project
- Project aims and map topic
- Project Audience
- Knowledge in area
- Responsibilities including administrative requirements
- Scoping requirements / additional work
- Determining the type of sources to be used for map material, e.g. journals, policy sources
- Inclusion/exclusion criteria discussion - key documents and keywords should be suggested by the subject expert
- Setting final map parameters and topic
- Start the protocol

The PM may need an induction session on mapping methodology. The information scientist (who will be from the PIT if SCIE is planning the map) will need to arrange / check that the map has been set up in EPPI-Reviewer.

The PM plans and coordinates advisory group input on the map plans. Consultation with the advisory group may be by meeting or email.

By now, the planning and preliminary work has reached the point where a second meeting of the whole map team can take place to agree the map parameters, including definitions, additional scoping requirements, topics covered, sources to be used for map material, draft inclusion / exclusion criteria, coding tool suggestions, outline review topics and the nature of the final product. Although the map topic may be agreed at this meeting, it may need to be further refined after some initial searching has taken place.

b. Setting inclusion / exclusion criteria

The inclusion / exclusion criteria form the building blocks for the rest of the mapping process. The inclusion / exclusion criteria will have been discussed at the initial planning

meeting but not set, and will be informed by the scope. The second meeting will involve the Project manager, information manager, subject expert, a Research Analyst, and representation from the registered provider team.

The inclusion/exclusion criteria may be decided by splitting the map title into component topics. The PICOS - participants, interventions, comparisons or context, outcomes, study types - structure can be used for studies which may involve interventions. For example, for SCIE's Map 3, concerning depression among people from BME communities (<http://www.scie.org.uk/research/maps.asp>), papers had to involve BME older people (defined as over 50 to reflect cultural definitions), and any interventions cited had to address depression or otherwise promote wellbeing. In social care studies generally, and in relation to this topic (despite the searching of health databases), most of the available literature did not involve interventions, and the very few identified had not been subject to a good evaluation. We had also decided to include non-intervention studies, such as qualitative studies reporting the views of older people of black and minority ethnic background, and this was reflected in the study types included. Exclusion criteria were sometimes, but not always, the reverse of inclusion criteria. Studies that were NOT a record concerning people from black and minority ethnic backgrounds were excluded; but although we searched for and included intervention studies, we did not exclude study types that did not describe or evaluate interventions.

The inclusion/exclusion criteria need to be written before the search strings can be put together, although additional clarification and refinement will be needed as screening proceeds. The inclusion criteria should be piloted on references from a number of pilot searches and refined accordingly, to ensure that the records arising do match the map topic and the expectations of the project team. This is a complex and vital area that is explored in more detail in section (1.3.3) d, and sections 1.7.1 and 2.6 below.

c. Searching

During the early stages of planning a map, the team needs to discuss the type of sources which should feed into map content. The range of potential information sources has grown exponentially since the arrival of the internet. Other factors such as increased transparency in government proceedings and the rise of the service user movements mean that traditional bibliographic sources may not be sufficient to cover a specific topic. Currency, lifespan, accessibility and governance of online material are further issues for consideration.

Sources for map material must be decided before searching is planned.

The range of sources includes:

- Bibliographic databases
- Research registers, although implications need to be considered for dealing with incomplete research records and recording research project final publications
- Aggregated journal databases
- Individual journal electronic tables of contents
- Journal hand-searching (bearing in mind the high investment of effort required for relatively low returns)

- Other sources such as government department websites for policy context. Consultation with experts will provide further references, but reference harvesting should generally wait until the registered providers are working on reviews, as reference harvesting from hundreds of records in a large map is not practical.

Searching bibliographic databases of published literature generally makes up the major part of map searching. The bibliographic databases are selected from the recommended list for SCIE systematic reviews (Coren & Fisher, 2006); the source for access to electronic resources is the SCIE online resources file including SCIE listing of e-journals subscriptions, held on SCIE.net. In 2009, following consultation with health economists, SCIE took a policy decision to seek economic evaluations from specialised databases, so as to incorporate, wherever possible, material on the cost of health and social care practice into systematic maps and reviews. More detail on the databases accessed and data extraction is given below, in sections 1.5, 2.5 and Appendices 4 & 5.

To develop search strings, controlled language tools and known relevant documents are explored to discover relevant search terms. Subject experts may also be consulted. Search strings aim to operationalise the inclusion / exclusion criteria. They need to be piloted on selected databases (e.g. one large health database such as Medline, one social care database such as Social Care Online and one subject specific database such as AgeInfo), and the relevance of the records checked. The search strings can then be revised if necessary, and are developed iteratively for each database.

After trying a search string on each database, the resulting topic coverage should be assessed before repeating the search with additional terms. The search strategy will need to be adapted for each database depending on its coverage, structure, utilities and the controlled language tools available. All searching will be carried out by the information officer, but results will need to be discussed with the entire mapping team and altered accordingly. The results from the searches will be used to alter parameters for the map, alter inclusion criteria and restrict (or less commonly expand) the map topic.

Journal searching will generally require short search strings. This is because the available content on a specific issue is likely to be limited, and journal searching interfaces do not offer the capacity to conduct complex searches.

The search output is imported to and managed in EndNote. Ideally, each record will include at least a title and abstract, and source details. All search output figures and strategies used should be recorded in the relevant templates. When searching is complete the results are deduplicated (duplicate records from different databases removed) in EndNote (using the deduplication function and manual inspection) and the data is cleaned. More detail on searching is given in section 2.5 below.

d. Screening of Endnote map database

Non-relevant results are screened out in several stages by screening the records – title and abstract - against the inclusion/exclusion criteria. It is important to pilot the

inclusion criteria at this early stage on a random sample of the references found through searching, because it is still possible to alter inclusion criteria at this stage. Alteration at a later stage is highly disruptive, as it is likely to require repetition of the screening process against titles already included or excluded. It is also important that all those doing the screening share the same understanding of the criteria: the piloting of the criteria will usually throw up such ambiguities.

The first stage of screening is carried out in EndNote, using single letter abbreviations of the relevant inclusion / exclusion criteria, applied in the Keyword field.

The largest proportion of search result records are excluded at this stage. It is highly desirable that screening is carried out by at least two people, independently, as this will promote a shared understanding of the criteria, and reduce wasteful inclusion of inappropriate papers at the next stage. It is necessary to reflect on questions about the inclusion / exclusion criteria, record decisions and guidance, and amend the criteria if necessary.

At the end of the first screening stage, the included records are transferred to EPPI-Reviewer using RIS import, and the data quality of imported records is checked in EPPI-Reviewer. Retrieval of full text is handled in a separate EndNote library but all subsequent stages of information management are managed in EPPI-Reviewer. The general principles are:

- Maintain cross-checks on data numbers to ensure consistency of records and accurate transfer
- Correct data discrepancies across all holdings.
- Check that all relevant records have been transferred at each stage.

e. Retrieval of full-text

After screening on titles and abstract, the included articles will need retrieving in full text. This process is carried out co-operatively within SCIE by the SCIE library staff, with PIT carrying out the bulk of the work. Library staff should be given as much advance notice as possible of map commencement, due to the impact on their workload. See Retrieval guidance for sequence to follow when downloading or ordering full text documents. In general, the cheapest, easiest sources are checked first (e.g. free downloads), progressing to the more expensive and time consuming (e.g. interlibrary loans from non-partner libraries).

EndNote is used to manage the retrieval source and hard copy status of the records, while Konduct is used to manage the loan process itself. A hard copy library is set up with the retrieved articles protected in plastic sleeves and filed in alphabetical order ready for coding and later management of included records to loan out. An EndNote library is used to manage loans. The retrieval stage can take 6 weeks, and a cut-off date, beyond which materials will not be included in the map, should be agreed.

f. Coding

The purpose of coding is to allocate keywords to each paper to identify its subject content to enable later selection of records from the completed map database. This

process is also referred to as data extraction. It is the only data extracted from the papers and forms the basis of the map report on the content and quality of the literature on a map topic.

Whilst documents are being retrieved the coding tools can be developed. Up to three tools, reflecting generic, quality and topic specific keywords, have been used on previous maps:

- 1) The map (or topic) specific keywording tool
- 2) The social care core keywording tool
- 3) The study reporting quality keywording tool

The second and third of these tools have now been combined (see sections 1.7 and Appendices 2 & 3 below.) The effort required to compile and reach agreement on coding tools should not be underestimated. It is essential to pilot the tools on at least 10% or 100 of the full text papers being retrieved (whichever is the greater amount) with the whole map team. This should be carried out on the first papers returned in order to save time. Any concerns or alterations mean that previously coded papers may need recoding. Coding tools must have clear guidance that has been agreed by all the people working on the map and recorded for reporting in the final map report.

The SCIE standard for data extraction from the included (full text) papers is the independent coding of all records by at least two people. It can be useful, given the need to circulate full texts, to carry this out in designated pairs with regular 'disagreement' meetings scheduled into the process. In addition, 20% of the papers should be independently coded for quality assurance by an assessor independent of the project team. QA at this stage entails re-applying both the inclusion/exclusion criteria, and the coding tools, for subsequent comparison with the decisions of the two main coders. Delays will always occur at this stage, especially if map hard copies need to be transported between sites. If discrepancies arise, it may be necessary to revisit sections of the coding after the QA stage, and time should be allocated for this eventuality when agreeing map deadlines.

g. Analysis of map. Report and database interface production

After all the papers have been keyworded and the QA process is complete the map records can be finalised in EPPI-Reviewer and analysis carried out.

Analysis questions are decided by the PM in consultation with the Project Team, and answered by running searches, frequency questions and cross-tabulations. The flow chart of literature progression through the map is completed, and the information from these processes is used to draft the report.

There is a map report template used for all maps containing instructions on the minimum criteria to be reported (see 2.12.1 below). Obviously there will be topic specific gaps and trends that will need highlighting in addition to those in the core reporting template.

The written draft is circulated among the whole map team for comments and editing. At this stage, for SCIE maps, external support for chart formatting is arranged via the SCIE Communications team, who also arranges editing of the online copy, followed by proofreading by the PM and PIT. The presentation of the final online product needs to be agreed between PM and Communications teams, with support from PIT. This presentation includes the summary report, supporting text and a link to the map interface which PIT arrange with EPPI. This interface makes the map results freely accessible to the public, practitioners and academics, and is usually offered in two versions

- A public version without abstracts, available on the SCIE website e.g. <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=9>
- A password protected version with abstracts, available for the RP e.g. <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=10>

When the summary report, supporting text and interface link are ready, they are sent to SCIE web services manager for upload to the SCIE website.

h. Follow up work

A variety of follow up work will be required after the map report has been published. SCIE and its registered providers will consider ongoing uses for the map.

Examples of follow up work include:

- the commissioning of systematic knowledge reviews;
- the commissioning of research briefings;
- planning of practice surveys, where, for example, the evidence base is found to be inadequate to support a research review.

The involvement of registered providers in the map process lays the groundwork for them to deliver subsequent commissions.

i. Dissemination

Dissemination is an important part of the research process, and involves activities up to 1 year after map completion. Dissemination can include:

- Contacting interested parties to inform them of the map's publication
- Making presentations to groups interested in the topic or methodology, including at conferences
- Networking to spread news of SCIE's work
- Writing reports, articles and news releases about the map (in liaison with the Communications team).

One means of dissemination is to assist other research groups with their systematic maps, such as SCIE's work with the Institute for Evidence-Based Social Work in Sweden.

1.3.4 Critical points

During the map process, there are certain points at which prompt cross-team input and agreement is critical for the map to proceed. This report sets out the key systematic map processes and critical points.

It should also be noted that at any time, it may become apparent that the work is unlikely to deliver a useful resource, or to deliver a resource that is sufficiently useful to justify the considerable time and staff effort that a map entails. During the mapping process, the continuous review - especially in the early stages - of map topic, inclusion criteria and coding of materials are all points at which the project is engineered to meet the team's increasing understanding of the scope of the literature or evidence on the topic. It is possible that it might become apparent that:

- There is too much literature for the process/team to cope with (in which case a narrower map question would be advisable);
- There is insufficient literature to address the map question, and it is clearly of dubious quality.

SCIE came close to both these cut-off points. Map 1 (Extent and Impact of Parental Mental Health Problems, and Accessibility and Acceptability of Interventions) generated large amounts of literature that was costly to access and review, mainly because mental health is such a vast topic area. On the other hand, literature directly concerning depression among older people of BME backgrounds (for Map 3) as very sparse. In such circumstances, it is always worthwhile considering abandoning the project and using resources for other purposes, such as commissioning of empirical research. SCIE, however, did have additional incentives to explore the methodological processes of mapping.

The following systematic mapping checklist lists the main tasks involved in mapping (not all smaller tasks are included on the list). The checklist identifies in **bold** critical points in the mapping process.

It is important when viewing the checklist to remember the process of mapping is not linear. The checklist follows the stages of mapping but some of the tasks can be done in parallel and most of the critical tasks may entail revisiting earlier stages of the process.

Table 1: The map process, highlighting critical points

Task
Induction session with PM on mapping processes (if PM has no map experience)
Pre map scope
Definitional work, possibly arising from scope
Initial Planning Meeting, decide and agree roles including administration
Plan advisory group/ consultation
Hold advisory group meeting / or request email feedback requests

Receive and collate feedback from advisory group
Meeting to plan map parameters
More detailed scoping on specific map topic
<ul style="list-style-type: none"> • Assess impact of books • test searches • reference harvest key documents • journal searches • log organisations and research centres • Legislation and policy papers- check differing Welsh, NI legislation • database and internet searches • write scope report, disseminate to Core team
Deadline for input by RPs to map parameters
Draft inclusion / exclusion criteria
Meeting to finalise map parameters: Decide inclusion / exclusion criteria, suggest search terms.
Write protocol
Run pilot searches
Where necessary, revise parameters and inclusion / exclusion criteria depending on pilot search results.
Conduct full searches
Search databases, online sources e.g. portals, organisations' websites and research listings
Consult team to validate search strategy
Validate search strategy documentation by asking non-map team member of PIT to rerun search and duplicate results
Contact experts (potentially beyond advisory group) for additional suggestions
Pilot screening on title and abstract- at least 10% of sample
Before next meeting, email around screening results, questions, their implications for inclusion / exclusion criteria and proposals about way forward
Meeting: Revision of inclusion / exclusion criteria, depending on screening pilot results. Agreement to park some types of references or sub-topics as required
Screen all remaining records on title and abstract against revised inclusion / exclusion criteria
Retrieval of full text
Ongoing management of hard copy library
Meetings to devise map specific keywords
Pilot all coding tools on % of full text studies and make necessary revisions
Screen on full text against inclusion / exclusion criteria
Get coding tools uploaded to EPPI-Reviewer
Code on full text
QA coding
Redo sections of coding as necessary
Alert Communications and Web Services Manager of upcoming report
Online publication
<ul style="list-style-type: none"> • Run frequency / cross tabs

<ul style="list-style-type: none"> • Complete flow chart of literature progression
<ul style="list-style-type: none"> • Analysis of map
<ul style="list-style-type: none"> • Draft report and circulate among team for comment
<ul style="list-style-type: none"> • Edit report
<ul style="list-style-type: none"> • Circulate for proofreading
<ul style="list-style-type: none"> • Send report to editors for Online version edit and agree presentation
<ul style="list-style-type: none"> • Arrange map interface with EPPI and test
<ul style="list-style-type: none"> • Write supporting text
<ul style="list-style-type: none"> • Send to website manager to upload database link, report and supporting text
<ul style="list-style-type: none"> • Send publication to RP
RP access to and use of map database, including training and support
RP access to map hard copies
Ongoing support for RP: e.g. map coverage, search strategy,
Dissemination: can include <ul style="list-style-type: none"> • Contacting interested parties to inform them of the map's publication • Making presentations to groups interested in the topic or methodology • Networking to spread news of SCIE's work • Writing reports, articles and news releases about the map (liaise with Communications team).

1.4 Timeframes

It is not possible to define exactly how long each stage of a map should take as:

- The mapping team are rarely able to work on the map full time, and the amount of skilled assistance varies.
- The nature and size of each map influences the time required.
- Different models of working with commissionees require different time inputs – in general, involving external workers throughout will increase the amount of meeting, discussion and decision making time required, but it will be harder to arrange whole team meetings than if solely SCIE staff were involved.

1.4.1 Outline timeframes

The following outlines are taken from the experience of the first three maps. So far, no map has been completed in less than 1 year of part-time work, and they can take up to 2 years.

Many of the stages can run in parallel and some processes take place throughout, e.g.

- recording decisions
- cleaning data
- removing duplicates
- updating and sharing guidance (for screening and coding).

Meetings will take place throughout, supplemented by email and phone contact. Any task which requires whole team input to development and discussion will be time consuming, and the difficulty of scheduling meetings with all map team members should be allowed for.

The list is not exhaustive, but gives the main events and an idea of how long the most time consuming tasks take. The estimated times represent calendar time elapsed, while doing other work as well (as no-one can work full-time on a map). However, some work can happen simultaneously.

a. Initial planning, topic setting and preliminary work

Induction meeting for project manager on mapping	2 hours
Preliminary scoping	1-2 weeks
Initial planning meeting	3-6 hours and email discussion
Definitional work	1-2 weeks including email discussion
Advisory group planning and input	3-4 weeks including email discussion
Further scoping work	1-2 weeks
Further planning meeting	3 hours and ongoing email discussion

Draft protocol	Ongoing, 1 day background
TOTAL	Can take 12-24 weeks (if delay in agreeing topic)

b. Setting inclusion / exclusion criteria

Feedback from scope results	2 hour meeting and by email over a week or two
Work on inclusion / exclusion criteria	2 hour meeting and by email over a week or two
Feedback from pilot screening	2 hour meeting and by email over a week or two
Revision of inclusion / exclusion criteria	Ongoing until screening completed: up to 4 weeks
TOTAL	8 weeks

c. Searching

Pilot search	3 days
Discussion with group	2 hour meeting plus email contact over a week or two
Search term input from experts	1-2 weeks
Conduct search	2 – 4 weeks
Possible team meeting to explain search strategy	3 hours plus email discussion over a week or two
QA: Rerun search to check reproducibility	1 week
Deduplication and main data cleaning	1-2 weeks
TOTAL	5-8 weeks

d. Screening

Pilot screening (at least 2 staff)	1 week
Meeting to discuss results and change inclusion criteria	2 hours plus email discussion
Screening on title and abstract	2 -4 weeks
Double screening on title and abstract	2 -4 weeks (can overlap with above)
QA of screening on title and abstract	2 weeks
Screening on full text (after retrieval has started)	2 weeks
Double screening on full text	2 weeks (can overlap with above)
QA of screening	2 weeks
Screening during coding	Ongoing during coding
Ongoing updates to guidance	Ongoing during coding
TOTAL	4-12 weeks

e. Retrieval of full-text

Sourcing records and recording source in EndNote	3-6 weeks
Retrieval of records including ordering interlibrary loans in Konduct	3-6 weeks (overlaps with above)
Managing returning records	3-4 weeks (overlaps with above)
Creation of sources in EPPI-Reviewer	½ day
Import to EPPI-Reviewer and verification	3 days
TOTAL	4-8 weeks

f. Coding

In EPPI-Reviewer, transfer included records to Review	1 day
Verify complete transfer	½ day
Draft coding tools	1 week
Pilot coding tools	2 weeks
Amend coding tools	Ongoing
Coding	4-8 weeks
Double coding (conducted at same time if staff resources allow)	4-8 weeks
QA coding	2-4 weeks
TOTAL	12-16 weeks

g. Analysis of map. Report and database interface production

In EPPI-Reviewer, finalise records	2 days
Verify complete finalisation of records	1-2 days
Analyse results	1 week
Draft report	1 week
Request database interface link from EPPI	½ day including occasional testing
Liaison with Communications team for copy editing, chart formatting, discussion about appearance of final product page on SCIE website	Tasks may be spread over 2-4 weeks
TOTAL	5-6 weeks

h. Follow up work

Registered provider access to and training on map interface	1 hour meeting plus ongoing support

Manage access to map loan records (hardcopy and EndNote)	2-3 days to organise and catalogue records. Then ongoing assistance up to 1 year after completion
Ongoing support for registered provider, e.g. answering queries on search strategy, decisions and map coverage.	Up to 1 year after completion, depending on review commission lifespan or other products such as research briefings.
TOTAL	Ongoing up to 1 year

i. Dissemination

Contact interested parties to inform them of the map's publication including liaison with Communications team	1-3 days
Making presentations to groups interested in the topic or methodology, including at conferences	Depends on context
Writing for publication	1 week plus review, proofreading and amendments
Consultancy	Depends on context
TOTAL	Ongoing up to 1 year

Total time for map production in real time 1-2 years.

1.5 Economic evaluation

SCIE has not to date included economic evaluation in its systematic reviews, and systematic mapping has not therefore included studies that report economic evaluations. The quality and quantity of economic evaluations in the social care sector are known to be generally lacking (Sefton et al, 2001¹). Nevertheless it is still possible to include an economic perspective in a systematic review by identifying data about the resources required to implement an intervention. This data can potentially be extracted from effectiveness studies that describe, measure or value resource use (costs). Effectiveness studies are particularly important in the field of social welfare, largely due to the paucity of relevant full or partial economic evaluations. Even without evidence from economic evaluations it is possible to develop an understanding of economic aspects of a service or intervention by gleaned resource use information from effectiveness studies.

SCIE is therefore intending to locate studies relevant to the costing of recommended social care interventions and policies for future maps. Appendix 5 describes some of the search issues arising from the pilot use of NHS EED and EconLit.

1.5.1 Definition

The aim of this new strand of work at SCIE is to identify studies that report:

1. the costs of providing services generally;
2. the costs of particular intervention(s) (if it is a study of an intervention);
3. any information on the costs incurred by users and carers due to their experience of health problems or disability. The last is rare, and is sometimes called foregone costs - meaning the income foregone by users or by carers due to their incapacity to work.

It is quite specifically economic analysis that is being looked for, rather than any information on individual income or benefit entitlement.

1.5.2 Context and plans

SCIE used Map 2 (on the role of vocational support in recovery from mental ill-health) as the basis for a feasibility study to consider whether:

- (a) high quality economic studies are available
- (b) models of economic evaluation are appropriate to social care
- (c) recommendations in SCIE guides can be costed.

SCIE now recommends that two additional databases are included in standard mapping searches:

¹ Sefton, T., Byford, S., McDaid, D., Hills, J. and Knapp, M. (2002) *Making the most of it: economic evaluation in the social welfare field*, York: Joseph Rowntree Foundation.

NHS EED (Economic Evaluation Database)

freely available at:

<http://www.york.ac.uk/inst/crd/crddatabases.htm#NHSEED>

or via the Cochrane Library at:

http://www.mrw.interscience.wiley.com/cochrane/cochrane_cleed_articles_fs.html

EconLit

accessible through university libraries or at <http://www.econlit.org/>

Appendix 4 gives more detail on the searching of NHS EED and EconLit, while Appendix 5 contains more guidance on classifying economic material.

1.5.3 Background reading

The reference below is included as an introduction to economic evaluation in social welfare.

Sarah Byford, David McDaid and Tom Sefton (2003) *Because it's worth it: A practical guide to conducting economic evaluations in the social welfare field*. York: Joseph Rowntree Foundation. Available at

<http://www.jrf.org.uk/bookshop/eBooks/1859351123.pdf>

1.6 Factors important in successful systematic mapping

1.6.1 Developing a map team

Crucial in preparing a map project is the development of a team that encompasses a range of knowledge and skills. Subject expertise input is vital at an early stage to help define the parameters of the map and to give insight into the topic-specific utility of the proposed product. Information specialist input is essential to devise, pilot and run the searches. Finally, it is necessary to have research skills input, to develop the conceptual framework around the map topic, to assure the quality of the project throughout the process, and to design and operationalise the coding tools that will determine the nature of the final searchable database and its utility as a resource for researchers.

These different personnel need to work together intensively and collaboratively at key stages and throughout the project. At SCIE, the team that works on systematic mapping may or may not include the team that conducts any later systematic reviews that may be commissioned. In the case of the third SCIE map, on depression in older people from BME communities, the registered providers who were to take the topic forward after completion of the map were involved from the earliest stages. However, this model has implications for time management and quality assurance.

1.6.2 Quality assurance

Quality assurance (QA) of the entire mapping process is fundamental to the transparency, quality and utility of the map. The use of the term QA in this guidance is therefore distinct from the process of examining the quality of research papers, according to their methodological rigour: the latter is not part of the mapping process (though it is of course central to systematic review methodology).

As emphasised above, one of the most important aspects of systematic mapping is to ensure consistency and transparency in decision making. It is advisable to maintain one or more logs of decisions – around topic definition, search strategies, inclusion criteria, etc - taken throughout the process, as this will be indispensable when reviewing rationale and writing up methodology. Consistency – ie the systematic nature of the process - is ensured through applying quality assurance techniques at various sensitive points in the map process. Section 1.7 below describes how quality assurance has been applied in SCIE maps to date.

Results from quality assurance at all stages should be discussed within the team and any issues arising should be addressed and action to be taken agreed with all members of the team. Where there are serious concerns about the quality of work, or major disagreement between coders based on fundamental misconceptions, there may be a need to repeat some of the work.

1.6.3 Planning and timetabling

Due to the nature of the task, there is a limited role for advance planning. There will always be uncertainty about the size of the final map until searches and screening are complete, and some decisions on direction will need to be made while the map is in progress, including in response to piloting and quality assurance processes. Staffing and time resources are key, and it is important to ensure both that sufficient time is allowed for the map development stages, and that appropriate personnel are available.

1.6.4 Searching and importing references

The availability of expert search skills is essential to the search phase of systematic mapping. In work of this scale, database access, costs, search interfaces and export functions will all be important. For example, a crucial database for the topic may have an inadequate search interface, limiting the potential quality of searches conducted. Key but technically 'poor quality' databases put a premium on the skills of the information specialist, particularly in devising good quality free text searches. Subject specialists also play an important role at this stage, advising the information specialist on important and often changing terminology and concepts in the field.

Search results also need to be collated and managed. The search output may be thousands of records. In this respect, availability within the software of automated transfer of records to reference management software is desirable, for which access to skills in using and adapting import filters is necessary. For those databases that do not have import filters, or where the data are in a format such that filters can not be used, records need to be 'copied and pasted' or entered manually, thus adding time to the task.

1.6.5 End products

The completed map has several potential uses. At the most fundamental level it provides an index of the literature that can be used to identify the breadth or knowledge in the field. The map itself can be made available as an online database, and the parental mental health and child welfare map can be viewed in this form at <http://www.scie.org.uk/publications/details.asp?pubID=100>. Subject to appropriate copyright agreement, copies of included studies can also be made available to stakeholders. If copyright arrangements do not allow this, individual studies can be identified from the map and then retrieved in full text by readers through normal library sources. Brief summary reports can also be produced (e.g. Bates and Coren, 2006b). These have the advantage of being accessible and short, and provide an overview of a map for stakeholders faced with time constraints for reading research material such as managers, policy makers and funders.

In addition, complex analyses can be performed using the frequency and cross-tabulation facilities in EPPI-Reviewer that enable detailed assessment of the literature in the topic area. It is such analyses that most clearly identify gaps in research. Alternatively, more descriptive information can be provided on issues such as where research has been conducted and whether outcome evaluations have taken place, which enable assessment of the potential for further reviews to be conducted on a

particular topic. As well as conventional outcomes-focused systematic reviews, there may be scope for maps to be used as a basis for more rapid reviews, where a swift answer to a particular question is needed. They may also help in identifying the conceptual literature to clarify issues in developing a particular field of knowledge, for example concepts within the recovery approach in adult mental health services. This literature could be used to write a summary overview of these issues prior to the commissioning of further research which may inform the direction of that therapeutic approach.

DRAFT

1.7 Quality Assurance: Methods and lessons learnt

Quality assurance needs to be implemented throughout the mapping process, particularly at the stages of:

- Scoping
- The identification and definition of map topics
- Searching
- Screening against inclusion/exclusion criteria
- Retrieval of papers
- Selection and / or design of coding tools
- Coding for topic relevance (and possibly quality of material)
- Analysis and report writing.

In addition to formal processes for these stages, the whole process is quality assured by

- its collaborative nature, including frequent consultation with internal and external team members;
- documentation of procedures and decisions.

1.7.1 Methods

a. Scoping

Scoping quality assurance is carried out by:

- the use of systematic and documented procedures, templates and checklists
- discussion of requirements and findings with the whole team, before, during and after scoping searches
- evaluative feedback from project managers

The scope permits the opportunity to broaden or limit the initial preliminary work, and to identify potential ambiguity in the topic area(s). The importance of reaching a shared understanding which (a) can be justified and (b) produces replicable search strategies cannot be over-estimated. Because of its potential impact on the direction and operationalisation of later work (such as commissioned knowledge reviews) SCIE will in most cases involve potential providers of further work (such as reviews) at this stage.

b. The identification, definition and operationalisation of map topics

Although most SCIE map topics will have been determined at the level of SCIE's annual Work Plan, it is important that the scoping aspect leads into the appropriate definition of a feasible and useful map topic. This may be a statement or a broad question, such as 'What evidence exists on?' By this stage, the project team should have members with expertise in the field which the map concerns, and may need to consult experts to ensure clarity of boundaries, what synonyms would be appropriate in devising search terms, and which databases might be most appropriate for harvesting. QA at this stage is largely achieved by consultation with experts. The team will try to anticipate (learning

from the scoping and their own subject expertise) the exclusion criteria they wish to impose, and document the thinking and conclusions from this process.

c. Searching

Quality assurance in searching is carried out by:

- The use of systematic and documented procedures, templates and checklists. Some databases may offer controlled language tools (e.g. thesaurus and index), while others rely solely on free-text searching. Consulting colleagues with similar expertise in information science is important.
- Discussion of requirements and findings with the whole team, who are expected to include subject experts.
- Duplicating searches: another colleague reruns the search and checks the reproducibility of results.

Search results, titles and abstracts, will be screened for duplicates, using a combination of automated and manual checking.

d. Screening against inclusion/exclusion criteria

Inclusion and exclusion criteria need to be clearly documented for the use of all team members (see section 2.6 for more detail and an example of such a document). This tool should be piloted by different personnel against early search results in order to test its clarity, with team members discussing and resolving any ambiguities. Ideally, if resources/personnel allow, all records – titles and abstracts which the searching procedures have thrown up - should be double-screened against inclusion and exclusion criteria. This is likely to throw up dilemmas, require referral to the whole project team, and may well generate additional or revised exclusion criteria. Such decisions should be clearly logged. Careful piloting and double-screening at this stage will reduce the risk of having to revise and re-screen later, and will also reduce waste in the retrieval of unsuitable material. Those abstracts and titles which appear to fit the revised remit for the map topic are then retrieved as full papers.

e. Retrieval of papers

Failure to retrieve records has been identified as a source of bias in systematic reviews. 'Unfindable' records are checked with SCIE librarian (CS) who is particularly skilled at tracking down resources. Issues which may require compromise (which is then stated in the map report) include:

- Retrieval of books (which are usually subject to finite loan periods);
- The cost of retrieving articles through British Library, which may be outside the scope of the funding;
- The necessity of applying a time limit for retrieval.

f. Selection and / or design of coding tools

The mapping process is designed to create a useful and structured resource for future work, and needs to signpost the extent and content of the literature identified. Tools must be identified and / or designed to systematically record the subject content of the paper. We refer to this tool as the 'map specific tool': its role is to capture the scope of the topic for the map, so a new version, based on the scope of the literature, is needed for each map. The map specific tool will cover aspects of the topic set for the map, identified by keywords alluding to the client group, type of service, focus of paper and type of knowledge. This tool will enable map users to see what topics the map covers, and what review questions it might therefore be able to answer. An example from Map 2 is given at Appendix 2.

Some aspects of the records identified – type of paper, country of origin, research design if applicable, BME perspectives – are relevant to all maps. SCIE has therefore designed a generic Social Care tool, included at Appendix 3, which we expect to use for all or most maps (enabling similar searching across different map databases). This generic tool is used alongside the map specific tool: they should not duplicate each other, so the map specific tool will be developed with regard to what is already covered. The consistent use of the generic tool will enable searching across map databases from different map projects. (However, the generic tool, which builds on the experience gained from 3 maps at SCIE, has yet to be piloted.)

The purpose of coding of map resources is NOT to assess the 'quality' of the paper as a contribution to evidence: this stage would be carried out in subsequent systematic reviews. Some material on the research design and methodology reported is recorded in the generic tool, as this is useful in describing the evidence available on the topic, and is therefore consistent with the purpose of mapping. However, no critical assessment of the studies is carried out during mapping: the studies themselves are not quality assured.

It will normally be the role of one team member to draft the map specific coding (keywording) tool to be used on the map project, with subject specific input from members of the project team. The coding categories should be unambiguous, so that all those using them will be able to make the same coding. The design of the tools is time-consuming, but vital, as the way the data articles are coded (keyworded) will determine what information can be drawn about the content the map collates.

g. Coding

10% (normally the earliest to arrive) of the full-text papers retrieved should be coded with the keywording tool(s) as a pilot exercise. The purpose of this exercise is to ensure that the tools adequately reflect the content of the papers. Any additional topics arising in the literature which appear important to the map topic can be added to the tool at this point. Any uncertainties in coding which the tool throws up can be clarified, either by changing the tool, or by devising guidelines. Guidelines are inserted in small text onto the coding tool (which is on-line within EPPI-Reviewer). These amendments should be carried out by the map team after adequate discussion, so that all are agreed on the way forward: these meetings and decisions should be logged so that the method can be

adequately described and justified in the map report. Time spent on 'ironing out' inconsistencies in the coding tools will be saved in the subsequent coding exercise.

Double coding of all full-text articles is preferred if resources allow, because up to 30% disagreement is likely between coders. We have found it useful to organise external and internal reviewers, or those with topic and those with methodological expertise, into pairs. Papers retrieved are then shared out equally between pairs. Each reviewer completes the keywording and coding 'blind', that is without knowing what the other party has coded. EPPI-Reviewer flags up discrepancies when both parties have entered their coding. Pairs then meet to discuss the discrepancies. It is helpful if all members of the map team participate in coding and quality assurance, not only to share out the work, but to develop a sense of the extent of the map evidence.

During this phase, the map project team may come together once or more to discuss and record any outstanding coding discrepancies, and decide how they will be handled. Although it is not appropriate to attach 'inter-rater' reliability standards to this work, a high level of disagreement suggests problems with the tools. The number and importance of such anomalies will be less if the initial work on designing and piloting the keywording tools was adequate.

Throughout the full-text coding, the reviewers should bear in mind the exclusion criteria, as it is quite possible (on the basis of the abstract) that a full-text article is excluded at this stage. It is also possible, if the team agree, that exclusion criteria are expanded, although this is undesirable as it could necessitate the re-screening of all papers in the light of the new criterion.

The physical 'tracking' of papers through the double-coding process is mundane but vitally important. Systems to keep track of who has each paper, whether reviews are completed, and what the next stage is, are important.

Once the coding has been completed, a random sample, usually 20%, of the papers should be separately coded for quality assurance purposes by a third person external to the project team. Their codings are then compared with the initial double coding, and any discrepancies investigated. This is a check both on the coding, and on the process of coding. If at this stage major anomalies are discovered, there may be a requirement to amend the tools and re-code some sections of them.

h. Analysis & report writing

Analysis proceeds largely from the keywording and coding categories, in order to describe the extent and focus of the literature identified. Graphic presentations such as pie-charts are used represent the different categories comparatively. The analysis stage should be checked by the analyst to confirm the accuracy of figures; ideally an information science colleague should duplicate the work.

Like all reports, the proof-reading and editing of reports should take several stages and use different personnel, with at least one reviewer who has knowledge of the map field

and has a perspective similar to that of the practitioner or professional reader, and one who has not, and can identify jargon, ambiguity, etc.

1.7.2 Lessons learnt in Quality Assurance

- QA of the mapping process is continuous, needs planning and careful management and takes a lot of staff and resources.
- It can be difficult to reach agreement on interpretation of screening and coding categories, especially where external team members are involved.
- Exclusion and coding decisions must be logged. This detail will be needed in the production of a map report which clearly states and justifies the methodology.
- An error highlighted in one part of the coding is usually indicative of errors elsewhere in the coding, e.g. a coder may not have followed the guidance for other papers or questions.
- If the map is a basis for future reviews, it is useful if the providers of such reviews can be involved in the map team. In this way, they can understand and influence the decisions taken at each stage of map development, as well as the limitations of the literature, and this will be a good foundation for the next stage of the work.

1.8 Working with registered providers: Models and lessons learnt

At the start of working with registered providers, their team lead, and the key contact for liaison with the map team (i.e. acting as a conduit for information to the entire team) is established. It may be difficult to arrange meetings that the entire external team can attend, so there should be agreement that the key person can represent the entire registered provider team.

Three different models of working with registered providers have been tried so far. However, the characteristics and experience of the specific teams involved are important too, e.g. commitment to collaborative working, geographical location and existing knowledge of the systematic mapping process.

1.8.1 Models

1. The map is completed, then a registered provider selected for subsequent commissioned knowledge reviews, without prior involvement in production of that map.
2. Registered provider acts as occasional consultant during map production.
3. Close involvement of registered provider in definitional work, developing map topic, approval of search strategy, coding tool development, coding, and quality assurance.

1.8.2 Lessons learnt

Model 1: There were many problems with this arrangement, exacerbated by the size and nature of our first pilot, and the subsequent relationship with the registered provider.

- The long time delay between starting the map and the registered providers starting reviews (2 years) meant that questions about the procedure were hard to answer in retrospect.
- The registered providers were dissatisfied with many decisions made before their involvement, e.g. map topic, map coverage, search strategy, screening and keywording decisions.
- Quality Assurance problems could not be resolved at such a late stage.

Model 2: This arrangement worked relatively well and was not time consuming, however these findings were probably biased by EPPI-Centre (the RP in question) having a thorough understanding of the mapping process.

Model 3: Close involvement of registered providers ensured their satisfaction with many of the map decisions. However, the high level of consultation was very time and effort consuming, and it was hard to ensure the registered providers completely understood the mapping process. Quality Assurance issues remain to be resolved.

This is the preferred model.

1.8.3 Stages of involvement with registered providers

a. Definitional work

Definitional work with the registered provider should feed into setting the map topic through clarifying definitions and important concepts. Alternatively, definitional work can be based on a pre-existing map question. In map 3, the registered provider team included subject experts, and so their help in clarifying definitions and important concepts was invaluable. The first meeting with registered provider involved looking at broad map topics. This was followed by definitional work which helped to shape a set of potential draft map topics. As with any collaborative working, definitions were discussed at meetings of the wider group to seek clarification and agreement on what was understood by the various terms.

b. Map parameter setting

The time taken to set the map parameters should not be underestimated. In fact it could take several weeks from the first idea to the final agreed map parameters. This process involves lengthy discussions with the registered provider, personal knowledge of an area (if relevant) and also consulting more widely with external stakeholders such as professional in the field of social care.

In terms of attempting to contain the process of lengthy consultation, experience from the third map would suggest that it is more time efficient to offer sample topics for consultation as opposed to starting from scratch.

c. Scope results

The registered provider can help outline scope requirements, and the scope findings will be helpful in team meetings on topic setting, inclusion / exclusion criteria and search strategy.

d. Inclusion / exclusion criteria

The registered provider can usefully advise on these to help define the map's parameters.

e. Search strategy

The search strategy should be developed in consultation with the registered provider team, but this can be very time consuming and require detailed explanation of individual databases' controlled language tool characteristics.

f. Screening

Registered provider teams can be involved in screening, but this approach can be time consuming, especially when attempting to resolve disagreements and questions between workers on different sites. Alternatively, uncertainties in screening (whether to include or exclude) can be discussed with providers, so as to firm up the map topic and scope.

g. Developing coding tools

This is an extremely time consuming task, requiring several meetings, which are more difficult to arrange with people from different workplaces. Discussion and refinement of definitions will carry on throughout the coding process.

h. Coding

Registered provider team members can take part in coding, but it is quite challenging to ensure agreement and QA output shows this to be the case. The time saved by bringing in more personnel to read and code papers is reduced by the logistical difficulties of managing hard copies (where there may only be one copy) and in arranging meetings to discuss coding issues. However, providers do gain a significant early understanding of the literature through involvement in coding.

Registered providers are not involved in writing the map report, which is the responsibility of the project manager together with PIT.

i. Quality Assurance

If registered providers are involved in screening and coding, they should also be involved in the QA process.

j. Arrangements for bibliographic services to registered providers

- Copyright guidance is provided at section 1.9 below. Provided copyright clearance has been purchased at point of ordering, registered providers can have copies of journal articles for working on this project.
- No further interlibrary loans can be requested by third parties, including registered providers. They need to make their own ordering arrangements.
- We cannot provide SCIE passwords or Athens passwords for third parties to conduct further searching / access SCIE e-journal subscriptions.

All these points should be clear in the contract, and understood by registered provider teams at the start of their work with us. The registered provider team need to be fully self-sufficient for bibliographic search and retrieval services when they tender for the contract.

k. Presentations and consultancy

There has been one example of this type of work so far. A member of the Map 3 registered provider team joined SCIE workers to make presentations, train and advise researchers from another organisation. Our existing close relationship on Map 3 made this very successful.

DRAFT

1.9 Copyright

This guidance has been written in good faith after Angela Upton and Christopher Streets checked our situation with the Copyright Licensing Agency (see www.cla.co.uk/). However, copyright law, although restrictive, is not always clear-cut so this should be considered a work in progress. Compliance with copyright is widely understood in information work to have an emphasis on minimising exposure to risk.

The relevant law is described by the Copyright Licensing Agency as follows:

The UK legislation governing copyright is the Copyright, Designs and Patents Act 1988. The law was amended by the Copyright and Related Rights Regulations of 2003 to comply with EU Directive 2001/29/EC.

(see http://www.cla.co.uk/copyright_information_aboutcopyright.php)

The strength of copyright law is widely underestimated and ignored by people wanting to make copies, but failure to comply can expose employers and individual workers to severe penalties, therefore compliance is important.

1.9.1 Procedures

- SCIE holds a Copyright Licensing Agency licence. The additional copyright fee should be paid on individual interlibrary requests for journal articles.
- Retrieval records should be carefully managed in EndNote, to avoid duplicate ordering of articles.
- The master copies of articles should be labelled as SCIE property
- Copyright and database right – databases with subscription abstracts cannot be made available outside SCIE. An alternative version of the database without abstracts is made publicly available.

See BL Document supply customer handbook p8

http://www.bl.uk/services/document/pdf_files/custhbk.pdf

1.10 EPPI-Reviewer

EPPI-Reviewer is a piece of software developed and owned by the EPPI-Centre at the Social Science Research Unit at the Institute of Education, London. It is a data collection tool that can be used for all stages of a systematic review. The PIT team have only been using it for the systematic mapping stages of such reviews. It is designed to store bibliographic records imported directly from bibliographic databases or from EndNote or Reference Manager. The records can then be screened on abstract or full text and coded according to numerous predetermined criteria. The end result is a searchable database that allows frequency reports, cross tabulations and analysis of included records. EPPI-Reviewer is not commercially available but is used by arrangement with the EPPI-Centre.

Detailed instructions for using EPPI-Reviewer are not given here because:

- The programme is under continual development
- The online help files are comprehensive and up-to-date
- There are different ways to use EPPI-Reviewer depending on the experience of the team and circumstances of the individual map.

Screen shot of home page of a systematic map in EPPI-Reviewer

Reviewers

Chloe Powell
Diane Gwynne-Smith
Ed Holloway
Esther Coren
Janet Clapton
Josephine Kavanagh
Kelly Dickson
Marie Diggins
Mike Fisher
rebecca goldman
Review Group: SCIE
Salina 2
Salina Bates
SCIE Commissionee
SCIE Guest

Guidelines

PHMP specific keywords	Edit
Study Reporting Quality Tool: Coren, E (2006)	Edit
EPPI-Centre health promotion keywording strategy: Peersman & Oliver (1997)	

1.10.1 Flow diagram of EPPI Reviewer use

Login <http://eppi.ioe.ac.uk/eppireviewer/login.aspx>

The Help link is at the top right.

The processes to follow are:

1. Create inclusion/exclusion criteria
2. Create sources (corresponding to individual search databases) to receive search results
3. Transfer search results from EndNote (Upload hits file)
4. Import references
5. Screen references
6. Source full text
7. Manage retrieval status
8. Transfer results
9. Keyword included
10. Import to review
- 11a. Search results
- 11b. Reports

Chasing stragglers:

Stages 5-8 require Screen References batch check

Stages 8-10 require Search results and Reports batch check

Section 2: Detailed systematic mapping process

DRAFT

2.1 Decision recording

Clear records of decisions taken throughout the map help ensure transparency when answering questions about the map at a later stage.

Decision recording can have the following purposes:

- For internal use
- For external use
 - sharing information with registered providers
 - with unknown interested parties in the future
 - as part of the methodology employed, it is important to the systematic, replicable nature of the study.

Some aspects of the process are customarily well documented, e.g. search strategy, inclusion / exclusion criteria. The rationale for qualitative decisions made around these and other issues is frequently less well recorded, e.g. definitional and conceptual work, ideas leading to the formulation of map parameters, and the reasons (such as the date of introduction of a highly relevant policy) why material published before a certain date was excluded.

We can attempt to capture this information in:

- Meeting minutes
- Working guidance document, e.g. for screening decisions
- A decision making template: see below. This has not been piloted.

At piloting, the following points will need clarification:

- How will we use it
- Who will have overall responsibility for the document, and who can change / update it
- Where will it be stored
- Version control.

2.1.1 General areas for decisions

Map topic – PM should have overall responsibility

Search process

Inclusion criteria

Screening

Coding

QA

Analysis

Dissemination

Other

2.2 Defining the map parameters

The map parameters are defined as the boundaries of the map topic of interest. It is crucial to explicitly define these boundaries and be prepared to revise them in the light of later findings. The time investment required can be up to 3 months.

2.2.1 Origin of map topic

SCIE map topics come from a variety of sources, e.g.

- Department of Health sponsors
- Staff suggestions
- Workplan

Subsequent map topic refinement is made with various stakeholders such as the registered provider, SCIE theme leaders and directors, project advisory group, and the senior analyst responsible for methodology.

2.2.2 Scope

A pre-map scope can be useful background work to take to a consultation, meeting needs such as:

- Exploring the extent of literature coverage in a general area. This can help match the topic breadth to the resources available to carry out the map work.
- Flagging types of significant literature on a topic
- Highlighting definitional requirements

However, the timing of first scope work varies with each map, as some may benefit from topic discussion prior to deciding the parameters of the scope. Detailed scoping work will always take place at some stage early in the map process, and may be revisited as map parameters are revised. Scoping offers an early indication of the likely quantity of resources applicable to the topic: a topic which is too large to accommodate within resources, or conversely one where there is little material, can be revised - tightened or expanded or even abandoned.

2.2.3 Consultation

This stage involves consulting with subject specialists and key stakeholders who may play a number of roles. Importantly, they assist in definitional work, scope input, determining the limits of the map topic and conceptual framework that underpins it. They may also help in locating relevant literature. For the parental mental health map, the subject specialists were drawn from internal SCIE experts and from the Parental Mental Health and Child Welfare Network (see www.spn.org.uk). This network promotes joint working between adult mental health services, children's services with an emphasis on social care, and health professionals who work with parents with a mental health problem or their children.

2.2.4 Inclusion / exclusion criteria in relation to map parameters

The next stage involves operationalising the parameters into explicit criteria for the inclusion and exclusion of literature (see section 2.6 below for further details and a sample template). These criteria are pivotal to the process: they determine the development of both the search strategy and elements of the coding tools.

The inclusion / exclusion criteria should be developed and reviewed with use of the completed map in mind, as they are likely to determine the development of the topic-specific coding tools and consequentially the framework for later analysis. It is important to pilot the inclusion / exclusion criteria, usefully in conjunction with search strategy development. They should be piloted as rigorously as other aspects of the mapping process, to ensure that they appropriately identify eligible studies.

2.2.5 Search strategy development

The development of the search strategy and analysis of search output are specialist information science activities, but topic experts should be involved in advising on:

- Suggesting topic specific terms to match keywords used in different databases.
- Limiting the search to reduce output volume without compromising the utility of the product or rigour of the process.

Again, piloting is very important in iterative development of the search strategy. Issues concerning the search strategy impact on the map topic and the utility of the map. Section 2.5, and Appendix 1, consider in more detail the development of search strategies.

All the above processes are iterative, and the findings from each process inform decisions on changes to parameters.

2.3 Systematic map scoping

2.3.1 Overview

By scoping we mean:

Researching what work is already out there in a subject area and providing background information relating to published work, experts, and policy documents to help you write the project and commission brief.

The overall purpose of the scope is to help define the map parameters. To do this, the team uses the scope to:

- Increase understanding of the type and quantity of literature coverage on the topic
- Begin to consider the feasible boundaries of the map topic (in relation to the team's resources)
- Develop search concepts and terms
- Identify key sources to investigate further such as most commonly cited journals
- Provide background for writing the protocol and report, and to pass on to registered providers as background material.

The map scope will tend to be more thorough than a normal scope, requiring up to 50 hours' work, and will have a larger output – probably 300+ references.

After the preliminary scope results have been discussed at a mapping team meeting, additional scoping work is needed to investigate developments arising. This is an iterative process.

2.3.2 Scoping procedure

Projects vary widely in their requirements. Below is a breakdown of typical project scope phases.

PROJECT SCOPING PHASES (drawn up by staff with research & reviews, practice development and knowledge management competencies)

	Task	Process	Output
Stage 1	Research whether other reviews exist	Identify appropriate resources and tools (on or off line); Literature Searches	List of references
	Research key texts (books, articles, reports, grey literature etc)	"	Fully referenced / keyworded bibliography, with abstracts if available. Mindmap of weblinks.
	Research leading writers / experts in the field	"	Names , position, institution, and main pieces of work
Stage 1 continued	Note Practice sites / teams / individuals if any.	"	
Stage 2	Research key policy documents (government department, Parliamentary , official bodies and agencies	"	Key documents listed and weblinks presented in Mindmap
Stage 3	Research any other R&D initiatives, commissions or briefs either prospective or in progress	Identify and contact appropriate networks and groups (requires input from Research and Reviews team)	Listing of projects, organisation, lead , status

Research development initiatives	Identify and list practice leader organisations / network; services and individuals. Identify development activities in topic field
----------------------------------	---

PIT has access to a wide range of social care databases (e.g. Social Care Online, Social Services Abstracts, PsycInfo, AgeInfo, ChildData), journals, books and reports. Other sources include databases of organisations and social care research studies and consulting subject experts among SCIE staff and associates.

The entire map team should contribute to defining scope parameters. The scope pro forma can be used for gathering information at the first meeting. There should be ongoing dialogue about ideas for resources and comments on the relevance of what has been found.

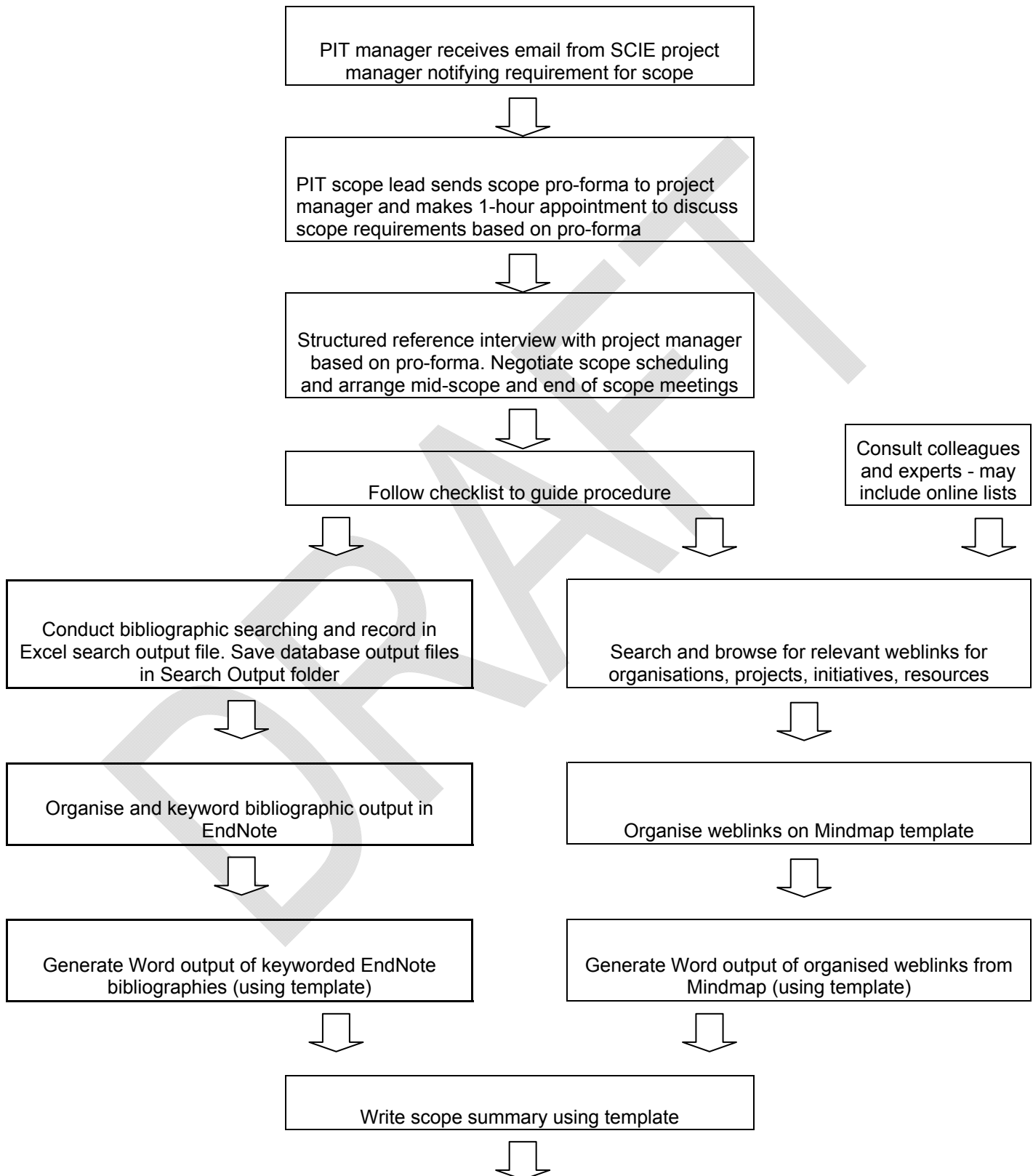
The results are delivered in a range of ways, including.

- EndNote reference management software, and its Word output as a bibliography.
- Excel tables of the search terms and sources used.
- Mindmaps (useful for complex subjects and weblinks for organisations) and Word output as a list of links.
- Summary report of scope findings - this is useful for project brief writing and for the successful commissionee.

If the team wishes to order full text to explore relevant material, PIT can co-ordinate inter-library loan requests with the Library team.

2.3.3 Scoping flow chart: SCIE example

This flow chart outlines the scope process. Iterations will be required for map purposes.



Output: Summary, EndNote library and bibliography, Mindmap and Word output. Excel file of search terms can be sent if required.
ITERATIONS WILL BE NEEDED FOR MAP

2.3.4 Scoping documents

Scoping follows a standard procedure outlined above. Scoping uses a framework of templates; within this framework, the output varies to suit the needs of the individual project.

2.3.5 Scoping templates

- Scoping checklist
- Scoping pro forma
- Search strategy and search output file
- EndNote library and associated word output (bibliographic details only, and with abstracts)
- Mindmap and associated word output
- Scoping summary

Hyperlinks are provided to master templates, otherwise version control problems are likely to arise.

2.4 Protocol

In systematic reviews, the protocol is viewed as a formal plan for the work. However, systematic mapping tends to occur at an earlier, more exploratory stage, and so far we have treated the protocol as a working document. Its functions are to aid planning, record decisions and provide content for the report. There will need to be a formal agreement on who can amend it, and who must be consulted or informed first.

However, there is an argument for finalising the protocol at an early stage, for example to hand over to a different project manager to oversee the review commission. A balance could be achieved by providing a protocol with a standardised process for agreeing and introducing amendments.

2.4.1 Protocol contents page example

This is drawn from the first pilot systematic map report (Map 1: visit <http://www.scie.org.uk/research/maps.asp>).

Title page

Preface pages

- Map team membership

- Specialist group membership

- Acknowledgements

Background

- Policy context

- Practice context

- Background research

Aims and objectives

Systematic map topics

Methods used in the map

- Identifying and describing studies

 - Population

 - Interventions

 - Outcomes

 - Study type

 - Search strategy

- Quality assurance of the map

Results

- Summary of principal findings

- Strengths and limitations of this systematic map

- Implications

Conclusions

2.4.2 Detailed guidance on protocols from SCIE systematic review guidelines

Detailed guidance on systematic review protocols is available in the SCIE systematic review guidelines (see <http://www.scie.org.uk/publications/researchresources/rr01.pdf>) and is copied, with some amendments relating to map processes, below.

However, it should be stressed that this **may not be applicable to map protocols**.

a. Length

Protocols should be no more than 4,000 words, with no more than 1,500 of these devoted to background discussion. The text of a protocol, transferred into the past tense, should be included in the final review report. The protocol is equivalent to a short draft of the methods section of the final technical report (of a map; of a systematic review), with a background section to set the project in context. For each heading, reviewers should follow the guidance in the main review section on that topic, to ascertain SCIE's expectations at each stage.

b. Structure

The reporting structure for a protocol should use the headings described below.

List of abbreviations

All abbreviations used in the text of the protocol should be clarified: e.g. National Society for the Prevention of Cruelty to Children (NSPCC). As the review progresses, any new abbreviations that arise should be added to this section.

Potential conflicts of interest

Anyone commissioned to contribute to the review or map, or serving in an advisory capacity should declare any previous or ongoing involvement in the topic in question. Examples of such involvement might be if a reviewer has written on the topic, developed programmes in the area, engaged in any relevant consultancies or experienced social care services in the area.

Background

This should set out the background to the topic including any legislative, policy specific, regulatory or performance assessment background context to the review, and include coverage of the relevant policy and organisational documents e.g. Audit Commission reports. In addition, any uncertainties in relation to the effectiveness or acceptability (to users/carers/minority groups/practitioners/ other stakeholders) of services/interventions should be discussed. This should not be a comprehensive overview of the field, or particularly lengthy, rather an opportunity to set the scene. If there are debates in the field about the theory or conceptual background of the topic or intervention, these should be identified briefly here.

The background section of protocols should summarise the state of research knowledge to date, if known, in relation to the review/map question. Where previous systematic reviews have been conducted on related questions these should be summarised. The background section should be no more than 1,500 words in length. If systematic reviews are found that cover similar ground to that proposed for the current review or map, this should be discussed with SCIE as soon as possible.

Objectives

Ideally, the objectives should be obvious from the background to the map/review. These should set out in more detail what questions the review is seeking to answer, or what areas the map is intending to cover.

Criteria for inclusion of studies in the review

Inclusion and exclusion criteria underpin the whole process (map or review). They should arise directly from the map topic and should be explicitly stated in the protocol. This is crucial as it helps readers to understand the process of identifying studies to be included, and to consider the likely applicability of the map/review for their purposes.

Searching

The search strategy is based on what the search is looking for (inclusion criteria) and not looking for (exclusion criteria). For the protocol it is sufficient to describe the planned search strategy in general terms. The areas it is necessary to include are the databases to be searched, a general plan in relation to search terms, any restrictions of the search (e.g. language, dates), and other planned searching such as handsearching, citation tracking, websites and personal contacts with authors. The planned role in locating literature of members of any stakeholder group should also be specified.

Methods of the review or map:

User/stakeholder involvement

To date, SCIE's three maps have not made extensive use of different types of stakeholder, largely because the methodology was uncertain and so difficult to convey. Ideally, mapping protocols (and review protocols) should outline plans to involve stakeholders in the review, together with some detail as to the role stakeholders will play in the process. Ideally, all stakeholder groups should be involved including service users and carers, practitioners, policy makers and researchers, especially in specifying the topic coverage. In particular it is important to outline at the protocol stage the ways in which the reviewers plan to involve users of the specific services that are the focus of the review, and any plans to support those users to participate in this process (e.g. mobility/childcare/transport issues).

It is for the map or review team to decide whether to use an advisory group. If an advisory group is used, the team should detail in the protocol the composition and the frequency of contact, whether this contact is face to face or by email, together

with the specific role of the group at which stages of the review. (The engagement of registered providers in Map 3 at SCIE has fulfilled some of the functions of wider stakeholder involvement: the providers were selected for topic expertise.)

Screening of studies

Reviewers should state in the protocol the proposed methods for screening, ie applying the inclusion and exclusion criteria to studies identified through searching. In particular it is important to state how many reviewers will view each title/abstract, and how consistency between reviewers will be established. SCIE requires that the level of agreement between those involved in screening is recorded and presented in the review. The protocol should state how any differences of opinion will be resolved (for example by moderation, by another reviewer or by consensus).

Descriptive maps

Descriptive maps describe the literature retrieved from the search that is relevant to the review. The coding of the map is constructed by keywording the studies in the map. Such maps are usually prepared as a preliminary step in commissioning SCIE systematic research reviews. Map frequency reports may comprise a simple numerical account of the frequencies in each category or be more complex. A useful example for descriptive map reports is to present data by topic focus, publication date, intervention type, evaluation/study design and country of study. More categories are available and should be determined on a review-by-review basis. There is no quality assessment of studies included in a descriptive map, but procedures for quality assurance of the map process should be detailed in the map protocol.

Keywording for the descriptive map

Keywording is a process used to describe and categorise the studies included in a map. The current version of the social care core keywording tool (Appendix 3 below), which will be available from SCIE, should be used for all reviews. In addition, in consultation with SCIE and other stakeholders, teams should devise a tool that is review-specific, in which there should be no more than 10–15 categories to enable mapping of review-specific items. Coding the map using these keywording tools will enable reports such as described above to be completed for discussion at the interim report stage.

In some cases, the map may summarise themes in a more lengthy conceptual or theoretical overview. This can be useful but is time-consuming and may impact on timescales and resources. Furthermore, if study findings are included without quality assessment, this may be potentially biased. Agreement should therefore always be sought from SCIE before embarking on such a piece of work. Where conceptual or theoretical material from the descriptive map is summarised without full data extraction and quality assessment, such summaries should be reported separately from the synthesis of studies included in the in-depth review that have been subject to full data extraction and quality assessment.

2.5 Systematic map searching

2.5.1 Tasks associated with searching

a. Selecting the range of sources for the specific map

During the early stages of planning a map, the team needs to discuss the type of sources which should feed into map content. The range of potential information sources has grown exponentially since the arrival of the internet. Other factors such as increased transparency in government proceedings and the rise of the service user movements mean that traditional bibliographic sources may not be sufficient to cover a specific topic. Commonly, searching for evidence, primary or secondary research studies (rather than expressions of opinion, or policy documents) is targeted. Currency, lifespan, accessibility and governance of online material are further issues for consideration.

Sources for map material must be decided before searching is planned.

The range of sources includes:

- Bibliographic databases
- Research registers, although implications need to be considered for dealing with incomplete research records and recording research project final publications
- Aggregated journal databases
- Individual journal electronic tables of contents
- Journal hand-searching (bearing in mind the high investment of effort required for relatively low returns)
- Other sources such as government department websites for policy context.

Consultation with experts will provide further references, but reference harvesting should generally wait until the registered providers are working on reviews, as reference harvesting from hundreds of records in a large map would not be possible.

Searching bibliographic databases of published literature generally makes up the major part of map searching. The bibliographic databases are selected from the recommended list for SCIE systematic reviews; the source for access to electronic resources is the SCIE online resources file including SCIE listing of e-journals subscriptions, held on SCIE.net.

b. Administration of search: overview

The following processes take place throughout and after searching:

- Recording search strategy and output
- Importing search results to EndNote
- Data cleaning references in EndNote
- Deduplicating references in EndNote
- Recording duplicates
- Database source analysis

- Assisting commissionees to rerun searches at later date

c. Developing the search strategy: overview

The processes involved are:

- I. Scope (includes pre-map scope and later development of scope)
 - Confirmation on decisions on type of search source
- II. Consultation on scope findings and search term development
- III. Conducting the search
- IV. Consultation on search results

I. Scope

The purposes of the scope are:

- Increase understanding of the type and quantity of literature coverage on the topic
- Development of map topic and initial development of inclusion / exclusion criteria
- Develop search concepts and terms
- Investigate key sources to investigate further such as most commonly cited journals.

The map scope will tend to be more thorough than SCIE project commission brief scopes, up to 50 hours' work (c.f. 10-30 hours), and will have a larger output – probably 300+ references (c.f. 10 -100 references). After the preliminary scope results have been discussed at the first mapping team meeting, additional work will probably be needed to investigate developments arising.

II. Consultation on scope findings and search term development

Registered providers are primary users of the maps and therefore need to be consulted on search terms and the results of searches. It is important to manage expectations in a trade off between utility and resources. Consultation and discussion is always time-consuming – allowance needs to be made.

Involvement of the registered provider team at the searching stage has the following benefits:

- Tapping into subject expertise and search term suggestions to:
 - Focus the map topic
 - Improve the search quality;
- Establishing their satisfaction with the search strategy at this stage ensures smoother progress when they later rerun and develop the search for the commission of research reviews arising from the map.

However, disadvantages may be:

- The large amount of time required to consult and obtain consensus from the whole team;
- Lack of knowledge of the map process, lack of searching knowledge and competition from other work priorities.

III. Conducting the search

In the first instance, all the databases listed in the SCIE Systematic Review Guidelines should be considered for searching, with any omissions justified.

See <http://www.scie.org.uk/publications/researchresources/rr01.pdf> pp19-24.

Specialist subject databases e.g. ChildData are used to supplement this list as required. Links for database and e-journal access are provided in the SCIE Online Resource Directory on SCIE.net.

Search strings

Search term suggestions can come from:

- Scope findings
- Mapping team discussion
- Database controlled language tools, e.g. thesauri and scope notes
- Examining indexing of known relevant documents
- Examining preliminary search outputs to delete irrelevant terms.

The search strings need to take account of the inclusion criterion agreed in stage 2.

To develop search strings, controlled language tools and known relevant documents are explored to discover relevant search terms, and subject experts may be consulted in addition. The search strings need to take account of the inclusion / exclusion criteria.

Piloting the search string

The established procedure is to work out and pilot a search strategy on a large, structured database such as PsycInfo or Medline. The results' topic coverage is assessed before repeating the search with a modified strategy. A procedure which has been tried on previous maps is to draft strategies for consultation on a large health database and on Social Care Online using a limited date range, then feedback to and consult the team. Once a suitable strategy has been devised for these two databases, the search strategy will need to be adapted for subsequent databases depending on its coverage and the controlled language tools available.

Extending the search to further databases

After testing a search string on each database, the results' topic coverage needs to be checked by the searcher (information officer) before repeating the search with additional terms. The search strategy will need to be adapted for each database depending on its coverage, structure, utilities and the controlled language tools available. All searching will be carried out by the searcher but results will need to be discussed with the entire mapping team and altered accordingly. The results from the searches will be used to alter parameters for the map, and restrict or expand the map topic.

Journal searching

Journal searching is conducted by:

- Searching journal hosts and using electronic search facilities for individual journals;

- Browsing electronic tables of contents. Journal searching will generally require short search strings. This is because the available content in a specific issue is likely to be limited, and journal searching interfaces do not offer the capacity to conduct complex searches.
- Handsearching key paper-only journals and latest editions of key electronic journals which are not online yet. However, handsearching is very time-consuming, especially if visits to other libraries are required.

e.g. From SCIE Knowledge Review 6 p61

<http://www.scie.org.uk/publications/knowledgereviews/kr06.pdf>

“CRD provided a frequency distribution of the journals in which records identified as relevant were published. A decision was made to search electronically available online contents (abstracts/papers) for the period January 2002 to the present day for the 10 most frequently sourced journals.

The top 10 journals and the issues that were searched are outlined below. Please note that hard copies of journals were not searched; it was only electronic versions that were accessed. All online searches were conducted on Tuesday 10 June 2003.”

Additional sources

Additional searching e.g. of key organisations’ websites, contacting key authors, reference harvesting and citation searching, will need to be carried out at some stage, although this need not be carried out as part of the search. All the searching carried out should be systematic, reproducible and planned within the available resources.

Quality assurance

When the search strategy is complete, it is quality assured by:

- Presentation to and comments by the entire mapping team;
- Obtaining reproducible results by re-running the entire search within PIT, usually by the member of PIT who is not leading on the information management of the specific map.

IV. Search output and consultation on search results

The search output of bibliographic details (including abstracts where available) is imported to and managed in EndNote. No filtering out is done at this stage. All search output figures and strategies used should be recorded in the relevant templates.

Due to overlap between coverage of search sources, there will be duplicate references in the total set of search findings. Therefore, when searching is complete the results need to be deduplicated in EndNote (using the deduplication function and manual check). Data will also need cleaning because:

- Some bibliographic databases do not hold complete data

- The data in the source database was not in format that could be accurately transferred to EndNote
- Data inaccuracies may be discovered; also different bibliographic databases may list authors in different orders.

The aim is to have a set of map records in EndNote (and later EPPI-Reviewer) where accurate data is present in the correct form in the right fields.

These processes are iterative and will continue throughout the life of the map.

d. Recording the search

The aim of recording the search is to make it possible to rerun the search.

As a minimum, the following data should be recorded:

- Database name, version and host
- Date search conducted
- Date limits set on records to search (e.g. 1999-2006) and rationale
- Language limits set on records to search and rationale, or note if no language limit available
- Exact search terms used for each database, and the combination of terms
- For journals, the journal title, volume, issue and dates of publication should be included.

Ideally each search line should be on a new line, with care taken to make the connection between lines clear with Boolean operators (and, or, not).

Database name, version, host
Date search conducted
Date limits set on search
Language limit set on search
Notes

Screenshots of the search history should also be saved for all databases. This is because host interfaces can change at short notice and evidence should be presented in case of dispute as to how the database was searched originally. In such cases, a new search may need to be devised for the purpose of later review work.

See [Appendix 1: Templates and example screenshots for recording searches in recommended bibliographic databases.](#)

e. EndNote use

EndNote is convenient for handling and organising the search output and data collection at all stages up to retrieval and export of included records to EPPI-Reviewer.

The end product is not just tidy, included, retrieved records – the quantity of literature processed at each stage needs recording for the map report ([Flow of literature through the map](#)). Therefore, it is important to manage the records carefully; preferably one person should have responsibility for this.

Data to collect:

- Total search output, including duplicates
- Number of duplicates found at each stage (at start, first screening, second screening, coding)
- number of items found in searches
- number of items found by other means (personal contact, stakeholder input, handsearching, citation tracking)
- inclusion/exclusion of items:
 - number excluded on preliminary screening, and reasons
 - number parked for potential later work
 - number of full-text items retrieved
 - number excluded on full-text screening, and reasons
 - number included in systematic map
 - number included in the in-depth review.
- number of useful citations retrieved from each database against total number of hits.

The search output from most databases can be imported directly to EndNote, and remaining search results are typed in. It is easiest to have several EndNote libraries, one for each stage, and a carefully maintained Excel sheet of literature flow at each stage. It is important to cross-check record number totals for each category; the publication stage is embarrassingly late to find discrepancies.

De-duplication can be started via the automatic duplicate finder in EndNote, followed by a manual check, but further duplicates will emerge at all stages up to the end of coding.

These are recorded in the Excel sheet described above, e.g.

	date	
Number of records to start with	13/11/2006	3830
Number of duplicates automatic removal	06/09/2006	895
Number of duplicates after additional manual removal	13/11/2006	1144
Total number of duplicates	13/11/2006	2039
Number of records going through to screening	13/11/2006	2696
Number of duplicates removed before screening	19/01/2007	1134
Number of unique records	19/01/2007	1791

Data cleaning is most practical once the volume of records has been reduced by deduping – as a minimum, the record data should be in the correct fields and the author names should be correctly formatted. Cleaned data will make further deduping possible. It is essential that the records are as clean and deduped as possible before export to EPPI-Reviewer for coding.

f. Database source analysis

- Print out list of included references.
- Copy all copies of each reference from original total search output EndNote library.
- Move the Database names to the Keyword field, run a subject bibliography based on the keywords.
- Copy unique references to another EndNote library and run a subject bibliography.

Example:

Analysed A's as a test:

12 unique records

31 included A's including duplicates

Subject bibliography shows

Cinahl 6

Embase 2

Medline 2

Psychiatric rehabilitation journal 2

PsycInfo 15

Social Services Abstracts 2

Sociological Abstracts 1

Working towards recovery 1

Unique records from:

PsycInfo 3

Cinahl 1

Embase 1

This example took about 20 mins

g. Assisting registered providers to rerun searches at a later date

So far, we only have the following experiences so this method is under development:

- Handing the strategy to York CRD, who had difficulty following the strategy due to limitations in its recording and changes to interfaces;
- Given the saved search username and password for Ovid, EPPI-Centre managing to log in to Map 2's saved strategies and rerun them. This would require our institutional login for other databases. Some databases do not have any facility to save searches permanently, e.g. Social Care Online.

2.6 Inclusion / exclusion criteria

2.6.1 Overview

The inclusion / exclusion criteria form the building block for the rest of the mapping process. The aim is to show why map records were excluded at different stages of the process. This is important for the transparency of the method. The process of screening for inclusion / exclusion is dealt with in the guidance section on screening (sections 1.3.1 and 1.7).

2.6.2 Development of criteria

The inclusion / exclusion criteria are discussed by the whole mapping team at the initial project meeting at which point the criteria are drafted but not finalised. The map parameters should inform the draft inclusion / exclusion criteria which in turn influence the search strategy and the coding tools. Ideally, the parameters should be broken down into sub-sections for which encompassing inclusion / exclusion criteria can be written. Piloting of the draft criteria against a subset of at least 100 abstracts is essential for the development process, but later amendments may be needed. Late amendments are likely to require all preceding material to be rescreened, so should be avoided if possible.

The PICOS structure may be used as a checklist for drawing up inclusion / exclusion criteria.

P - Participants
I - Interventions
C - Comparison
O - Outcomes
S – Study type

The first exclusion criterion will generally be on the scope of material, i.e. not addressing the map topic. Each criterion is examined sequentially, starting at the top of the list. The criteria are ordered hierarchically, so that material is more likely to be excluded by the broader, initial criteria than narrower, later criteria. If a record passes all the exclusion criteria, by default it is included. The Query category is to mark papers that need further discussion between team members. Decisions on screening difficulties should be recorded and may feed into changes in the criteria, particularly at the pilot stage.

Inclusion / exclusion criteria are allocated a corresponding letter code for use in the EndNote keyword field. There should be one criterion per letter. The following example table is taken from pilot Map 2, The recovery approach in community-based vocational and training adult mental health day services

(<http://www.scie.org.uk/publications/researchresources/rr03.asp>)

2.6.3 Inclusion / exclusion criteria and screening codes table example

Code	
S	Exclude scope: not about community based day activities in mental health
P	Exclude population: majority of participants are not adults with mental illness aged 18-65
V	Exclude interventions: Not about vocational / training interventions
R	Exclude interventions: Not based on the recovery model / person-centred approach
E	Exclude study type: not empirical study (but include systematic reviews)
L	Exclude language: not available in English full text
D	Exclude date: published prior to 1978
T	Exclude publication type: popular media / professional magazines (in general social care)
A	Exclude publication availability: not available as full text
I	Include
Q	Query: for later consensus

2.6.4 Inclusion/exclusion options for manageable maps

Pilot screening may demonstrate that the map parameters are too wide and the volume of literature included will be too large to handle. In this case,

- extra exclusion criteria are added. This could include a 'parking' category, which covers a discrete subtopic which is not progressed in the map beyond the screening stage. Parked papers could be retrieved, coded and used for a subsequent review.
- existing exclusion criteria are tightened.

The following options help limit the size of the search output to make the volume of records for screening manageable.

a. Population

- UK only residents – this might actually mean UK **studies** only i.e. not multi-country studies.
- Restricting age range – putting this into practice depends on reporting quality in the paper.
- Limit by diagnosis / conditions – e.g. in pilot map 1: “parked” postnatal depression.
- Dual diagnosis – can be limited to only primary condition but there must be awareness of the implications.

b. Interventions

Limiting by intervention type is very dependent on map topic.

- Can limit by **sector** providing intervention – e.g. social care only
- Can limit by **type** of intervention – e.g. only person centred approaches
- Can limit by the **location** – e.g. community based versus institutionalised care.
- Can limit by **who** delivers the intervention e.g. professionals versus informal carers.

c. Study Type

Examples include:

- Empirical studies only
- Limiting on Study design e.g. RCTs only
- Evaluations only
- Exclude opinion pieces, briefings
- Possibility of requiring all included studies to report stakeholder views

d. Amending search strategy

- Limiting database searching, e.g. justifying searching the five most relevant databases.
- Publication date limit with justification – e.g. to tie in with legislation, post 1990 for community care reforms.
- Translating map topics into more specific search terms – this would need to be transparently reported in results e.g. “supported employment” rather than “employment”.
- Use NOT Boolean operators – there is a danger here as NOT may exclude relevant studies.
- Database-specific filters could also be used (such as age): but experience shows that these may be inconsistently indexed by database providers and pose an unjustifiable risk of excluding relevant material.
- Justifying exclusion on availability e.g. theses, books, conference proceedings etc. can be difficult to obtain.

- Cut-off date for retrieval should be set to keep to timelines; a secondary benefit is reducing the amount of references coded (although the latter option would need to be justified).

2.6.5 Recording decision making

During the map process, development of the inclusion / exclusion criteria involves numerous discussions and decisions. It is important to have a process not only to record these for the purpose of writing up the method but also to ensure that everyone involved in the project is informed as changes take place. It is the project manager's responsibility to collate and disseminate decisions, and to have the final say on decisions which can't be resolved unanimously.

What follows is part of a pilot working document to record additions to guidance to resolve questions during screening. It supplements the table of inclusion / exclusion criteria above. Our brief was to find literature on community mental health employment interventions which have a recovery perspective.

A more rigorous decision recording template (including dates, who identified the ambiguity, outcome, etc.) is included in this guidance (see section 2.1) but has not yet been trialled.

Extract from decision making document

Include (provided meets inclusion / exclusion criteria):

- Articles clearly mentioning recovery approach
- Individual placement and support – but see full text
- Supported employment that is person centred
- Benefit / cost analysis studies of supported employment that otherwise meet the inclusion criteria
- Modernising sheltered workshops: if the record demonstrates how services are changing to be more person-centred/recovery-oriented/promoting of social inclusion.

Exclude:

- Sheltered employment without person-centred approach
- Articles generally about modernisation of psychiatric care which mention employment in passing – similar to above, exclude
- Minor mental disorders
- Autism, Aspergers, brain injury unless have mental health problems

2.7 Screening

After deduplicating and cleaning the bibliographic records, the search output is carefully screened against the exclusion criteria. This can be the most time consuming process in mapping because of the size of the task. For example, in SCIE's first pilot map, which covered a broad and complex question, 13,733 references were found and screened, and 2,790 duplicates identified and removed. The titles and abstracts of the remaining 10,943 were then re-screened and a further 10,189 were excluded on the basis of the criteria established for the map. It is vital, as discussed below, to build in quality assurance at the screening stage to ensure consistency of decision making between those involved.

It is often necessary to refine exclusion criteria at the screening stage. It is essential to gain agreement between screeners to ensure high concordance rates and a quality output. For example, in the second map, it was initially decided to exclude any research without a UK sample but this was refined to include collaborations and comparisons.

2.7.1 Managing the screening process

Ideally, each record (title and abstract, if available) should be screened against the inclusion / exclusion criteria by two workers and 10-20% of the records quality assured by a third team member. Disagreements should be discussed as they arise, guidance revised as appropriate (see example of working document in the Inclusion / exclusion criteria guidance) and retrospective screening done if necessary. Agreement should be over 80%.

The screening process can either be carried out in EndNote or EPPI-Reviewer – after three maps, the preferred method at SCIE is to use EndNote for screening and retrieval and then import screened included records to EPPI-Reviewer for coding and analysis.

It is convenient to use a single letter code in the Keyword field in EndNote. The maximum rate of screening per person is approx. 300 records per day.

Example of Screening codes table

Code	
S	Exclude scope: not about community based day activities in mental health
P	Exclude population: majority of participants are not adults with mental illness aged 18-65
V	Exclude interventions: Not about vocational / training interventions

R	Exclude interventions: Not based on the recovery model / person-centred approach
E	Exclude study type: not empirical study (but include systematic reviews)
L	Exclude language: not available in English full text
D	Exclude date: published prior to 1978
T	Exclude publication type: popular media / professional magazines (in general social care)
A	Exclude publication availability: not available as full text
I	Include
Q	Query: for later consensus

2.8 Retrieval of full text records

The retrieval process is important because

- It is labour intensive and involves many steps
- Success or failure to retrieve a record could affect the quality or existence of a record in the final map
- The process must be very tightly controlled to keep track of record status and location, fulfil legal (copyright) obligations, and maintain efficient cross-team working
- The costs of full text retrieval are potentially very high.

This document should be read in conjunction with the guidance on Copyright and on Management of map records.

2.8.1 Overall procedure

The rest of this section describes the detailed process, and may be of interest only to those embarking on retrieval.

1. Source the article
2. Record article source in the Label field in EndNote
3. Print or order the article using Konduct / ILL via Chris Streets
4. Record the retrieval status in the Call number field in EndNote
5. Update the retrieval status as required
6. Check EndNote for outstanding work

2.8.2 “Quick wins”

1. Order by journal source for more efficient retrieval
2. Search for references that contain “http:” these are usually available online

2.8.3 Additional notes before starting retrieval

- Tidy references at earliest opportunity – i.e. author names in correct format, editing journal titles so the same title is uniform – change & to and, spell out words in full.
- REFER records: print in full, also create new records for relevant final publications, link them by copying the REFER record, editing bibliographic data, enter in Research Notes field: REFER final publication: original project
xxxxxxxxxxx

2.8.4 Resource list

In EndNote, clicking on Edit Preferences / Library display to give the display

Author	Title	Keywords	Label	Call number
--------	-------	----------	-------	-------------

then clicking on the column heading will make it easy to sort and see the status of records at a glance.

a. Keywords for retrieval

PLEASE DO NOT ALTER OR ADD TO THESE KEYWORDS WITHOUT GROUP AGREEMENT.

Retrieval source terms: Use Label field

Online
SCIE e-journals
SCIE library [books and reports only!]
Google
UWE e-journals
UWE ILL
EBSCO Host
BMA
British Library
SUNCAT
Check
Not found

Retrieval status terms: Use Call number field

Not sourced
Sourced
Ordered
Retrieved

b. Article retrieval sources

Source the article by working down the following list and record its status.

General note when retrieving:

If the original item had no abstract but you find one in the above sources, copy and paste it into the Abstract field in EndNote.

Pubmed is a useful source of abstracts: <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

Full text in electronic record

Print the record

Source: **Online**

Retrieval Status: **Retrieved**

SCIE electronic journals list

- Click on the Excel sheet SCIE electronic journals and log in to the journal title given for the EPPI bibliographic record (NB – check years range on Excel sheet first).
- Search for the article and download full text (if available).
- Print the full text article (if less than 20 pages long). If more than 20 pages long, save the article to U://systematic map retrieved articles
[Printer instructions: select Printer 05, select Properties, Paper, Tray 2, Finishing Print on both sides]
- Place the article printout in the Full text indexed box.

Source: **SCIE e-journals**
Retrieval Status: **Retrieved**

If the article is not in the SCIE electronic journals list or the item is a book or report, proceed to checking Google.

Google

Search Google using the exact title (in “quotation marks”).
A check in Google is useful for reports or unclear journal titles (e.g. unfamiliar abbreviations) or open access e-journals which have no print version.

Source: **Google**
Retrieval Status: **Retrieved**

UWE catalogue

Found at: <http://www.uwe.ac.uk/library/catalogue/>
Click on Glenside and search for the relevant item.
Print / save / record the article as before

Source: **UWE e-journals**
Retrieval Status: **Retrieved**

If the item is in the UWE catalogue but only as a print copy / e-journal doesn't cover those years,

Source: **UWE ILL**
Retrieval Status: **Sourced**

[To make out a UWE Interlibrary loan request, see later – at that point, change Retrieval Status]

EBSCO Host

Another option for finding articles:
<http://ejournals.ebsco.com/login.asp?bCookiesEnabled=TRUE> (or from SCIE information Resources list – use Athens login).

Print / save / record
Source: **EBSCO Host**
Retrieval Status: **Retrieved**

BMA Library

See <https://www.bma.org.uk/BMALibrary.nsf/perlist/A>

Source: **BMA**

Retrieval Status: **Sourced**

Requires ILL request on Konduct – see later. Also send EndNote output text file to Chris, using output style BMAendnote7. This enables him to make automated requests.

British Library interlibrary loan

If the item is not found using the above procedures, check the British Library catalogue <http://catalogue.bl.uk>

To get to the journal search section:

- Click catalogue subset search
- Click serials and periodicals

Source: **British Library**

Retrieval Status: **Sourced**

[To make out a BL Interlibrary loan request, see later – at that point, change Retrieval Status]

Suncat catalogue

Suncat searches institutions libraries for potential loan copies:

<http://www.suncat.ac.uk/>

Source: **SUNCAT** NB – few should be this option.

Retrieval Status: **Sourced**

[to make SUNCAT ILL requests, send a text file of the output to Chris).

Chris to check

If the reference is still not found copy and paste the reference into an email to Chris.streets@scie.org.uk.

Source: **Check**

Retrieval status: **Not sourced**

Not found from above sources

Source: **Not found**

Retrieval Status: **Not sourced**

c. Retrieving books and reports

The order to search for these items is:

- SCIE library catalogue (using Konduct)
- UWE catalogue
- Google
- British Library
- SUNCAT

SCIE library catalogue

- Open Konduct and click catalogue
- Click Edit an existing catalogue title
- Paste the title being searched for into the blue box.
- If the item appears in the pull-down list, note the library details in the boxes on the right. If there is a copy in the SCIE library, note the classmark and use it to locate the item on the shelves

Source: **SCIE library**

Retrieval Status: **Retrieved**

- If it is in the UWE library, note the classmark and edit the citation to add it to the notes field.

Source: **UWE ILL**

Retrieval Status: **Sourced**

NB if not found here you still need to search the UWE catalogue as well

UWE catalogue

Use Detailed search (R hand box) to locate items.

Google

May be useful for leaflets and reports

British Library

Needs further investigation: Basic search of integrated catalogue.
Advanced search appears temperamental.

SUNCAT

Use the Author/Title search

Order these items via Konduct and SCIE librarian (CS), as for articles.

2.8.5 Making Interlibrary loans

First a sort and export needs to be done on EndNote according to Source (**UWE ILL/ British Library/BMA/SUNCAT**) and Retrieval Status (**Sourced**)

You'll process all the records for UWE ILL's in EndNote and Konduct completely before going back to another source.

Copy the search results (Ctrl K) into a Word document, using an export format which does not include abstracts (e.g. SCIE style, Author Date)

Cut and paste the file details into the Konduct records (see below).

When finished, alter the retrieval status for this batch on EPPI Reviewer to **Ordered**

Use the Konduct data entry stage as Quality Control – do you remember a particular journal as being available free? Could we obtain this Interlibrary loan from a cheaper source?

BL ILL's are processed in the same way.

BMA ILL's are processed as above, but a text file in BMAendnote7 format is also exported and emailed to Christopher Streets christopher.streets@scie.org.uk

SUNCAT ILL's are saved as a text file which is then emailed to Christopher Streets christopher.streets@scie.org.uk

These requests then have their retrieval status changed to **Ordered**

Konduct instructions

Konduct is an Access-based programme used for library stock management. Here, we are using it to automate the inter library loan requests.

Use the drop-down menus in the toolbar to go to Loans – Interlibrary Loans – Request by Status

This brings up the table of all requests on the database. Our batch will be distinguished by having the status **New**

Booking in new requests

Click Loans – Interlibrary Loans – New Request
(see screen shot)

Enter the following data, tabbing to move between fields.

- Lending library – type or use drop-down list
- **+** press for automatically incremented request number
- Select your user/requester name and librarian from drop down menus (can type in first 3 letters).
- Request method – email (default?)
- Request type – defaults to PHOTO but must be selected for the request to be charged at the correct rate (alternative is LOAN for books or reports – please ask Janet or Chris)

Entering the bibliographic information:

- Title = Journal title
- Author – first author only needed
- Article – only the first 5 words are needed, as longer titles cannot be handled by some loaning libraries' systems.
- Media = JOURNAL ARTICLE etc.

Using the British Library Integrated Catalogue serials search <http://catalogue.bl.uk/> to

- search on the serial title
- discover the copyright fee for that journal (in the Terms of Use field)
 - enter that fee in Konduct's Charges tab for that record
 - tick the Copyright Cleared box on the main record page
 - Press **New request** or **Close** (automatically saves record).

ILL's should be processed so that batches are around 30 records – this saves strain.

If not done already, on EndNote change the retrieval status for this batch to **Ordered**

2.8.6 Interlibrary loan hardcopies

Process and file as for full-text printouts.

Amend Retrieval Status to **Retrieved**

DRAFT

2.9 Management of map records

An organised master set of records needs to be set up, catalogued and maintained for the purpose of managing copies for those working on the project.


Map records are filed in journal boxes in author alphabetical order from the earliest stages of retrieval. Each paper is placed in a plastic sleeve (stocks of which should be monitored) and more ordered if needed).

The alphabetical order in EndNote will be slightly different to that in EPPI Reviewer. The final collection of included, coded records is numbered by hand to match a corresponding printed list of the records.

The Call number field is used for loan details

- where the record is
- whether it is full text or abstract only
- who the record has been loaned to and when

Example of EndNote library set up



Accession Number	Author	Title	Call Number
1	Ackerson	Coping with the Dual Demands of Severe Mental Illness and Parenting: The ...	in library
2	Ackerson	Parents with serious and persistent mental illness	in library
3	Ackerson	Issues in parenting by clients with severe and persistent mental illness: a sur...	in library
4	Agathonos-Ge...	The Prediction of Child Maltreatment in Greek Families	in library
5	Agerbo	Familial, psychiatric, and socioeconomic risk factors for suicide in young pe...	missing

2.10 Coding and coding tools

The purpose of coding or keywording is to describe the range of the records, and to allow users of the map to extract a set of records which relate to a particular topic, or type of participant, or research methodology. To achieve this end, coding organises, categorises and describes the records included in the systematic map. Possible coding categories include which language the item is written in, the population being studied, the location of the study, types of interventions being described, research methods used, and importantly the topics the paper focuses on. This enables researchers to consider what the evidence covers, to devise questions that the map can address, and to extract relevant papers. Although generally the quality of records as evidence is outside the remit of mapping, coding could include a rapid assessment of a paper's quality as evidence.

Development of coding tools can start in the planning stages, and should be ready for piloting when full text retrieval is under way. Everyone involved in the coding process should be aware that they need to prioritise time for extensive piloting of the coding tools before the cut-off date. The tools should be finalised for use soon after the retrieval cut-off date. The third map included the registered provider in coding tool development and coding records, but this model is still under development.

2.10.1 Type of coding tools

In previous maps, we have worked with up to three coding tools (sets of coding questions)

- The social care core coding tool, which has been modified for each map
- The study reporting quality coding tool
 - These two tools are being replaced by a new generic tool, which has yet to be piloted: see Appendix 3.
- The map specific coding tool, which is devised from scratch for each individual map to supplement the generic tool. Appendix 2 provides an example.

Coding tools seek a balance between capturing the information needed and having too many questions which tire the coders, leading to loss of efficiency and accuracy. 30 questions in total is a reasonable maximum. Pre-set options are provided to reduce coding time, and "Other, specify" category is inserted as necessary to allow for unanticipated responses.

At present, the coding tools for each map are stored and used on EPPI-Reviewer.

2.10.2 Devising the coding tools

The generic tool may need review and any changes will be prompted by the needs of the map.

The map specific coding tool is devised in main from the inclusion criteria. However, it also needs to take into account the map parameters.

- Each code question should have guidance, and this guidance should be updated as disagreements are resolved during coding.
- There should be stated limits on the number of options that can be selected (e.g. Choose no more than three options, or restriction by radio buttons). It is preferable to only have one option answers to avoid 'watering' down the map results.
- Options should be logical, mutually exclusive, and aim to cover all possibilities. 'Other' should be used as little as possible as it is not a descriptive term and tends to get chosen as a catch all. 'Not applicable' may be needed, along with planning how the rest of the tool works if whole sections are not applicable (e.g. not about interventions). Completing all questions for each record facilitates housekeeping for missing coding answers.
- Free text comment options can be planned for individual category options if helpful. However, such comments will not be in controlled language and so could be difficult to search reliably when the map is complete.

For examples of coding tools, see [Appendix 2: Map specific coding tool for Map 2](#) and [Appendix 3: Proposed generic tool, April 2008](#)

a. Testing the coding tools

It is essential to pilot the tools on at least 10% or 100 papers (whichever is the greater amount). This will be carried out on the first papers returned in order to conserve time. Any concerns or alterations need to be recorded so that alterations can be made to guidance. The PM takes the lead in collating and disseminating updated guidance. Piloting is extremely time consuming, but making changes once coding is underway is likely to mean extensive recoding.

b. Application of coding questions and QA of coding

Double coding of full texts is essential, because up to 30% disagreement is likely between coders. Coders should also take into account exclusion criteria (which have only previously been applied to title and abstract). Each member of the team should participate in coding, as this is an opportunity to get a partial sense of the literature. The percentage of papers quality assured by a third coder independent of the map team depends on the total number of records, but should be at least 20%.

2.11 Analysis

Approaches to analysis will vary between maps but should aim to meet the map parameters and consider the following core variables:

- Demographics (age, gender, ethnicity, other factors such as disability)
- Location
- Language
- Study type
- Interventions

When the coding results have been quality assured and finalised, the map records can be searched and analysed. This analysis can be simple (examining the distribution of answers to each question individually) or complex (performing cross-tabulations to compare answers across questions). In addition, the statistics for the flow of map records through the map process need to be compiled, checked and rechecked.

See Report writing (section 2.12) for examples of structuring the write-up.

The screenshots on the following pages show a simple analysis (taken from Map 2):

2.11.1 Analysis example

Reports - Microsoft Internet Explorer

Address: <http://eppi.ioe.ac.uk/eppireviewer/reports.aspx>

Eppi-Reviewer 3.0 Reports [Help files](#)

Review details | Screening | **Analyse** | Enter / edit data | My account | Logout

Search | **Reports** | Manage groups | Meta-analysis | Summary report (a) | Summary report (b) | Inductive coding | Item Summary

Items: [A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [Y](#) | [Z](#) | ([Show all 301 items](#) | [Groups](#))

SCIE Social care keywording strategy (Bates et al 2006)

Section A: Core keywords (All studies)

What is the status of the report?
Which language is the study in?
How were the keywords allocated?
What type of study does this report describe?

Published
In press
Unpublished (including ongoing project, communication from author etc)
Conference presentation

Frequency Report

To run a frequency report based on the question selected above: [Click here](#)

Crosstabs Report

Done Internet

2.11.2 Frequency report example

Reports - Microsoft Internet Explorer

Address: <http://eppi.ioe.ac.uk/eppireviewer/reports.aspx>

EPPi-Reviewer 3.0 Reports [Help files](#)

Review details | Screening | Analyse | Enter / edit data | My account | Logout

Search | Reports | Manage groups | Meta-analysis | Summary report (a) | Summary report (b) | Inductive coding | Item Summary

Items: [A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [I](#) | [J](#) | [K](#) | [L](#) | [M](#) | [N](#) | [O](#) | [P](#) | [Q](#) | [R](#) | [S](#) | [T](#) | [U](#) | [V](#) | [W](#) | [Y](#) | [Z](#) | ([Show all 301 items](#) | [Groups](#))

Frequency report

SCIE Social care keywording strategy (Bates et al 2006)
What is the status of the report?

Attribute	Number	List items
Published	300	Select
Conference presentation	1	Select

| [Show as bar chart](#) | [Show as pie chart](#)

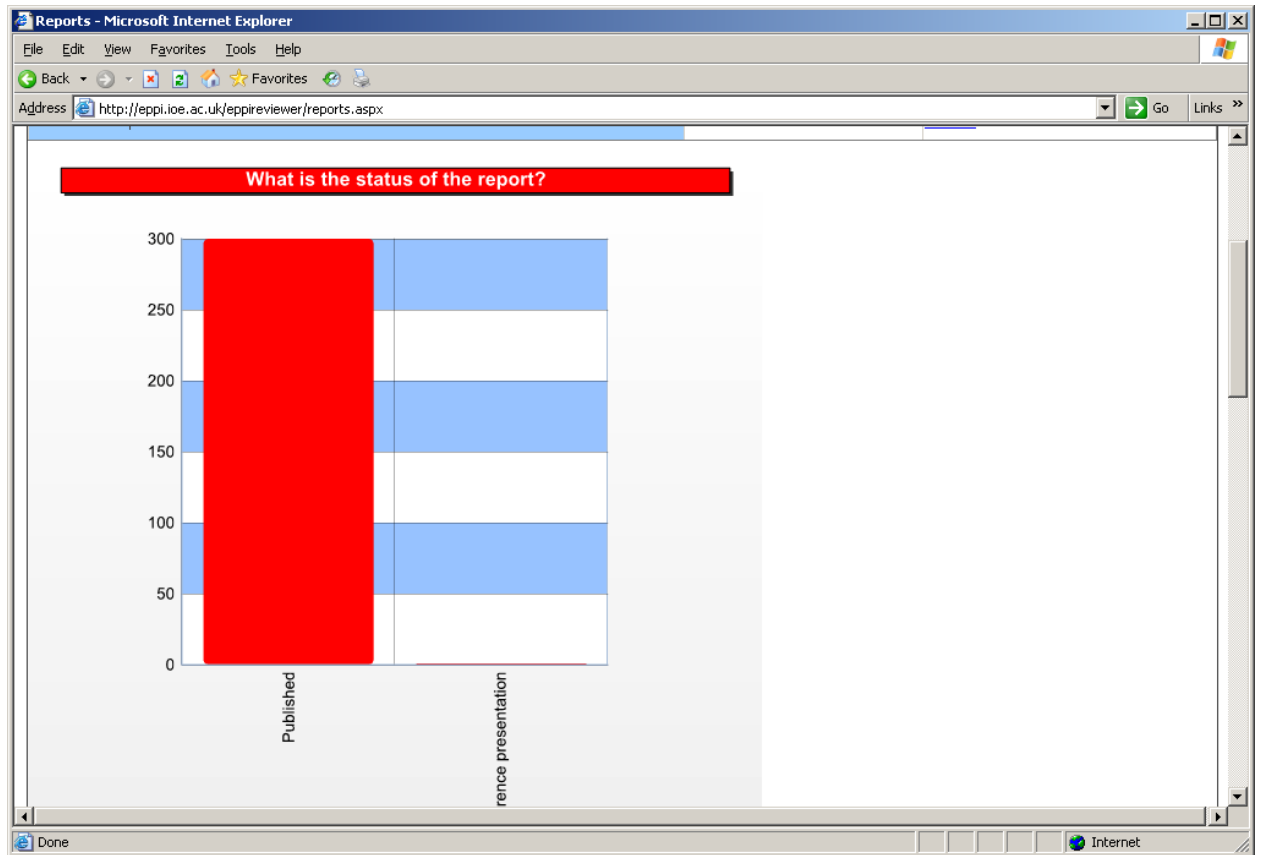
SCIE Social care keywording strategy (Bates et al 2006)

Section A: Core keywords (All studies)

What is the status of the report?

Done Internet

2.11.3 Bar chart example



2.11.4 Cross-tabulation example (based on answers to two questions)

Reports - Microsoft Internet Explorer

Address: <http://eppi.ioe.ac.uk/eppireviewer/reports.aspx>

Crosstabs report

X-Axis: In what country/countries was the study undertaken?
Y-Axis: What type of study does this report describe?

	USA	UK	Republic of Ireland	Canada	Australia	New Zealand	Europe Other (Please specify)	Scandinavia (Please specify)	Africa (please specify)	Middle East (Please specify)	Asia (Please specify)	Total
Description (non empirical)	3	28	0	0	0	0	0	1	0	0	0	32
Exploration of relationships or correlations between different factors	57	9	0	4	6	1	5	2	0	0	0	84
Evaluation (of an intervention)	119	19	0	12	1	0	8	3	1	0	9	172
Methodology	2	0	0	0	1	0	0	0	0	0	1	4
Secondary Analysis	1	0	0	0	0	0	0	0	0	0	0	1
Systematic review	1	3	0	2	0	0	0	0	0	0	0	6
Review	0	1	0	1	0	0	0	0	0	0	0	2
Related intervention evaluation to be retrieved	1	2	0	0	0	0	0	0	0	0	0	3
Total	184	62	0	19	8	1	13	6	1	0	10	304

Hide [Calculate chi-square](#)

The numbers of records in the table link through to the relevant references.

2.11.5 Map record statistics

Statistics for analysis of record flow through the map are collected throughout the process and collated as the following example shows:

Summary of includes

After first round of screening (all items sourced)

After second round of screening (full text)

After coding

14/11/2006	736
05/12/2006	390
19/01/2007	301

Summary of excludes

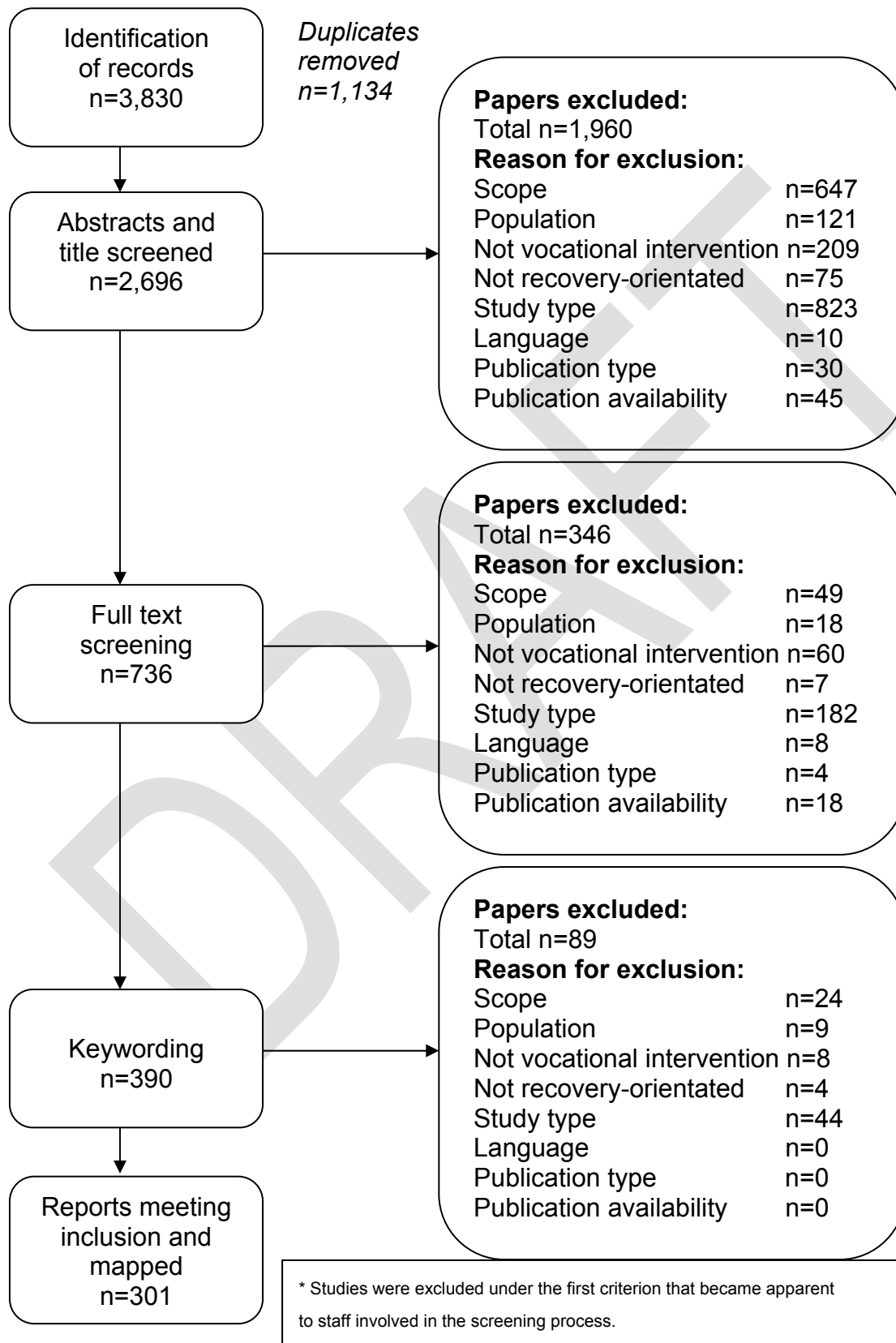
	1st screen	2nd screen	coding	totals
Exclusion on Scope				
Exclusion on Population	647	49	24	720
Exclusion on Intervention: not vocational	121	18	9	148
Exclusion on Intervention: not recovery	209	60	8	277
Exclude study type: not empirical study	75	7	4	86
Exclude language	823	182	44	1049
Exclude publication type	10	8	0	18
Exclude publication availability	30	4	0	34
	45	18	0	63
	1960	346	89	2395

These statistics will feed into a summary diagram in the final report as shown:

2.11.5 Flow of literature records within the map

adapted from EPPI-Centre (2004)

Excluded papers*



2.12 Report writing

The map report is used to describe the coverage of literature in the map, and is written by the SCIE project manager with assistance from the PIT lead. It remains a SCIE product although is freely available to registered providers.

The uses of the map and the content of the map report will reflect the literature searched. There may be good evidence that knowledge reviews can be commissioned to investigate a number of map areas. On the other hand, if the literature is clearly deficient and reviews are unlikely to be commissioned, there may be some value in a short narrative synthesis of the topics addressed by the literature. This would then justify subsequent decisions to look elsewhere to deliver evidence (e.g. to practice surveys). The map report may be the only place where the content of the literature found by the mapping team is described.

The body of the report is about 8 pages long, and is an overview of the aims, methods, findings and limitations. Findings are analysed in terms of factors such as demographics, service provision, gaps and main messages. Most of the methodology and results documentation such as search strategy, inclusion / exclusion criteria, coding tools and actual references, are presented in the appendices.

So far, three map reports have been written, and these can all be found at: <http://www.scie.org.uk/research/maps.asp>

2.12.1 Draft format for map reports

- **Aims of map**
 - This section has core aims being the same across all maps
 - Specific map aims also to be highlighted
- **Methods**
 - Standardised section for all maps to include flow chart outline of process
- **Results**
 - Standardised flow chart of literature through map
 - Standardised core result charts - for example a cross tabulation of location x evaluation type to highlight countries that focus on theory vs. countries that focus on evaluated interventions (under development)
 - 'standard' study quality result charts (under review)
 - Map specific result charts - these will need to be chosen on a project by project basis by the map team.
- **Limitations in the map**

- Non standardised, map specific
- **Gaps highlighted**
 - Non standardised, map specific
- **Main messages of the map**
 - Non standardised, map specific
- **Uses for the map**
 - Non standardised , map specific
- **Appendices**
 - a) Exclusion criteria
 - b) Search strategy
 - c) Coding tools
 - d) References in the map

Finally a link to the online database of results should be included as well as contact details for project manager and main map worker.

2.13 Follow up work

A variety of follow up work will be required after the map report has been published. Some of this will be ad hoc, but adequate time needs to be allowed for the work, following map publication.

While the time required for many of these tasks cannot be estimated in general, planning should take account of likely follow up work for specific maps. Follow up reviews based on Map 1 took an additional two years after map completion.

2.13.1 Follow up work tasks

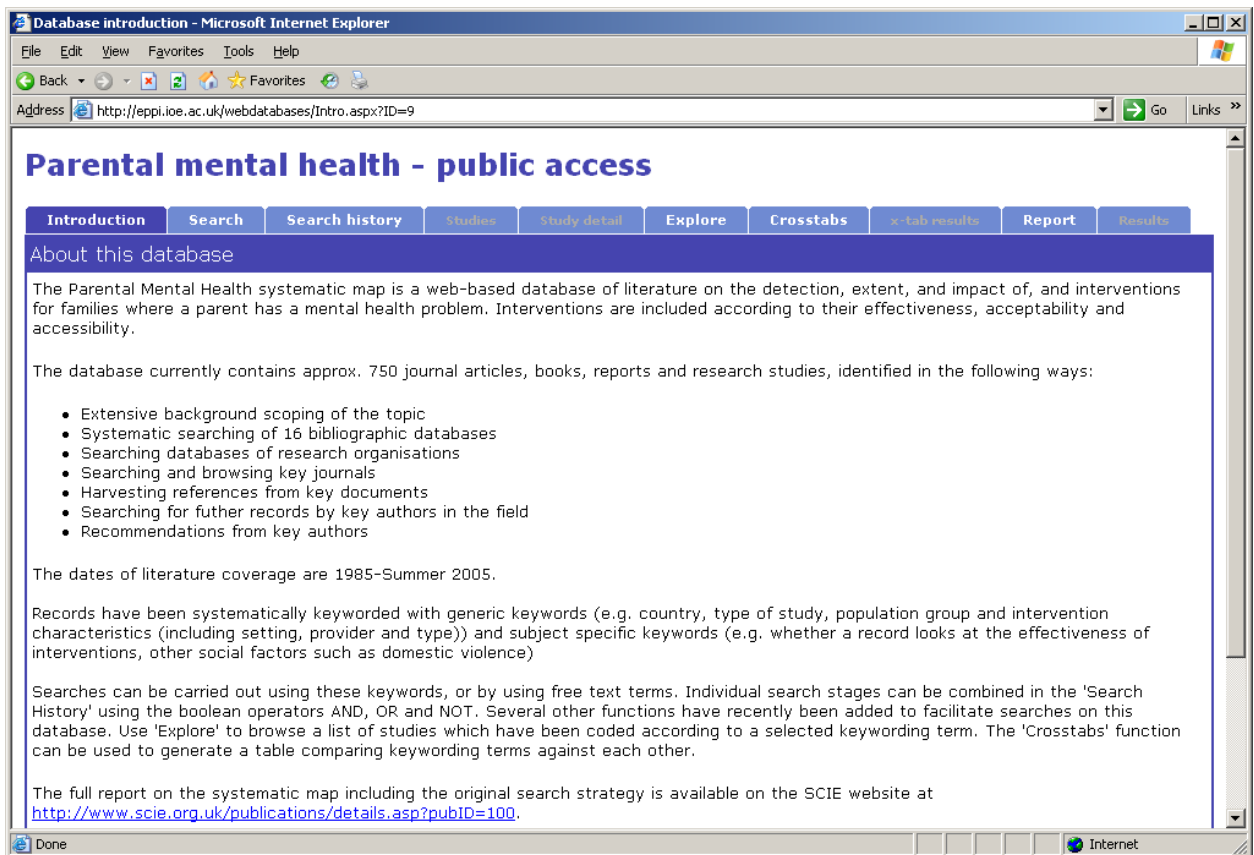
a. Registered provider access to the map report

The registered provider is sent a copy of the map report, including the Appendix list of all the studies included in the map (see example of the full report of Map 1 at <http://www.scie.org.uk/publications/map/map01.pdf>)

b. Access to the map database

PIT can coordinate for the EPPI-Centre to provide EPPI-Reviewer passwords which will allow the registered provider team to access the map data, run searches and export sets of references. Passwords will last for the duration of the review, after which they will be deleted.

The EPPI-Centre can also offer a web interface for each map (e.g. <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=9>). The web interface allows the registered provider to work with records but not edit them. They can run cross tabulations, reports and searches, and export search results to a RIS file (for import to EndNote or Reference Manager).



For the first two maps, two versions of the interface were available:

- A registered provider interface, login protected, but including map record abstracts, where available
- A public interface, freely available but minus the abstracts for map records.

c. Guidance on using the map database

PIT will provide a demonstration session to the registered provider team to explain how the database is structured and how to use it effectively for review needs. Ad hoc email support will be provided throughout the review.

An example of a brief demonstration schedule is given below:

Demonstration of parental mental health database interface Access

URL: <http://epi.ioe.ac.uk/webdatabases/Intro.aspx?ID=10>

Login using

User name: SCIE Guest

Password: SC1E

Introduction

Note the link to the full map report on the SCIE website

Search

Keywords: use single searches at this stage – it is easy to combine them in Search history

Example: [Does this study describe the detection of PMHP?: Yes](#)

Freetext: see help

RIS export enables you to transfer the results to Reference management software such as EndNote or Reference Manager

Search history

Previous searches are saved between logins

Searches can be combined using AND, OR or NOT

Studies

Shows the list of studies from your search

Study detail

Shown when you Select an individual study: includes the abstract and coding results

Explore

Gives you an overview of the numbers in each category (click on the numbers to see the studies)

Crosstabs

For investigating relationships – select the categories of interest

Report

This gives all the coding answers to a particular question, e.g. Does the study describe the extent of PMHP?

Results

Shows report results.

Tip: use landscape format for printing.

d. Enabling access to map records in hard copy

SCIE houses in its library a master copy of each article and report included in the map, most of which were obtained via SCIE online subscriptions or interlibrary loan. Books obtained by loan are only at SCIE while the map is being compiled.

See also guidance on Copyright and Management of map records.

To access the records, the registered provider should do one of the following:

- Work at SCIE from the SCIE records
- Order their own copies
- Work on a copy made from copyright-cleared SCIE records.

Loan records are managed by PIT in EndNote – see Management of map records guidance.

e. Map coverage and re-running the search strategy

The registered provider may have questions about map coverage and the search strategy. The SCIE team may need to help with database search tips, although access to SCIE's database subscriptions cannot be arranged due to terms and conditions of our subscriptions.

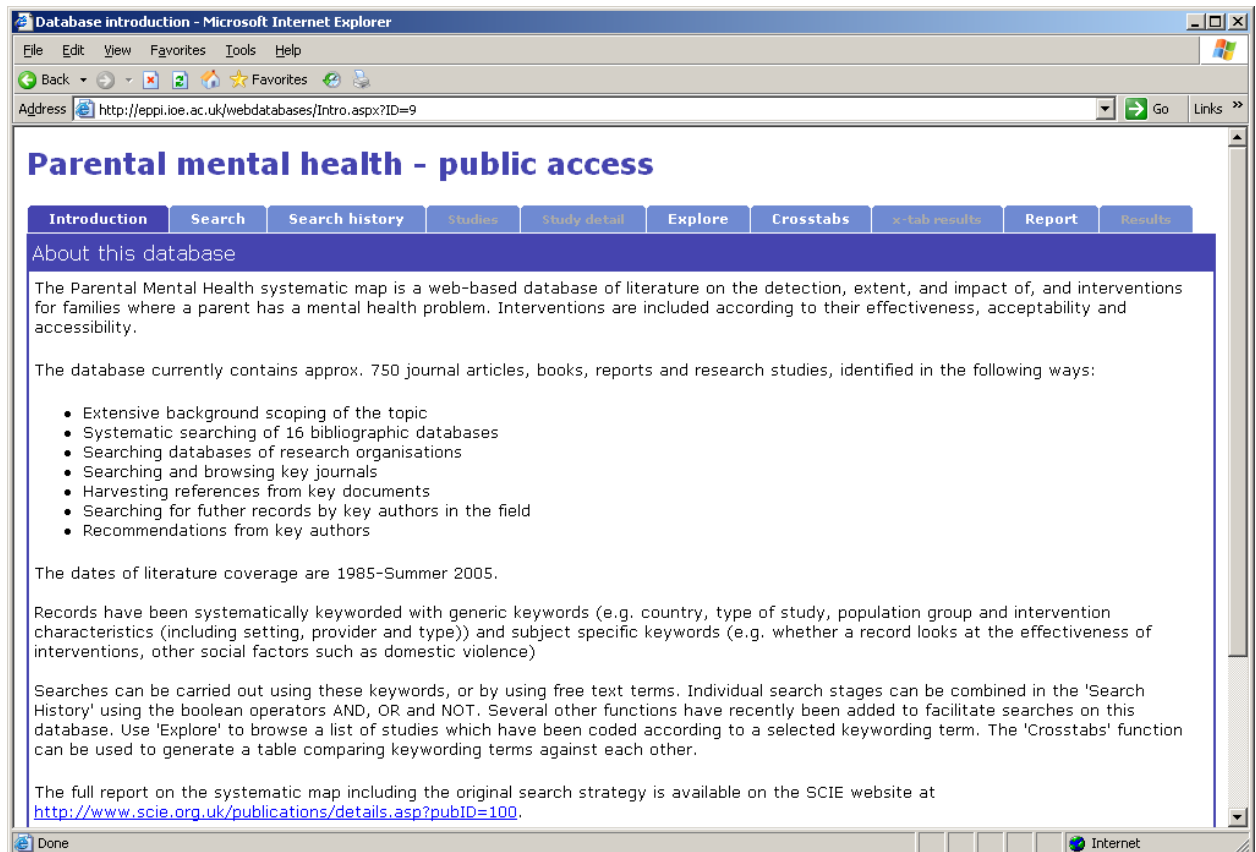
f. Dissemination

Dissemination could include the following activities:

- Contacting interested parties to inform them of the map's publication
- Making presentations to groups interested in the topic or methodology
- Networking to spread news of SCIE's work, e.g. via SCIE's Practice Partners Network
- Writing reports, articles and news releases about the map (liaise with Communications team)
- Conference presentations

2.13 Public database access

The EPPI-Centre can offer a web interface for each map (e.g. <http://eppi.ioe.ac.uk/webdatabases/Intro.aspx?ID=9>). This link is usually provided in the map report and on the publication introduction page on SCIE's website.



For the first two pilot maps, two versions of the interface were available:

- A commissioner interface, login protected, but including map record abstracts, where available
- A public interface, freely available but minus the abstracts for map records.

Copyright law prohibits free access to the map record abstracts.

The web interface allows public access to work with records but not edit them.

Functions include:

- Keyword search (i.e. the answer to coding tool questions)
- Free text search (useful for programme names, e.g. Sure Start)
- Explore the coding structure
- Cross-tabulations
- Reports

An example of a demonstration schedule is available in Follow up work guidance if required.

2.14 Updating the map

2.14.1 When will the map become out of date?

The map starts to date as soon as searching is complete. Registered providers should update and extend map material with their own searches

- Rerunning the map search from the year of map search onwards.
- Performing additional searching such as reference harvesting from records which will be in their specific systematic review.

2.14.2 Should the map be updated?

The SCIE systematic map product should not be updated itself, as such activity is likely to be carried out on an ad-hoc, non systematic basis.

However, in light of the fact that the map becomes out of date as soon as searching is complete, registered providers should update and extend the coverage of specific topics relating to their review question as outlined above.

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Colloquium, Los Angeles, US. For further details contact the authors:
esther.coren@scie.org.uk; J.Kavanagh@ioe.ac.uk

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Appendix 1: Templates and example screenshots for recording searches in recommended bibliographic databases

Index of recommended databases

AgeInfo
Applied Social Sciences Index and Abstracts (ASSIA)
British Education Index
C2-SPECTR
C2-RIPE (Register of Interventions and Policy Evaluations produced by the Campbell Collaboration)
ChildData
CINAHL
Cochrane Library (CDSR, CENTRAL)
Dissertation Abstracts
EMBASE
Health Management Information Consortium Database (HMIC)
International Bibliography of the Social Sciences (IBSS)
Medline
PsycINFO
Social Care Online (SCO)
Social Sciences Citation Index
Social Services Abstracts
Social Work Abstracts
Sociological Abstracts
Wilson Social Science Abstracts
ZETOC

Any additional databases used should also use the following recording principles.

AgeInfo

AgeInfo, CPA
Date search conducted
Date limits set on search (can only limit to 1 year)
Language limit set on search – N/A
Notes

e.g.

keywords =

(OSTEOPAENIA/OSTEOPENIA/OSTEOPENIC/OSTEOPOROSIS/OSTEOPOROTIC)

and text = fall*

AgeInfo screen shot example

CPA - AgeInfo Search Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites Refresh

Address <http://ageinfo.cpa.org.uk/scripts/ageinfo/hfclient.exe> Go Links >>

AGE info Search form

Boolean: Field: Search Term(s):

OR	Text	Index	
OR	Keywords	Index	
OR	Title	Index	
OR	Authors	Index	
OR	Corporate Author	Index	
AND	Journal/Publisher	Index	
AND	Year of Publication	Index	

Search hints: Always use the index when searching for Authors or Keywords
Use ~ to search for a range of Years of Publication eg 2000 ~ 2002

[Search](#) [Clear search form](#) [Exit](#) [Help](#) [About AgeInfo](#)

Done Internet

Applied Social Sciences Index and Abstracts (ASSIA)

ASSIA, CSA Illumina
Date search conducted
Date limits set on search
Language limit set on search
Notes

e.g.

#1 ((**approved social worker**) or (**approved mental health professional**)) and (**compulsory treatment**)

#2 schizo*

#1 or #2

ASSIA screenshot example

The screenshot displays the 'Search History' page in Microsoft Internet Explorer. The browser's address bar shows the URL: http://www-uk1.csa.com/jds70/history.php?SID=dfc6bbe3696dfa4f2720c513b9c8b059&mark_id=search%3A2%3A0%2C0%2C10&tab_collection_id=0. The page header features the CSA ILLUMINA logo and navigation tabs for 'Quick Search', 'Advanced Search', and 'Search Tools'. The main content area is titled 'Search History' and lists a search query: 'adoption and fostering'. It indicates that 574 results were found in ASSIA and 125 in COS Scholar Universe, with a date range set to 'Earliest to 2008'. Below the query, there are links for 'Edit', 'Save OR Alert', 'View Results', and 'Delete'. The page also includes a 'Combine Searches' section with a text input field and a 'Search Tips' link. At the bottom, there are filters for 'Now Selected' (ASSIA), 'Change' (Subject Area), 'Date Range' (Earliest to 2008), and 'Limited to' (Latest Update, Journal Articles Only, English Only).

British Education Index

British Education Index, Dialog Datastar, 1975 to date
Date search conducted
Date limits set on search
Language limit set on search
Notes

e.g.

1. employ\$
2. mental ADJ illness
3. 1 and 2

BEI screenshot example

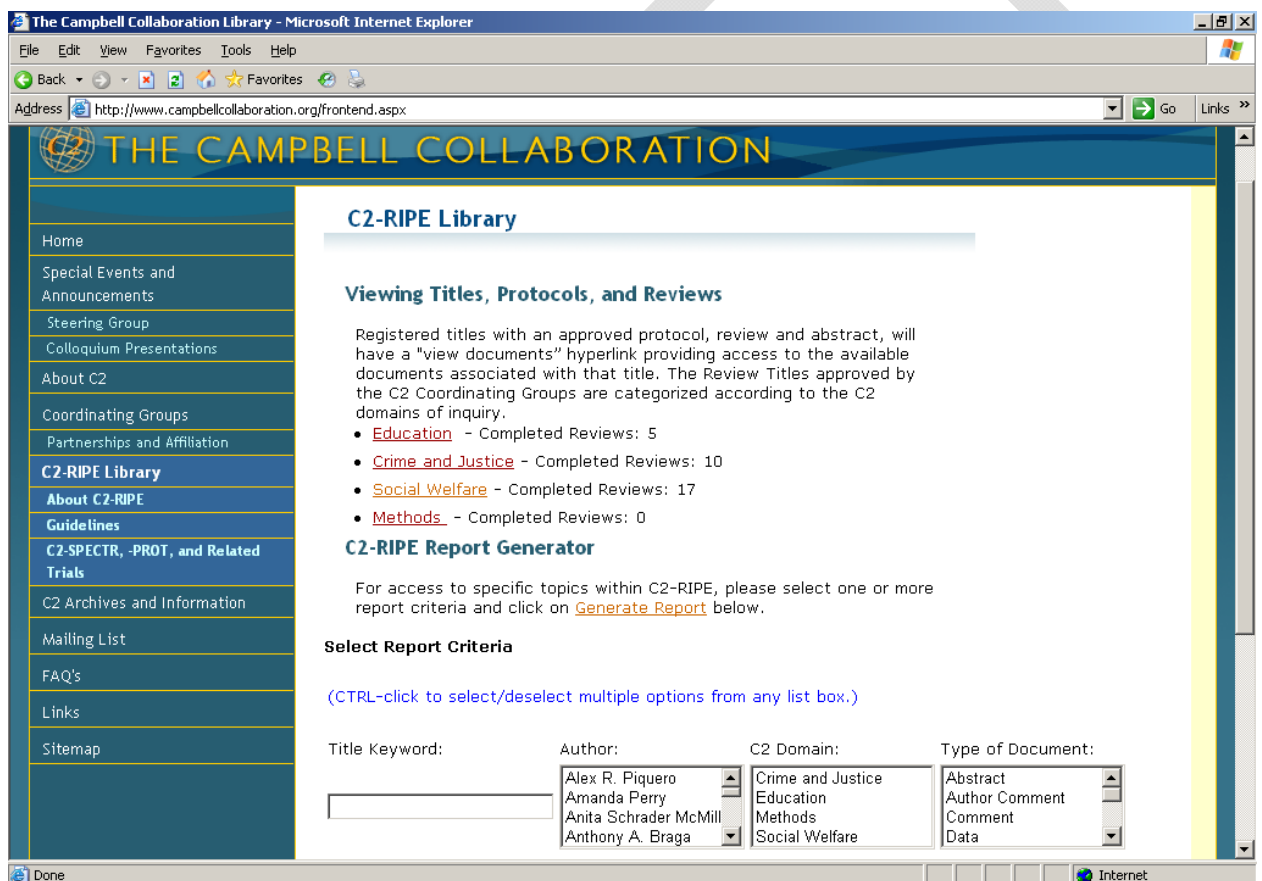
No.	Database	Search term	Info added since	Results		
CP		[Clipboard]		0	-	
1	British Education Index - 1975 to date	employ\$ AND LG=ENGLISH	unrestricted	3593	show titles	rank
2	British Education Index - 1975 to date	mental ADJ illness	unrestricted	21	show titles	rank
3	British Education Index - 1975 to date	MENTAL-DISORDERS#.DE.	unrestricted	893	show titles	rank
4	British Education Index - 1975 to date	1 AND 3	unrestricted	9	show titles	rank

C2-RIPE (Register of Interventions and Policy Evaluations produced by the Campbell Collaboration)

C2-RIPE, Campbell Collaboration
Date search conducted
Date limits set on search – N/A
Language limit set on search – N/A
Notes

Title keyword: mental
 Author: all
 C2 domain: all
 Type of document: all

C2-RIPE screenshot example



C2-SPECTR

C2-SPECTR, Campbell Collaboration
Date search conducted
Date limits set on search – N/A
Language limit set on search – N/A

Notes: NB small database, browsing categories may be more appropriate than searching

C2-SPECTR screenshot
(weblink access not available for last month)

ChildData

ChildData, NCB
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

Title (word or phrase in title) inter-racial
AND Keyword adoption / ="adoption"

ChildData screenshot example

Library Catalogue - ChildData - Microsoft Internet Explorer

Address http://www.childdata.org.uk/library_search.asp

Library Catalogue Organisations Directory Conferences & Events Children in the News

Home News & Updates Help & Support Your Subscription About NCB Log Out

national children's bureau

ChildData Information that makes a difference

LIBRARY CATALOGUE

Quick Search Advanced Search

AND Title (word or phrase in title) adoption AND Journal title Word Wheel

AND Word or phrase in abstract AND Keyword Word Wheel

AND Author (eg Sinclair R) AND General subject heading Word Wheel

AND Date (eg 2003) AND Format Word Wheel

AND Publisher Results per page 20

Applet app_QI7 started Internet

CINAHL (Cumulative Index to Nursing and Allied Health Literature)

CINAHL, Ovid
Date search conducted
Date limits set on search
Language limit set on search
Notes

1. exp *DEPRESSION/
2. exp Nursing Assistants/
3. 1 and 2
4. limit 3 to (english and yr="1967 - 2007")

CINAHL screenshot example

Ovid: Search Form - Microsoft Internet Explorer

Address: http://gateway.uk.ovid.com/gw1/ovidweb.cgi

CINAHL - Cumulative Index to Nursing & Allied Health Literature
1982 to November Week 3 2007

Try OvidSP! | Change Database | Online Support | Help | LOGOFF
Personal Account (for Searches) | Saved Searches/Alerts

#	Search History	Results	Display
1	exp *ADOPTION/	634	DISPLAY
2	fostering.mp. [mp=title, subject heading word, abstract, instrumentation]	1059	DISPLAY

Combine Searches | Delete Searches | Save Search/Alert

Advanced Search | Basic Search | Find Citation | More Fields | Search Tools

Keyword | Author | Title | Journal

Enter **Keyword** or phrase (use "\$" for truncation): Map Term to Subject Heading

Limits [More Limits](#)

Latest Update Research Abstracts
 English Full Text Revised Date

Publication Year: -

Cochrane Library (Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, Cochrane Central Register of Controlled Trials – CENTRAL, Cochrane Methodology Register, Health Technology Assessment Database, NHS Economic Evaluation Database)

Cochrane Library (Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, Cochrane Central Register of Controlled Trials – CENTRAL, Cochrane Methodology Register, Health Technology Assessment Database, NHS Economic Evaluation Database), Wiley Interscience
Date search conducted
Date limits set on search
Language limit set on search
Notes

e.g.
 #1 MeSH descriptor **Depression** explode all trees
 #2 (maternal)

Cochrane screenshot example

[Advanced Search](#) | [MeSH Search](#) | [Search History](#) | [Saved Searches](#)
 Enter a term below and click Search to continue.

Search For: In:
 To search using field labels (e.g. heart:ti) use the [Search History](#) page.

	Enter search term 1	Search All Text
AND	Enter search term 2	Record Title
AND	Enter search term 3	Author
AND	Enter search term 4	Abstract
AND	Enter search term 5	Keyw ords

Go directly to Search History

Restrict Search by Product

- All of The Cochrane Library
- The Cochrane Database of Systematic Reviews (Cochrane Reviews)
- Database of Abstracts of Reviews of Effects (Other Reviews)
- SCIE S, matic mapping guidance, April 2009
 the Cochrane Central Register of Controlled Trials (Clinical Trials)

- The Cochrane Methodology Register (Methods Studies)
- Health Technology Assessment Database (Technology Assessments)
- NHS Economic Evaluation Database (Economic Evaluations)
- About The Cochrane Collaboration (Cochrane Groups)

Restrict Search by Record Status

- All records
- Articles that are:
- New Updated Commented Commented and Updated Withdrawn

Date Range

(4-digit years, or "*" for any year)

Dissertation Abstracts

Dissertation Abstracts, Dialogweb
Date search conducted
Date limits set on search
Language limit set on search
Notes

Dissertation Abstracts screenshot example

Search History			
Set	Term Searched	Items	
S1	SOCIAL WORK	16950	Display
S2	EDUCATION	396594	Display
S3	1 AND S2	75430	Display

[Database Details](#)

Format

Free ▼

Number of Records

EMBASE

EMBASE, Ovid

Date search conducted
Date limits set on search
Language limit set on search
Notes

1. exp *DEPRESSION/
2. exp Nursing Assistants/
3. 1 and 2
4. limit 3 to (english and yr="1967 - 2007")

EMBASE screenshot example

The screenshot shows the Ovid Search Form interface. At the top, there's a navigation bar with 'Try OvidSP!' and links for 'Change Database', 'Online Support', 'Help', and 'LOGOFF'. Below this is a search history table:

#	Search History	Results	Display
1	exp *ADOPTION/	836	DISPLAY
2	fostering.mp. [mp=title, abstract, subject headings, heading word, drug trade name, original title, device manufacturer, drug manufacturer name]	1820	DISPLAY

Below the table are buttons for 'Combine Searches', 'Delete Searches', and 'Save Search/Alert'. The main search area has tabs for 'Advanced Search', 'Basic Search', and 'Find Citation'. The 'Basic Search' tab is active, showing a search input field with the placeholder 'Enter Keyword or phrase (use "\$" for truncation):' and a 'SEARCH' button. There are also checkboxes for 'Map Term to Subject Heading'. Below the search area is a 'Limits' section with a 'More Limits' link and checkboxes for 'Full Text', 'English Language', 'Abstracts', 'Latest Update', and 'Human'. A 'Publication Year' dropdown menu is also present.

Health Management Information Consortium Database (HMIC)

HMIC, Ovid
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

1. exp DEPRESSION
2. exp CARE ASSISTANTS/
3. 1 and 2
4. limit 3 to yr="2007"

HMIC screenshot example

Ovid: Search Form - Microsoft Internet Explorer

Address: http://gateway.uk.ovid.com/gw1/ovidweb.cgi

HMIC Health Management Information Consortium
November 2007

Try OvidSP! | Change Database | Online Support | Help | LOGOFF
Personal Account (for Searches) | Saved Searches/Alerts

#	Search History	Results	Display
1	exp *ADOPTION/	0	-
2	equality impact assessment.mp.	7	DISPLAY

Combine Searches | Delete Searches | Save Search/Alert

Advanced Search | Basic Search | Find Citation | More Fields | Search Tools

Keyword | Author | Title | Journal

Enter **Keyword** or phrase (use "\$" for truncation): Map Term to Subject Heading

Limits [More Limits](#)

Abstracts Latest Update

Publication Year: - -

Results

International Bibliography of the Social Sciences (IBSS)

IBSS, Ovid
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

1. depression.mp. [mp=abstract, title, subject heading, geographic heading]
2. care assistants.mp. [mp=abstract, title, subject heading, geographic heading]
3. 1 and 2

IBSS screenshot example

Ovid: Search Form - Microsoft Internet Explorer

Address: http://gateway.uk.ovid.com/gw1/ovidweb.cgi

International Bibliography of the Social Sciences
1951 to November Week 03 2007

Try OvidSP! | Change Database | Online Support | Help | LOGOFF

#	Search History	Results	Display
1	equality impact.mp. [mp=abstract, title, subject heading, geographic heading]	4	DISPLAY
2	race equality.mp. [mp=abstract, title, subject heading, geographic heading]	39	DISPLAY

Combine Searches | Delete Searches | Save Search/Alert

Advanced Search | Basic Search | Find Citation | More Fields

Keyword | Author | Title | Journal

Enter **Keyword** or phrase (use "\$" for truncation):

SEARCH

Limits | More Limits

Latest Update | Abstracts | Full Text

Publication Year: - - -

Results

Medline

Medline, Ovid, 1950 to Week 3, August 2007
Date search conducted
Date limits set on search
Language limit set on search
Notes

1. exp *Depression/
2. depress\$.mp. [mp=title, original title, abstract, name of substance word, subject heading word]
3. 1 or 2
4. limit 3 to (english language and yr="2005 - 2007")

Medline screenshot example

Ovid MEDLINE(R)
1950 to November Week 2 2007

Try OvidSP! | Change Database | Online Support | Help | LOGOFF
Personal Account (for Searches) | Saved Searches/Alerts

#	Search History	Results	Display
1	exp *Cerebrospinal Fluid/	7566	DISPLAY
2	*Craniocerebral Trauma/	11136	DISPLAY

Combine Searches | Delete Searches | Save Search/Alert

Advanced Search | Basic Search | Find Citation | More Fields | Search Tools

Keyword | Author | Title | Journal

Enter **Keyword** or phrase (use "\$" for truncation): Map Term to Subject Heading

Limits [More Limits](#)

Full Text Humans English Language
 Review Articles Abstracts Latest Update
 Core Clinical Journals (AIM)

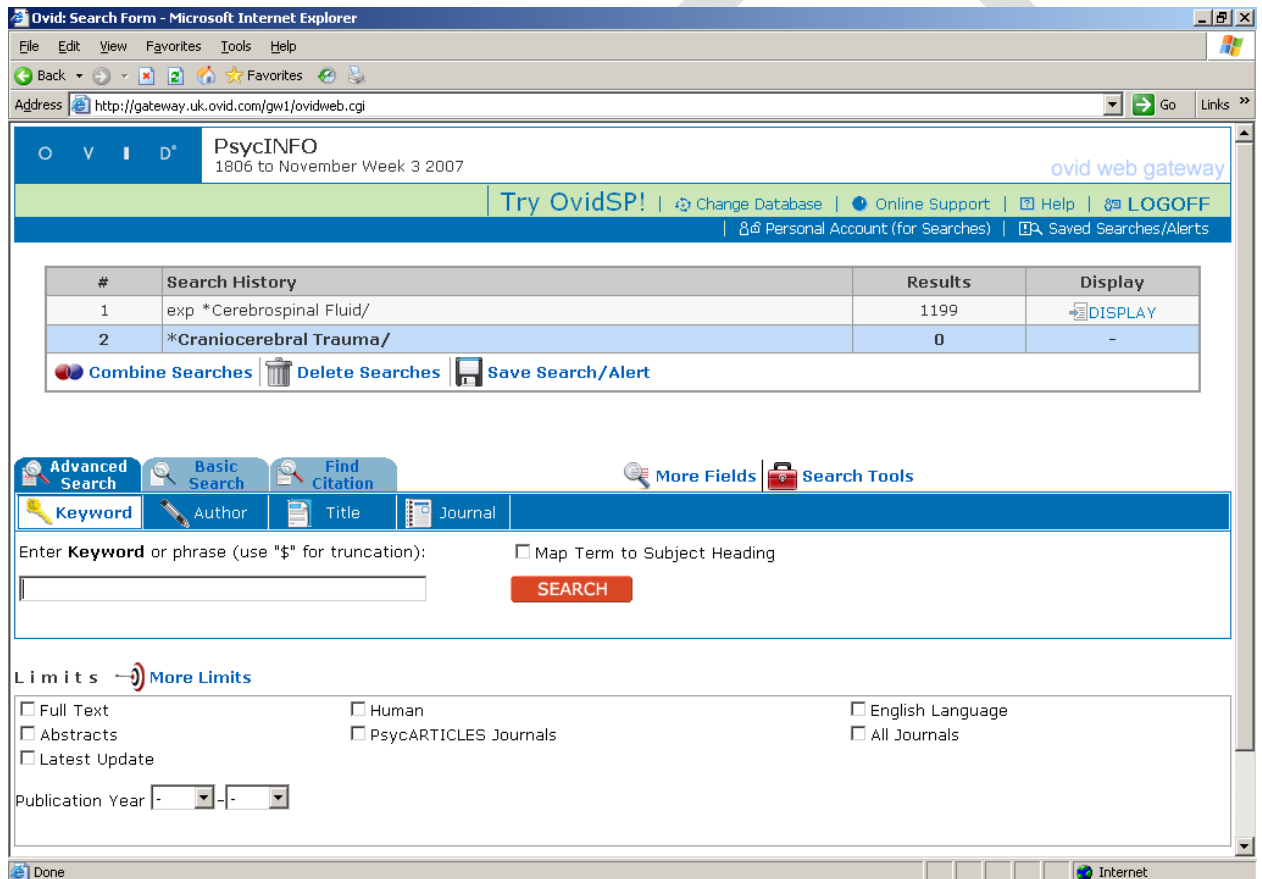
Publication Year: - -

PsycINFO

PsycInfo, Ovid
Date search conducted
Date limits set on search
Language limit set on search
Notes

1. exp *MAJOR DEPRESSION/
2. depress\$.mp.
3. exp Caregivers/ or exp Health Personnel/ or exp Child Care Workers/
4. (1 or 2) and 3 (english language and yr="1990 - 2007")

PsycINFO screenshot example



Social Care Online (SCO)

SCO, SCIE
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

Intermediate search:

Author = Levin

And Topic = older people

Advanced search:

@p=("asian") and @k=("adoption") and @p.publicationdate>("2000")

Social Care Online screenshot example

Use the advanced search if you require precise results. The advanced search relies on the user typing in specific combinations of words and symbols, called a 'query', to generate results. If used correctly, it can generate exact results. The advanced search is most often used by information professionals and researchers, but there is no reason why students, practitioners and others could not use with a bit of knowledge and practice. If you want to find out more about the advanced search and how you can use it to help you, visit the [help pages](#).

Advanced search

@p=("equality impact assessment") and @k=("black and minority ethnic people") and @p.publicationdate>("2001")

Search Save Clear

Click here for [help with searching](#)

Insert a ready-made query

Below are a list of 'field tags' already constructed for you. By clicking on one, you will enter that field tag into your search box. To complete the query you should type your word or phrase between the brackets. Click here to find out more about [field tags](#).

Click on the ready-made queries to restrict your search by:

Free text: @p=" "

Title: @p.title=" "

Author: @p.author=" "

Topic: @k=" " (view topics 223kb PDF)

Editor: @p.editor=" "

Journal Title: @p.journaltitle=" "

Publisher: @p.publisher=" "

Publication Date: @p.publicationdate=" "

@p.publicationdate>" "

@p.publicationdate<" "

Saved Searches

Social Sciences Citation Index

Social Sciences Citation Index, Web of Knowledge
Date search conducted
Date limits set on search
Language limit set on search
Notes

#1 AU=Levin

DocType=All document types; Language=All languages; Database=SCI-EXPANDED; Timespan=1970-2007

#2 TS=older people

DocType=All document types; Language=All languages; Database=SCI-EXPANDED; Timespan=1970-2007

#3 #1 and #2

DocType=All document types; Language=English; Database=SCI-EXPANDED; Timespan=1970-2007

Social Sciences Citation Index screenshot example

The screenshot displays the ISI Web of Knowledge Advanced Search interface. The search parameters are as follows:

- Select database(s) and timespan:**
 - Citation Databases:
 - Science Citation Index Expanded (SCI-EXPANDED)--1970-present
 - Social Sciences Citation Index (SSCI)--1970-present
 - Arts & Humanities Citation Index (A&HCI)--1975-present
 - Latest: 1 week (updated November 24, 2007)
 - Year: 2007
 - From: 1970 to 2007 (default is all years)
- Search Query:** #1 NOT #2
- Search Aids:** Author Index, Group Author Index, Full Source Titles List
- Restrict search by languages and document types:**
 - All languages: English, Afrikaans
 - All document types: Article, Abstract of Published Item
- Search Results:** 15,355 results for the query `TS=(adoption) OR TS=(fostering)`. The results are filtered by `DocType=All document types; Language=English; Database=SSCI; Timespan=1970-2007`.
- Field Tags Legend:**
 - TS=Topic
 - TI=Title
 - AU=Author
 - GP=Group Author
 - SO=Source
 - PY=Publication Year
 - AD=Address
 - OG=Organization
 - SG=Suborganization
 - SA=Street Address
 - CI=City
 - PS=Province/State
 - CU=Country
 - ZP=Zip/Postal Code

Social Services Abstracts

Social Services Abstracts, CSA Illumina
Date search conducted
Date limits set on search
Language limit set on search
Notes

#1 (depress* or mental or psychia*) and children

#2 social services

#3 #1 and #2

Social Services Abstracts screenshot example

Advanced Search Form - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Favorites Go Links

Address http://www-uk1.csa.com/ids70/advanced_search.php?SID=25d0575919aeeed42e3e07be16e705cdc Go Links

CSA ILLUMINA
Natural Miracles: What Functional Foods Can Do for You?

Logout Quick Search Advanced Search Search Tools

Please log in to My Research
0 Marked Records | Search History

Help & Support

(adoption or fostering or) Anywhere

and (asylum seeker* or or) Anywhere

and (or or) Anywhere

[Search Tips](#): e.g., wildcard*, exact phrase; use Keywords for a single search of Title, Abstract, Descriptors

Search Clear

Now Selected: Social Services Abstracts

Date Range: Earliest to 2008

Limited to: Latest Update Journal Articles Only English Only

Show: Short format Results per page: 10

Search Tools: [History/Combine Searches](#) | [Command Search](#) | [Thesaurus](#) | [Indexes](#)

[Create Desktop Shortcut to Advanced Search](#)

Done Internet

Social Work Abstracts

Social Work Abstracts, Ovid web gateway
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

e.g.

1. adoption.mp. [mp=title, abstract, subject heading, heading word]
2. (black and minority ethnic).mp. [mp=title, abstract, subject heading, heading word]
3. 1 and 2

Social Work Abstracts screenshot example

Social Work Abstracts
1977 to September 2007

Try OvidSP! | Change Database | Online Support | Help | LOGOFF

#	Search History	Results	Display
1	equality impact.mp. [mp=title, abstract, subject heading, heading word]	0	-

Combine Searches | Delete Searches | Save Search/Alert

Advanced Search | Basic Search | Find Citation | More Fields

Keyword | Author | Title | Journal

Enter **Keyword** or phrase (use "\$" for truncation):

Limits | More Limits

Abstracts | Latest Update | Full Text

Publication Year: -

No Records in Set

Copyright (c) 2000-2007 [Ovid Technologies, Inc.](#)

Sociological Abstracts

Sociological Abstracts, OCLC First Search
Date search conducted
Date limits set on search
Language limit set on search
Notes

kw: ethnic and kw: adoption and yr: 2000-2007 and ln= "english"

Sociological Abstracts screenshot example

The screenshot displays the OCLC FirstSearch SocAbs Advanced Search page. The search terms entered are 'adoption'. The interface includes a search bar with a 'Search' button and a 'Clear' button. Below the search bar, there are filters for 'Year', 'Language', and 'Document Type'. The 'Year' filter is set to 'No Limit', 'Language' is set to 'No Limit', and 'Document Type' is set to 'All'. The 'Limit availability to' section is checked for 'Subscriptions held by my library (2WE, UNIV OF THE W OF ENGLAND)'. The 'Rank by' option is set to 'No ranking'. The current database is 'Sociological Abstracts'.

Wilson Social Science Abstracts

Wilson Social Science Abstracts, Ovid web gateway
Date search conducted
Date limits set on search
Language limit set on search – N/A
Notes

e.g.

1. adoption.mp. [mp=title, abstract, subject heading, heading word]
2. (black and minority ethnic).mp. [mp=title, abstract, subject heading, heading word]
3. 1 and 2

Wilson Social Science Abstracts screenshot example

The screenshot displays the Wilson Social Science Abstracts search interface. The browser window title is "Ovid: Search Form - Microsoft Internet Explorer". The address bar shows the URL "http://gateway.tx.ovid.com/gw1/ovidweb.cgi". The page header includes "Wilson Social Sciences Abstracts 1984 to October 2007" and "ovid web gateway". A navigation bar contains links for "Try OvidSP!", "Change Database", "Online Support", "Help", and "LOGOFF". Below this is a search history table with one entry: "# 1", "Search History: equality impact.mp. [mp=title, abstract, subject heading word]", "Results: 1", and "Display: DISPLAY". There are buttons for "Combine Searches", "Delete Searches", and "Save Search/Alert". The search interface includes tabs for "Advanced Search", "Basic Search", and "Find Citation", with sub-tabs for "Keyword", "Author", "Title", and "Journal". A search input field is present with a "SEARCH" button. Below the search field are "Limits" options for "Abstracts", "Articles", and "Latest Update", along with a "Publication Year" dropdown. At the bottom, there are links for "Results Manager", "Customize Display", and "Reset Display".

ZETOC

British Library Direct <http://direct.bl.uk/bld/Home.do> is a developing alternative

ZETOC, British Library
Date search conducted
Date limits set on search
Language limit set on search N/A
Notes

All fields: adoption

And Title: mixed

Screenshot example:

All fields:	<input type="text" value="adoption"/>	e.g. "smart structures" Burke
Article Title:	<input type="text" value="mixed"/>	e.g. Smart Structures and Materials Systems eg, "ability grouping"
Author(s):	<input type="text"/>	e.g. Bowden eg, "Bathurst R J"
Journal Title:	<input type="text"/>	e.g. American Economic Review
ISSN:	<input type="text"/>	e.g. 00357596
Volume/Issue:	<input type="text"/>	e.g. 82 5 to search for Volume 82 Issue 5
Page(s):	<input type="text"/>	e.g. 254 for the start or end page eg, 254- 257 for the start and end pages
Year published:	<input type="text"/>	e.g. 1995- e.g. 1997-1999 eg, -1999

No examples have been found showing small database searches where browsing is the principal means of locating records.

If a permanent search can be saved in the database,

- For Ovid, create and share a personal username and password
- For other databases use the same institutional login.
- Some databases do not have the facility to save searches permanently.

Excel sheet for recording search output

Name of systematic map	Name of searcher						
Database	Host	Database coverage dates	Date of search	Search limits	Search terms	Search output	Relevant records
PsycInfo							
Medline							
Cinahl							
EMBASE							
HMIC							
Social Care Online							
Social Work Abstracts							
Social Services Abstracts							
ASSIA							
IBSS							
SIGLE							
Sociological Abstracts							
Wilson Social Science							

Abstracts							
Zetoc - British Library electronic table of contents							
Research project databases							
ReFeR							
INVOLVE							
NIMHE							
Joseph Rowntree Foundation							
Cochrane Library - (including The Cochrane Database of Systematic Reviews (Cochrane Reviews), Database of Abstracts of Reviews of Effects (Other Reviews), The Cochrane Central Register of Controlled Trials (Clinical Trials), The Cochrane Database of Methodology							

Reviews (Methods Reviews), The Cochrane Methodology Register (Methods Studies), Health Technology Assessment Database (Technology Assessments), NHS Economic Evaluation Database (Economic Evaluations)							
Campbell Collaboration							
C2 SPECTR							
C2 RIPE							
RiPFA							
Danish National Research Database							
SOLIS - Social Science Literature Information System (Germany)							
FORIS - Social Science Research Information System (Germany)							

NOD - Dutch Research Database							
Other organisations							
Department of Health							
Department for Work and Pensions							
Evidence based practices							
Social Policy Research Unit							
Centre for Economic and Social inclusion							
Portals and resource collections							
Past scoping work							
Journals							

Appendix 2: Map specific coding tool for Map 2

The Recovery approach in community-based vocational and training adult mental health day services: Review Specific Keywords

Section A: Population terms

<p>A.1 Mental health diagnosis</p>	<p>A.1.1 People with mental health problems (unspecified)</p> <p>A.1.2 People with schizophrenia and/or other psychoses</p> <p>A.1.3 People with bi-polar disorder (also known as manic depression)</p> <p>A.1.4 People with obsessive compulsive disorder (also known as OCD)</p> <p>A.1.5 People with depression and/or anxiety disorder <i>(e.g. the study cohort is comprised of some people with schizophrenia and/or other psychoses and some people with depression and/or anxiety disorder)</i></p> <p>A.1.6 Study population have mixed diagnosis <i>(e.g. the study cohort is comprised of some people with schizophrenia and/or other psychoses and some people with depression and/or anxiety disorder)</i></p>
<p>A.2 Mental health problem duration</p>	<p>A.2.1 People with long-term mental health problems <i>(also know as severe/serious and enduring mental health problems)</i></p> <p>A.2.2 People with short-term mental health problems</p> <p>A.2.3 Unspecified</p>

A.3 Other concurrent issues	<p>A.3.1 No other concurrent issues reported</p> <p>A.3.2 People with a dual diagnosis (<i>i.e. mental health problem and substance misuse; mental health problem and a learning disability; mental health problem and a physical disability</i>)</p> <p>A.3.3 People with mental health problems who have had contact with the criminal justice system (<i>also known as mentally disordered offenders</i>)</p>
A.4 Age	<p>A.4.1 Age not reported</p> <p>A.4.2 Study includes under 18s</p> <p>A.4.3 Study includes 18-65 only</p> <p>A.4.4 Study includes over 65s</p>

Section B: Service sector

B.1 Please state which community based sites	<p>B.1.1 Health</p> <p>B.1.2 Social Care</p> <p>B.1.3 Training and Education</p> <p>B.1.4 Voluntary/Not-for-Profit</p> <p>B.1.5 Independent/Private</p> <p>B.1.6 Joint (please specify)</p> <p>B.1.7 Unspecified (only to be used if sector entirely unreported)</p>
--	--

Section C: Service provider

C.1 Please state which service provider	C.1.1 Community mental health
---	-------------------------------

	<p>team</p> <p>C.1.2 Voluntary/Not-for-Profit agency</p> <p>C.1.3 Independent/Private agency</p> <p>C.1.4 Statutory agency (i.e. Social Services, NHS Mental Health Trust, Primary Care Trust)</p> <p>C.1.5 User/peer/self-advocacy agency</p> <p>C.1.6 Further education/higher education institution</p> <p>C.1.7 Commercial business</p> <p>C.1.8 Social firm/Cooperative</p> <p>C.1.9 Occupational health</p> <p>C.1.10 Jobcentre plus (or equivalent employment agency)</p> <p>C.1.11 Joint provider (please describe)</p> <p>C.1.12 Other (please specify)</p>
--	--

Section D: For non-empirical descriptive reports (i.e. practice or policy documents)

<p>D.1 For non-empirical descriptive reports (i.e. practice or policy documents)</p>	<p>D.1.1 User derived</p> <p>D.1.2 Practitioner derived</p> <p>D.1.3 Researcher derived</p> <p>D.1.4 Policymaker derived</p> <p>D.1.5 No applicable, an empirical study</p>
--	---

Section E: For intervention studies

<p>E.1 Intervention type (tick all that apply)</p>	<p>E.1.1 Not applicable, not a study reporting an intervention(s)</p> <p>E.1.2 Supported unpaid employment</p> <p>E.1.3 Supported paid employment</p> <p>E.1.4 Individual placement</p> <p>E.1.5 Occupational therapy</p> <p>E.1.6 Occupational health</p> <p>E.1.7 Vocational advice</p> <p>E.1.8 Vocational training</p> <p>E.1.9 Vocational rehabilitation</p> <p>E.1.10 Income support/benefits</p> <p>E.1.11 Clubhouse model (a model of user-led psychosocial rehabilitation which includes the right to meaningful work)</p> <p>E.1.12 Recovery model</p> <p>E.1.13 Person-centred approach (including person-centred planning, user-led care planning etc)</p> <p>E.1.14 Relapse prevention</p> <p>E.1.15 Advance directives</p> <p>E.1.16 Self-managed care (including self-directed care)</p> <p>E.1.17 Other (please describe)</p>
<p>E.2 Detail of intervention delivery</p>	<p>E.2.1 Not applicable, not a study reporting an intervention(s)</p> <p>E.2.2 Individual intervention</p>

	<p>E.2.3 Group based intervention</p> <p>E.2.4 Mixed intervention (please describe)</p> <p>E.2.5 Delivery not specified</p>
<p>E.3 Types of outcome reported (tick all that apply)</p>	<p>E.3.1 Not applicable, not a study reporting outcomes</p> <p>E.3.2 Satisfaction with service/intervention</p> <p>E.3.3 Levels of social inclusion</p> <p>E.3.4 Rehabilitation</p> <p>E.3.5 Symptom reduction</p> <p>E.3.6 Relapse prevention</p> <p>E.3.7 User views</p> <p>E.3.8 Staff/professional views</p> <p>E.3.9 Carer/family views</p> <p>E.3.10 Quality of life <i>Satisfaction with service/intervention</i> <i>Levels of social inclusion</i></p> <p>E.3.11 Individual outcomes (i.e. self-esteem, social activity etc)</p> <p>E.3.12 Health related outcomes</p> <p>E.3.13 Employment related outcomes</p> <p>E.3.14 Benefits/financial related outcomes</p> <p>E.3.15 Meaningful occupation</p> <p>E.3.16 Recovery model</p>
<p>E.4 Sources for outcomes</p>	<p>E.4.1 Not applicable, not a study reporting outcomes</p> <p>E.4.2 Self report</p>

	<p>E.4.3 Observed</p> <p>E.4.4 Agency records</p> <p>E.4.5 Practitioner</p> <p>E.4.6 Scales and Instruments</p> <p>E.4.7 Other (please specify)</p>
--	---

Section F: For studies reporting views

<p>F.1 Whose views were reported? (tick all that apply)</p>	<p>F.1.1 Not applicable, not a study reporting views</p> <p>F.1.2 Service user</p> <p>F.1.3 Carer</p> <p>F.1.4 Parent of service user</p> <p>F.1.5 Partner of service user</p> <p>F.1.6 Child of service user</p> <p>F.1.7 Practitioner (please specify)</p> <p>F.1.8 Service provider</p> <p>F.1.9 Employer</p>
<p>F.2 Views reported on (tick all that apply)</p>	<p>F.2.1 Not applicable, not a study reporting views</p> <p>F.2.2 Interventions</p> <p>F.2.3 Service delivery</p> <p>F.2.4 Employment</p> <p>F.2.5 Meaningful occupation</p> <p>F.2.6 Training and Education</p> <p>F.2.7 Recovery model</p> <p>F.2.8 Mental health</p> <p>F.2.9 Family/personal life</p> <p>F.2.10 Self-esteem</p>

	<p>F.2.11 Social activity</p> <p>F.2.12 Income and/or benefits</p> <p>F.2.13 Social inclusion</p> <p>F.2.14 Other (please specify)</p>
F.3 Who collected views?	<p>F.3.1 Not applicable, not a study reporting views</p> <p>F.3.2 Practitioner</p> <p>F.3.3 Academic researcher</p> <p>F.3.4 Peer/Service user</p>
F.4 How were views collected?	<p>F.4.1 Not applicable, not a study reporting views</p> <p>F.4.2 Interviews</p> <p>F.4.3 Focus groups</p> <p>F.4.4 Scale or instrument</p> <p>F.4.5 Self completion questionnaire</p>

Appendix 3: Proposed generic tool, April 2009

SCIE Generic keywording tool

Note: in all cases, this tool will be supplemented by a tool specific to the topic areas addressed by the map. This tool is therefore designed to enable analysis of the state of the evidence, and overlapping themes in health and social care, and to reduce the work needed to design and pilot data extraction tools for each map. It does not address, and should not duplicate, the finer details of the map topic(s). (This version was not used with the Recovery in Mental Health map specific tool, and there is therefore some slight duplication.)

Section A: Background, design & methods

A.1 What kind of printed material does it concern?	A.1.1 Book A.1.2 Journal article A.1.3 Other (specify)
A.2 What is the status of the report?	A.2.1 Published A.2.2 In press A.2.3 Unpublished (including ongoing project, communication from author etc.) A.2.4 Conference presentation
A.3 In what country/countries was the study undertaken? <i>(Select maximum of 2. For a review or systematic review which includes studies from more than two countries, code on the basis of which country the lead reviewer was based in.)</i>	A.3.1 UK A.3.2 Republic of Ireland A.3.3 USA A.3.4 Canada A.3.5 Australia or New Zealand A.3.6 Europe ex-UK/RoI (please specify) A.3.7 Scandinavia (please specify)

	A.3.8 Other (specify)
A.4 How are the keywords allocated?	A.4.1 Abstract A.4.2 Full report
A.5 What type of paper is this report?	A.5.1 Policy document Go to question B.1 A.5.2 Discussion/opinion (<i>inc. theoretical/conceptual paper with no new data collected</i>) Go to question B.1 A.5.3 Research study: new data collected or new analysis/synthesis of existing data Go to next question A.6
A.6 What is the purpose of this research study? (<i>Select all that apply</i>)	A.6.1 Report of consultation with general or specific population A.6.2 Exploratory (<i>inc. exploring relationships/correlations of factors; views/experiences of stakeholders, processes</i>) A.6.3 Epidemiological (<i>establishes or discusses prevalence, frequency of problem & new cases in a population</i>) A.6.4 To build a model to predict relationships & outcomes A.6.5 Evaluation seeking to establish med/long-term outcomes (<i>impact/effectiveness of a policy, intervention or pathways & outcomes for service users</i>) A.6.6 Implementation study (<i>focus on process rather than outcomes: if, why, how policy/practice implemented & what factors affect implementation</i>) A.6.7 Economic evaluation A.6.8 Feasibility or pilot study A.6.9 Other (specify)
A.7 What is the design of this research study? (<i>Select</i>)	A.7.1 Systematic Review

<p>one option only. Systematic reviews apply secondary analyses to existing data; RCTs are controlled/experimental: but select the one option that first occurs in the table)</p>	<p>A.7.2 Secondary analysis of existing data (eg national surveys; patient casenotes)</p> <p>A.7.3 RCT (Randomised Controlled Trial)</p> <p>A.7.4 Controlled/ Experimental (inc. case controls, before/after designs)</p> <p>A.7.5 Longitudinal &/or cohort study (systematic follow-ups)</p> <p>A.7.6 Descriptive, SOME comparison between different groups or processes (could inc. comparative case studies, factor analysis, instrument development)</p> <p>A.7.7 Descriptive, NO comparison between different groups or processes (could inc. case studies, interventions described but not evaluated, & factor analysis)</p> <p>A.7.8 Other (specify)</p>
<p>A.8 What type of methods does this research study report using? (Select all that apply.)</p>	<p>A.8.1 Qualitative methods Use for focus groups, semi-structured interviews, observation, ethnography.</p> <p>A.8.2 Quantitative methods Use this keyword for a study type which collects numerical measures and/or examines relationships and/or statistical associations between variables in order to build theories and develop hypotheses.</p> <p>A.8.3 Structured surveys and/or validated measures Include description of the processes or stages involved in developing an 'instrument' (e.g. Activities of Daily Living Scale or the Beck Depression Inventory).</p> <p>A.8.4 Economic or resource quantification & analysis (detail in A.9 below)</p> <p>A.8.5 Other (specify)</p>
<p>A.9 What type of economic</p>	<p>A.9.1 N/A: no economic data, not</p>

<p>evaluation can this study be classified as? <i>(Select one: see guidance)</i></p>	<p>an economic evaluation</p> <p>A.9.2 Full economic evaluation <i>Studies which aim to clarify, quantify, and value the resource inputs and consequences of all relevant alternative courses of action or intervention. Several types of studies fall into this category and they are; cost benefit analysis (CBA), costs effectiveness analysis (CEA) and cost utility analysis (CUA).</i></p> <p>A.9.3 Partial economic evaluation <i>Partial economic evaluations are economic analyses which either focus solely on costs and/ or resource use but do not relate costs to consequences, or which focus on both costs and consequence but do not involve a comparison between alternative interventions. Partial economic evaluations include: cost analysis, cost-comparison studies, cost-consequences analysis and cost-outcome descriptions.</i></p> <p>A.9.4 Effectiveness study <i>Compared with full and partial economic evaluations, effectiveness studies contain more limited information relating to the description, measurement or valuation of resource use associated with interventions. The purpose of such studies may be to establish effectiveness or efficacy, but some resource data is included (though possibly not costed).</i></p> <p>A.9.5 Potentially useful data on resources <i>Detail on service components, staffing, cost elements, etc</i></p>
<p>Section B: Participants, samples & scope</p>	
<p>B.1 How were service users or carers involved in the study? <i>(Select all that apply)</i></p>	<p>B.1.1 No involvement apparent</p> <p>B.1.2 Involved only as subjects of research</p> <p>B.1.3 Involved in/consulted re study or instrument design</p>

	<p>B.1.4 Collected data as service user or carer researchers</p> <p>B.1.5 Authorship (one, more, or all authors untenured SU or carer researchers)</p> <p>B.1.6 Other (specify)</p>
<p>B.2 Does the study report views & experiences of service users and/or carers? <i>(Guidance: users' views must represent all or a substantial aspect of paper. Reports of use of quantitative tools measuring Quality of Life or other user experience should be coded NO)</i></p>	<p>B.2.1 Yes, collated & presented by researchers</p> <p>B.2.2 Yes, self-reported, ie with service user/carers authorship and/or substantial use of quotations</p> <p>B.2.3 No</p>
<p>B.3 Is the sample population drawn from ... <i>(Select all that apply)</i></p>	<p>B.3.1 N/A. Not a population-based study. Go to question B.5</p> <p>B.3.2 Two or more countries (international comparison)</p> <p>B.3.3 National databases</p> <p>B.3.4 From several (3+) locations (multi-centre)</p> <p>B.3.5 From two settings</p> <p>B.3.6 Selected from the records of a health or social care service</p> <p>B.3.7 Location not clear</p> <p>B.3.8 Other <i>(specify)</i></p>
<p>B.4 Age/gender of the study population <i>(Select all that apply. If no ages given for population, use defining terms – such as children, young people. NOTE: categories need not match section A13:eg young people or general population may be consulted about mental health services)</i></p>	<p>B.4.1 General population, age unspecified. Go to question B.4.9</p> <p>B.4.2 SPECIFIC AGES (SUB-HEADING: DO NOT SELECT)</p> <p>B.4.3 babies (under 36 months)</p> <p>B.4.4 children (3-12)</p> <p>B.4.5 young people (12-25)</p>

	<p>B.4.6 adults</p> <p>B.4.7 older people (all 50+)</p> <p>B.4.8 age unspecified</p> <p>B.4.9 GENDER SPECIFIED (SUB-HEADING: DO NOT SELECT)</p> <p>B.4.10 General population, gender unspecified. Go to question B.5</p> <p>B.4.11 male only</p> <p>B.4.12 female only</p> <p>B.4.13 mixed gender</p> <p>B.4.14 Transexual and/or transgender (<i>inc. only where specifically reported</i>)</p> <p>B.4.15 Not clearly reported</p>
<p>B.5 What broad areas of service provision are addressed in this paper? <i>DO NOT select more than 2 options.</i></p>	<p>B.5.1 Not applicable: no service features in this paper</p> <p>B.5.2 Services for general population or communities</p> <p>B.5.3 SERVICES FOR PEOPLE WITH SPECIFIC HEALTH & SOCIAL CARE NEEDS (SUB-HEADING: DO NOT SELECT)</p> <p>B.5.3 People with learning disabilities</p> <p>B.5.4 People with mental health &/or substance misuse problems</p> <p>B.5.5 People with physical disability or sensory impairment</p> <p>B.5.6 People with physical disability or sensory impairment</p> <p>B.5.7 Children, parents, families</p> <p>B.5.8 SERVICES FOR PEOPLE OFTEN EXCLUDED BECAUSE OF ...(SUB-HEADING: DO NOT</p>

	<p>SELECT)</p> <p>B.5.9 Homelessness</p> <p>B.5.10 Criminal justice status</p> <p>B.5.11 Ethnicity</p> <p>B.5.12 Asylum-seeking or refugee status</p> <p>B.5.13 Other service type/need not covered above, or more than the 2 selection options permitted (specify)</p>
<p>B.6 Does this paper concern or include the views, experience, practice or training of health & social care providers? <i>Select all that apply.</i></p>	<p>B.6.1 No</p> <p>B.6.2 Yes, those of carers (paid/unpaid, not employed directly by health & social care organisations)</p> <p>B.6.3 Yes, staff employed by health & social care organisations</p>
<p>Section C: Questions re specific services</p>	
<p>C.1 Does this study concern one or more health or social care service(s)? <i>Include in this section services from which the sample were recruited (select B.1.4). Select B.1.3 in preference to B.1.4 if both apply</i></p>	<p>C.1.1 N/A - no specific service features in paper. (Go to D.1)</p> <p>C.1.2 No. (Go to D.1)</p> <p>C.1.3 Yes – full or partial evaluation of intervention <i>Use broad definition of evaluation: eg if focus is on accessibility of particular service, select this option</i></p> <p>C.1.4 Yes – sample recruited from a health or social care intervention/service</p>
<p>C.2 Which agency or sector provides the health and/or social care service(s)? <i>Classify the service referred to at either B.1.3 or B.1.4</i></p>	<p>C.2.1 Provided entirely by statutory health services (eg GP service)</p> <p>C.2.2 Provided mainly by statutory health services with</p>

	<p>some social care input (<i>assume most generic MH services fall in this category if unstated</i>)</p> <p>C.2.4 Provided solely by statutory social care</p> <p>C.2.5 Provided by statutory social care in partnership with health</p> <p>C.2.6 Provided by statutory social care in partnership with the voluntary sector</p> <p>C.2.7 Provided by statutory social care in partnership with the private sector</p> <p>C.2.8 Provided solely by the voluntary sector</p> <p>C.2.9 Provided solely by the private sector</p> <p>C.2.10 Unclear who provides</p>
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Section D: Implications for Evidence Base

<p>D.1 Does the report explicitly include all of the following in the abstract: aims, methods, findings and conclusion?</p> <p><i>For a YES: the report's abstract must explicitly contain ALL of the following: aims, methods, findings and conclusion</i></p> <p><i>If NO: State which of these is not in the abstract</i></p>	<p>D.1.1 Yes</p> <p>D.1.2 No. Specify what is missing</p>
<p>D.2 In your opinion, does this paper contribute to the evidence base? <i>This is a matter of judgement or opinion, based on clarity & appropriateness of methodology, transparency and clear pathway through data collection, findings and conclusions.</i></p>	<p>D.2.1 Yes: useful background to topic <i>Policy, observations, review</i></p> <p>D.2.2 Yes: credible research findings <i>No particular topic focus is required if study appears sound</i></p> <p>D.2.3 No. <i>Use this option if there are major doubts about the methods or</i></p>

	<i>reporting that suggest little confidence in findings</i>
D.3 Does this paper appear to have implications for practice in social care & health?	<p>D.3.1 Yes: specifically deals with practice/management issues</p> <p>D.3.2 Yes: indirectly (<i>examples would be paper exploring how BME older people talk about depression; paper on prevalence of MH problems among parents</i>)</p> <p>D.3.3 No</p> <p>D.3.4 Uncertain</p>

Appendix 4: Searching for economic evaluations

Introduction

SCIE is working to develop its methodology for assessing the economic implications of social care policy and practice. During April – July 2008, test searching on a social care topic was carried out using NHS EED and EconLit. Analysis of the results of iterative searching showed that familiarisation with NHS EED and EconLit is needed before including their use in systematic searching. The following Appendix draws on some of the lessons learnt. At the present time, only UK-serviced databases have been explored, using the example of Map 2: The recovery approach in community-based vocational and training adult mental health day services (see <http://www.scie.org.uk/research/maps.asp>).

NHS EED and EconLit offer promising additions to the recommended databases used for systematic searching at SCIE, particularly for economic information. However, they do have different emphasis on topics. For example, in the mental health recovery map (Map 2, above), a definition of recovery was used that was intended to empower service users. Economic evaluations tend not to take this perspective, and ‘reading between the lines’ is needed to include material from an alternative viewpoint. For example, in mental health recovery and employment, employer-sponsored benefit programmes (which implicitly aim to help workers recover and get back to work) could also be relevant. This has implications for inclusion and exclusion criteria as well as search terms, so economic databases should be included at the scoping stage.

Using NHS EED and EconLit

Neither interface is ideal. The test exercise showed that some persistence is required to get the best out of searching the content.

NHS EED

Database description

The NHS Economic Evaluation Database is produced by the Centre for Reviews and Dissemination, York (CRD). CRD states that the database, which is updated every month, contains “over 7000 quality assessed economic evaluations”, published from 1994 onwards. The database description is linked from www.crd.york.ac.uk/crdweb/ (choose, ‘help section’) and states:

“NHS EED aims to assist decision-makers by systematically identifying and describing economic evaluations, appraising their quality and highlighting their relative strengths and weaknesses.

...thousands of citations are screened every month to identify economic evaluations. Economic evaluations in the scope of NHS EED are regarded as studies in which a comparison of two or more treatments or care alternatives is undertaken and in which both the costs and outcomes of the alternatives are examined. This includes cost-benefit analyses, cost-utility analyses, and cost-effectiveness analyses.

If a study appears to be a full economic evaluation relevant to the NHS, it is passed to an abstractor for abstracting. Bibliographic details of costing studies, methodological papers and reviews of economic evaluations are also included in the database.

Each abstract describes the effectiveness information on which the economic evidence is based, as well as providing a detailed breakdown of the key components of the economic evaluation. A critical commentary summarises the overall reliability and generalisability of the study, and presents any practical implications for the NHS. All abstracts are written by commissioned health economists around the world and then checked in-house to ensure the production of accurate, detailed and accessible abstracts.

On final completion of an abstract, a copy is sent to the original authors for information. Authors are invited to reply with corrections to factual errors, further information and other research. Where applicable this information is added to the records.”

Following the same hyperlink (above) also provides information about how studies are identified for inclusion in NHS EED. The source material is a long list of journals and the following bibliographic databases:

- [MEDLINE](#) (1995 onwards)
- [CINAHL](#) (1995 onwards)
- [EMBASE](#) (2002 onwards)
- [PsycINFO](#) (2006 onwards)

For further, detailed information, refer to the NHS EED handbook².

NHS EED is freely available via the CRD interface at www.crd.york.ac.uk/crdweb/ or Cochrane Library (Wiley Interscience) www.thecochranelibrary.com. (See screenshots below.) We have been advised that the Cochrane Library interface is updated less frequently than CRD's.

² CRD (2007) *NHS Economic Evaluation Handbook*, University of York
<http://www.york.ac.uk/inst/crd/pdf/nhseed-handb07.pdf>

CRD interface screenshot

The screenshot shows the CRD interface in Microsoft Internet Explorer. The browser address bar displays the URL: <http://www.crd.york.ac.uk/CRDWeb/search.aspx?SessionID=724501&SearchID=724501&SearchFor=mental+health&RPP=10&DB=NHS+EED&DefaultOr=No&D>. The page header includes the NHS logo and the text "National Institute for Health Research" with links for "Help", "Why log in?", and "Login".

The search interface is titled "Search" and shows the search term "mental health" entered in the search box. Below the search box, it indicates "mental health: 1612 documents found". There are options for "All these words" and "Any of these words". A "search" button is visible. Below the search box, there are fields for "Year published" and "From" with a "restrictions info" link. A "results per page" dropdown is set to "10".

The search results are displayed in a table with the following columns: "Select Database", "Title", "Year published", "Author", "Source", and "Record type". The results are filtered by "All results (1612)", "DARE (578)", "NHS EED (919)", and "HTA (115)". The table shows three results:

Select Database	Title	Year published	Author	Source	Record type
<input type="checkbox"/> NHS EED	Are psychological treatments for depression in primary care cost-effective?	2008	Bosmans J E, van Schaik D J, de Bruijne M C, van Hout H P, van Marwijk H W, van Tulder H W, Stalman W A	Journal of Mental Health Policy and Economics	Provisional abstract
<input type="checkbox"/> NHS EED	Intensive short-term dynamic psychotherapy for DSM-IV personality disorders: a randomized controlled trial	2008	Abbass A, Sheldon A, Gyra J, Kalpin A	Journal of Nervous and Mental Disease	Provisional abstract
<input type="checkbox"/> NHS EED	A randomized trial of self-management and psychoeducational group therapies for comorbid chronic posttraumatic stress disorder and depressive disorder	2007	Dunn N J, Rehm L P, Schillaci J, Souček J, Mehta P, Ashton C M, Yanasak E, Hamilton J D	Journal of Traumatic Stress	Partial economic evaluation

Cochrane Library interface

The screenshot shows the Cochrane Library interface in Microsoft Internet Explorer. The browser address bar displays the URL: http://www.mrw.interscience.wiley.com/cochrane/cochrane_search_fs.html. The page header includes the Wiley InterScience logo and the text "The Cochrane Library Evidence for healthcare decision-making".

The search interface is titled "SEARCH" and shows the search term "Enter search term" entered in the search box. Below the search box, there are options for "Title, Abstract or Keywords" and a "Go" button. There are links for "Advanced Search", "MeSH Search", "Search History", and "Saved Searches".

The search options are displayed in a table with the following columns: "AND", "Enter search term", and "Search All Text". The table shows five search terms:

AND	Enter search term	Search All Text
<input type="checkbox"/>	Enter search term 1	Search All Text
<input type="checkbox"/>	Enter search term 2	Record Title
<input type="checkbox"/>	Enter search term 3	Author
<input type="checkbox"/>	Enter search term 4	Abstract
<input type="checkbox"/>	Enter search term 5	Keywords

There is a "Search" button and a "Go directly to Search History" checkbox. Below the search options, there is a "Restrict Search by Product" section with several checkboxes:

- All of The Cochrane Library
- Cochrane Database of Systematic Reviews (Cochrane Reviews)
- Database of Abstracts of Reviews of Effects (Other Reviews)
- Cochrane Central Register of Controlled Trials (Clinical Trials)
- Cochrane Methodology Register (Methods Studies)
- Health Technology Assessment Database (Technology Assessments)
- NHS Economic Evaluation Database (Economic Evaluations)
- About The Cochrane Collaboration (Cochrane Groups)

On the right side of the page, there is a "Suppose you are trying to enter complex search directly in text box with mixed Boolean operators." section with an example: "Example: (colchicine AND liver) AND (fibrosis OR cirrhosis)". There are also "Tip No. 2" and "Tip No. 3" sections providing search tips.

CRD offers only a simple search interface. An alternative is to use advanced search on the Cochrane Library interface. However, export is more unreliable. Search history and combination of searches is possible in both interfaces. A login account can be created to save searches to the next session. Cochrane Library has a My Profile option, but this does not seem to include saving searches.

The MeSH thesaurus can be explored and searched from both interfaces.

The CRD interface has a help tag, whereas Cochrane Library has Search tips in the right hand column.

Export to EndNote from the CRD interface is now possible thanks to copying in a new filter to SCIE's EndNote installation – you are advised to check that you can access this filter. Exported records from Cochrane require data cleaning.

Limitations and difficulties of NHS EED

In using NHS EED, or in judging whether to, colleagues should be aware of the following:

- NHS EED contains evaluations of clinical interventions, e.g. drug treatments, which are likely to be of low relevance in social welfare searches on topics such as mental health.
- The emphasis of the database coverage is neither social care nor service user orientated. Therefore alternative concepts may be needed to capture relevant material.
- Both the CRD and Cochrane Library interfaces are non-standard, and therefore present unfamiliar formats.
- The start date for coverage varies by source; coverage is likely to be less comprehensive before 2006.
- When assessing output volume, care must be taken on both interfaces to select the relevant tab, as output from other databases is displayed on the same page.
- NHS EED contains 'parked' records which have been judged by CRD not to be full economic evaluations – these have no abstract and so are difficult to assess for relevance.
 - Abstracts can be obtained individually using Google Scholar, but this task is time intensive. When screening, there is a knock-on effect of increased requirement for full text to assess inclusion / exclusion.
 - It is important to note that CRD 'parked' records may meet SCIE criteria for *partial* economic evaluations. The parked records might also be single

effectiveness studies from which resource use data could usefully be extracted at synthesis stage. In both cases, abstracts would have to be obtained and if found to be relevant, should be included in the scope.

EconLit

EconLit is available via Athens (UWE for SCIE staff) password at www.uwe.ac.uk/library/resources/general/databases/titles/econlit.htm

UWE describe ECONLIT as:

“Coverage from 1969 of worldwide economic literature. Covers 620 journals, collected volumes, books, dissertations and working papers licensed from Cambridge University Press. Produced by the American Economic Association.”

EBSCOhost’s information states that the database contains more than 1 million records.

EconLit screenshot

The screenshot displays the EBSCOhost Advanced Search interface for EconLit. The browser window title is "EBSCOhost: Advanced Search - Microsoft Internet Explorer". The address bar shows the URL: <http://web.ebscohost.com/ehost/search?vid=2&hid=116&sid=7e2025e8-6d2d-44c9-b241-30011b93a444%40sessionmgr109>. The search bar contains the text "Searching: EconLit" and "Choose Databases >". Below the search bar are three input fields for keywords, each followed by a dropdown menu labeled "Select a Field (optional)". The search options section includes "Search modes" with radio buttons for "Boolean/Phrase" (selected), "Find all my search terms", and "Find any of my search terms". There are also checkboxes for "Apply related words" and "Also search within the full text of the articles". The "Limit your results" section includes "Linked Full Text" (checkbox), "Published Date from" (Month and Year dropdowns), "Geographic Descriptor" (text input), "Reviewed Book Title" (text input), "Publication Type" (dropdown menu with options: All, Book, Book Review, Collective Volume Article), and "Geographic Region" (dropdown menu with options: All, Africa, Antarctica, Asia). The interface also includes a "Search" button, a "Reset" button, and a "Top of Page" link. The footer contains "EBSCO Support Site | Privacy Policy | Terms of Use | Copyright" and "© 2008 EBSCO Industries, Inc. All rights reserved."

Although SCIE does not yet have a great deal of familiarity with the EBSCOhost interface, it has been developed by a major commercial provider and several of the SCIE systematic review databases have recently changed to this hosting.

Search history and a combination of searches is possible. In theory, searches can be saved for future sessions using My EBSCOhost but when tested, this was not straightforward.

There does not appear to be a formal thesaurus but by clicking on 'Indexes' in the top toolbar, you can browse index keyword terms. Many search limits are available.

Help is available via a small blue question mark icon.

ECONLit does not have a bulk export feature, which limits its usefulness for sensitive searches. Selecting records for export is tedious, slow and will sometimes crash Internet Explorer. To export:

1. Add records to a Folder. At the bottom of the page, set the number of records displayed per page to 50 (default is 20) then at the top right click 'Add 1-50'.
2. This step has to be repeated if there are more than 50 records to export.
3. Then click on the Folder icon in the top toolbar, select all records, deselect 'Remove these items from folder after saving'.
4. Perform direct export to EndNote.

Limitations and difficulties of EconLit

In using EconLit, or in judging whether to, colleagues should be aware of the following:

- ECONLit appears to have low relevance on social welfare issues. The emphasis of the database coverage is neither social care nor service user orientated. Therefore alternative concepts may be needed to capture relevant material
- In practice, searches cannot be saved for future sessions.

Appendix 5: Classifying economic evaluations

SCIE is beginning to include economic evaluations in its systematic maps and knowledge reviews within social care. Strategies for searching for economic data are discussed in detail in section 2.5 and Appendix 1. This Appendix discusses the classification or coding of economic studies identified.

As part of the mapping process, a limited amount of data on each record is extracted or 'coded', to facilitate later analysis and detailed quality assurance (eg within a systematic review). The following classification (table below) of economic material is suggested for use in map coding. The table is supplemented by additional notes. The classification below has been incorporated into the SCIE Generic Coding Tool (Appendix 3).

<p>Q. What kind of economic evaluation can the study be classified as? (see appendix 4 for further information on classifying economic evaluations)</p>	<p>A. 1 Full economic evaluation <i>Studies which aim to clarify, quantify, and value the resource inputs and consequences of all relevant alternative courses of action or intervention. Several types of studies fall into this category and they are; cost benefit analysis (CBA), costs effectiveness analysis (CEA) and cost utility analysis (CUA).</i></p> <p>A. 2 Partial economic evaluation <i>Partial economic evaluations are economic analyses which either focus solely on costs and/ or resource use but do not relate costs to consequences, or which focus on both costs and consequence but do not involve a comparison between alternative interventions. Partial economic evaluations include: cost analysis, cost-comparison studies, cost-consequences analysis and cost-outcome descriptions.</i></p> <p>A. 3 Effectiveness study <i>Compared with full and partial economic evaluations, effectiveness studies contain more limited information relating to the description, measurement or valuation of resource use associated with interventions. The purpose of such studies may be to establish effectiveness or efficacy, but some resource data is included (though possibly not costed).</i></p>
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This appendix provides more detailed information to help with the classification of economic evaluations. It also provides citations for further reading on the subject.

Economics studies can be classified into three broad categories: full economic evaluations, partial economic evaluations and effectiveness studies.

All types of full economic evaluation compare the costs (resource use) associated with one or more alternative courses of action with their consequences (effects). All types value resources in the same way (i.e. by applying unit costs to measured units of resource use) but differ primarily in the way they itemize and value effects. These differences reflect the different aims and viewpoints of different decision problems (or economic questions).

Full economic evaluation

Full economic evaluation has been defined as the comparative analysis of alternative courses of action in terms of both their costs (resource use) and consequences (effectiveness) (Drummond, 2005). Full economic evaluation studies aim to clarify, quantify, and value the resource inputs and consequences of all relevant alternative courses of action.

Several types of studies fall into the category of 'full economic evaluation' and they are: cost benefit analysis (CBA), costs effectiveness analysis (CEA) and cost utility analysis (CUA). The types differ primarily in the way they itemize and value effects and the differences between them reflect different aims and viewpoints of the different economic questions they seek to answer (Shemilt, 2008).

Cost-effectiveness analysis (CEA): When the effects of two or more alternative courses of action are measured in identical units of outcome and the alternatives are compared in terms of 'cost per unit of effect'.

Cost-consequences analysis (CCA): A specific sub-type of cost-effectiveness analysis in which an array of outcome measures (effects) associated with two or more alternative courses of action (some of which, but not all, may be expressed in monetary units), are presented alongside their costs and it is left to decision-makers to form their own view of the relative importance of these (i.e. there is no synthesis of cost and effects data as with a standard CEA and not all effects are monetised as with as standard CBA).

Cost-utility analysis (CUA): When two or more alternative courses of action produce different levels of effect in terms of both quantity and quality of life (and/or different effects) and these effects are expressed in utilities. Utilities are measures which comprise both length of life and subjective levels of well-being. The best known utility measure is the quality-adjusted life year, or QALY. Alternative courses of action are compared in terms of 'cost per unit of utility gained' (e.g. cost per QALY).

Cost-benefit analysis (CBA): When both the resource inputs and all measured outcomes (effects) of two or more alternative courses of action are expressed in monetary units, so that they compare directly and across programmes within the health care system, or with programmes outside health care. Alternative courses of action are usually compared in terms of the ratio of monetised costs to monetised benefits (or the ratio of monetised benefits to monetised costs).

Partial economic evaluations

Partial economic evaluations are economic analyses which either focus solely on costs and/ or resource use but do not relate costs to consequences, or which focus on both costs and consequence but do not involve a comparison between alternative interventions. Types of studies considered to be partial economic evaluations include: cost analysis, cost-comparison studies, cost-consequences analysis and cost-outcome descriptions.

Effectiveness studies

Compared with full and partial economic evaluations, effectiveness studies, ordinarily related to the costing of a single intervention, tend to contain more limited information relating to the description, measurement or valuation of resource use associated with interventions. While effectiveness studies do not constitute economic evaluations, they may still contribute useful evidence to an understanding of economic aspects of services or interventions.

Effectiveness studies are important in the context of SCIE's work partly due to the dearth of full and partial economic evaluations from which to derive cost information about social care interventions. The map guidance suggests broad inclusion, at the mapping stage, of studies which appear to include any useful economic or resource use material. This reflects the scarcity of such material in social care studies. Studies included in maps are coded for limited data extraction (see Appendix 4, section A.9) but not quality assured.

However, at the subsequent stage of systematic review and synthesis of material, individual papers would be quality assured for methodological rigour and content. Depending upon the review questions set, and the material available, a decision may be taken to exclude economic studies which do not meet a quality standard or threshold.

Further reading:

Byford, S., McDaid, D. and Sefton, T. (2003) 'Because it's worth it: a practical guide to conducting economic evaluations in the social welfare field.' *York: Joseph Rowntree Foundation.*

Drummond, M., Sculpher, M., Torrance, G., O'Brien, B. and Stoddart, G. (2005) 'Methods for the economic evaluation of health care programmes' (3rd edition) Oxford: Oxford University Press

Holterman, S. (1998) 'Weighing it up: applying economic evaluations to social welfare programmes. York: York Publishing Services for the Joseph Rowntree Foundation

Palmer, S., Byford, S. and Raftery, J. (1999) Types of economic evaluation *British Medical Journal* vol. 318 p. 1349

Robinson, R. (1993) 'Economic evaluation in health care' *British Medical Journal*, Vol. 307, pp. 728-9, 793-5, 859-62, 924-6, 994-6.

Shemilt I, Mugford M, Byford S, Drummond M, Eisenstein E, Knapp M, Mallender J, McDaid D, Vale L, Walker D. Chapter 15: Incorporating economics evidence. In: Higgins JPT, Green S (editors), *Cochrane Handbook for Systematic Reviews of Interventions Version 5.0.0* (updated February 2008). The Cochrane Collaboration, 2008. Available from www.cochrane-handbook.org.

Glossary of abbreviations

EPPI-Centre	Evidence for Policy and Practice Information Coordinating Centre
PICOS	Coding framework for intervention studies based on participants, interventions, comparisons or context, outcomes, study types
PM	Project Manager
RP	Registered Provider
PIT	Project Information Team: a SCIE team which provides the information, searching and management functions at SCIE
QA	Quality assurance. In this guide, it refers to quality (rigour, transparency) of the process of mapping, not to the quality of research records.