

The Literature Searching Process Protocol for Researchers



Developed by the Thames Valley Literature Review Standards Group on behalf of the Thames Valley Health Libraries Network.

Local amendments made by the Lincolnshire Knowledge and Resource Service.



Introduction

This document has been developed by NHS librarians in close partnership with the Thames Valley Research & Development Network. Its aim is to support healthcare researchers in carrying out effective literature searches according to an agreed set of recommendations. This will help ensure that research is not duplicated and that literature searches retrieve the best available evidence.

This document provides guidance for the following key steps:

- planning a literature search
- identifying key sources of information
- guidance in carrying out an effective literature search
- documenting the search process

Structured guidance and a checklist column are provided for each section so that researchers can quickly identify and tick off the necessary elements. The Lincolnshire Knowledge and Resource Service will be able to help you to work through this document and offer professional advice and support in carrying out your literature search (our contact details are below).

This is a working document that will evolve to meet the needs of research communities, therefore your feedback is of the utmost importance. A feedback form for comments and suggestions is provided at the end of the document.

If you would like to discuss the contents of this document further, please contact:

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Search Planning Form

Use this form to identify/clarify the key concepts and the scope of your research topic.
For each section, refer to the **guidance notes** on the following page for further explanation.

1. Your Research Topic

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2. Consider how the following four categories apply to your research topic

Patient/Population and/or Problem	Intervention	Comparison/Control <i>(if applicable)</i>	Outcomes <i>(or Effects)</i>
Alternative Words			

3. Your Research Question

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4. Any Search Restrictions

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Guidance notes for use with Search Planning Form

1. Your Research Topic – briefly describe in your own words the key aspects of your research topic

2. Consider how the following four categories apply to your research topic: Patient/population and/or problem, Intervention, Comparison and Outcome. These categories form the PICO model (Richardson, 1995), an evidence-based model for formulating a clinical question. By dividing your concepts into these categories, you will also be doing the groundwork for developing a search strategy. If the PICO model is not appropriate for your topic, there are alternatives, such as ECLIPSE (Wildridge, 2002), or you may like to adapt the PICO headings to fit the type of research you are undertaking. Please contact the Lincolnshire Knowledge and Resource Service for further advice on searching, or to arrange a training session.

- **Patient/Population and/or Problem** - any characteristics that define your patient or population, e.g. target clinical condition, co-existing condition, ethnicity, age group
- **Intervention** - what you want to do with the patient/population/problem e.g. form of treatment, diagnostic test, education programme, type of service delivery. This can also include any exposures (e.g. asbestos) or factors influencing prognosis.
- **Comparison/Control Intervention** (if applicable) – alternative(s) to main intervention, e.g. placebo
- **Outcomes or effects** - any outcomes or effects relating to the intervention e.g. prevention, side effects, morbidity, quality of life, cost-effectiveness

When filling in each category, consider any alternative keywords that could be used, taking into account differences in terminology, spelling etc - refer to the guidance notes in section 2a of the checklist (page 7) for more information.

Example

Patient/Population and/or Problem	Intervention	Comparison/Control Intervention (if applicable)	Outcome (or effects)
<i>acute stroke</i>	<i>blood pressure reduction</i>	<i>no treatment</i>	<i>secondary prevention</i>
Alternative Words			
<i>cerebrovascular accident cerebrovascular event ischaemic stroke</i>	<i>anti-hypertensive agents hypertension - drug therapy diuretics, atenolol etc lowering blood pressure</i>	<i>placebo</i>	<i>secondary prophylaxis reduce mortality risk reduction</i>

AND/OR - When searching bibliographical databases such as MEDLINE, similar concepts (i.e. terms in the same column) are combined with OR e.g. blood pressure OR hypertension. You may need to create a separate column if there is more than one concept associated with any of the PICO headings. Different concepts (i.e. terms in separate columns) are combined with AND, e.g. stroke AND blood pressure reduction

3. Your Research Question – your research topic phrased as a question, incorporating the elements identified in the PICO (or similar) model. *Example:* in people with a prior history of stroke, is blood pressure reduction more effective than no treatment in preventing future stroke events?

4. Any Search Restrictions – anything related to your topic that you wish to exclude. To avoid bias, use generic limitations only where strictly necessary e.g. avoid restrictions such as limiting to UK studies only, studies published since 2000, or English language only.



Section 1: Resource Checklist

Please note: this list is not exhaustive – the Lincolnshire Knowledge and Resource Service can advise on other relevant resources for your research topic.

Refer to the **Guide to sources of information** (p.11) for further details about the content and access details for these resources.

Guidance notes	LEVEL 1: CORE RESOURCES	<i>Searched</i>	<i>N/A</i>	<i>Unavail- able</i>
The resource checklist is divided into 3 levels: core, recommended and additional. Alongside each resource, tick the appropriate column: searched, not applicable (N/A) or unavailable.	a) Minimum core resources:			
Level 1 – core resources	<ul style="list-style-type: none"> • Cochrane Library • Centre for Reviews and Dissemination (CRD) website for latest updates to CRD databases • MEDLINE & PREMEDLINE OR PubMed • EMBASE 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective searches across these sources will help ensure that your literature review covers a significant proportion of published research.	Subject specialist databases appropriate to research topic: contact the Lincolnshire Knowledge and Resource Service for advice on additional databases			
Consider how retrospective the search needs to be, e.g. from the time when a drug was introduced; also consider whether the coverage of your source is sufficiently retrospective and/or up-to-date.	<ul style="list-style-type: none"> • Allied & Complementary Medicine (AMED) • British Nursing Index (BNI) • Cumulative Index to Nursing & Allied Health Literature (CINAHL) • DH-DATA • King's Fund • PsycINFO • Social Care Online • Social SciSearch • Education Resources Information Center (ERIC) • National Research Register & Research Findings electronic Register (ReFeR) • metaRegister of Controlled Trials (mRCT) • National Library of Medicine ClinicalTrials.gov • Turning Research Into Practice • Guidelines sites e.g. National Institute for Health and Clinical Excellence (NICE) • Websites of relevant associations, societies, centres of excellence, royal colleges & government bodies 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
These resources should be searched as a minimum requirement unless they are not appropriate to your research topic. If there are time constraints, section a) minimum core resources should be given priority.				
How far you proceed beyond Level 1 will depend on: <ul style="list-style-type: none"> • The subject of your research • The type of studies you need to locate (e.g. RCTs) • The time available • Availability of sources • How essential it is to ensure your research is not duplicating research elsewhere 				
The checklist is continued on the next page				

1) Resource Checklist (<i>continued</i>)	b) Other core resources:	Searched	N/A	Unavail- able
	• Bandolier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• BioMed Central	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Clinical Evidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Evidence-based gateways e.g. BIOME (includes OMNI & NMAP);	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Drug Information			
	a) Drug and Therapeutics Bulletin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	b) National electronic Library for Medicines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	c) National Prescribing Centre (including MeReC bulletins)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	d) UK Medicines Information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	e) Pharmaceutical and device manufacturers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level 2: Recommended resources	LEVEL 2 : RECOMMENDED RESOURCES			
<i>Some of these resources may help to locate unpublished literature including theses & conference proceedings.</i>	• British Library's Electronic Table of Contents (Zetoc) – journals conference proceedings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Contacting centres of excellence and experts in the field -	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Library catalogues (to locate theses etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Theses collections - Index of Theses and Networked Digital Library of Theses – see <i>Guide to Sources of Information on page 12 for details</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• References cited by retrieved research papers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• Web search engines, e.g. Google Scholar and Google (<i>contact the Lincolnshire Knowledge and Resource Service for advice on focusing and evaluating the quality of your results</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	• World Health Organisation Regional Databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>They are useful if you need a greater level of confidence that you are not duplicating other research.</i>	LEVEL 3 : ADDITIONAL RESOURCES			
	• Email / online discussion groups – <i>contact LKRS for advice on locating relevant groups.</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Level 3: Additional resources	• Handsearching of key journals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>These resources will further increase the comprehensiveness of your search. N.B. you may want to weigh up the likelihood of locating significantly new information before investing the time needed to explore these methods.</i>				



Section 2: Search Strategy Checklist

Before carrying out your search you will need to identify your research question and plan your search strategy. You will already have identified your research question and broken it down into different concepts when completing the Search Planning Form.

This section will help you identify a range of keywords relevant to your research question. It includes essential search techniques that should be used, wherever possible, to carry out an effective search of your chosen sources. Contact the Lincolnshire Knowledge and Resource Service for further advice / training, if required.

Guidance notes	a) Range of search terms	Used / Identified
<p>Often, initial searches will highlight other appropriate textwords (words or phrases that might appear in the text of an article) and database subject headings.</p> <p>Therefore, it is useful to carry out a pilot search in each database and review your search terms (and if necessary, your research question and its scope) before carrying out your final searches.</p>	<p>Identify a range of search terms for each of your identified search concepts, considering:</p> <ul style="list-style-type: none"> • Synonyms, e.g. <i>aged; elderly</i> • Acronyms, e.g. <i>AIDS, CHD</i> etc. • Differences in terminology across national boundaries, e.g. <i>Accident and Emergency / Emergency Room</i> • Differences in spellings, e.g. <i>anaemia / anemia</i> • Old and new terminology, e.g. <i>mongolism / down syndrome</i> • Brand and generic names, e.g. <i>coumadin / warfarin</i> • Lay and medical terminology e.g. <i>stroke / cerebrovascular accident</i> 	<input type="checkbox"/>
<p>Subject headings are used to index the content of most bibliographic databases (MEDLINE, EMBASE etc.) Example: heart attack is indexed under MYOCARDIAL INFARCTION</p> <p>The subject headings list used in MEDLINE is called MeSH (Medical Subject Headings).</p>	<p>b) Database subject headings</p> <ul style="list-style-type: none"> • Identify appropriate subject headings for each database used • Check coverage, scope and definition of each subject heading 	<input type="checkbox"/>
<p>Look for the MeSH or Thesaurus options to identify the most appropriate subject heading for the keyword you have entered.</p>	<p>NB: Sometimes subject headings are not defined as you might expect, e.g. the MeSH heading "SURGERY" is used to index material on the <u>discipline</u> of surgery, not surgical <u>procedures</u> (this is indexed under SURGICAL PROCEDURES, OPERATIVE).</p>	<input type="checkbox"/>
<p>Correct use of subject headings improves the accuracy of your results and is essential to an effective search. See section 2c).</p>		

Continued on next page

2) Search Strategy Checklist (continued)	c) Search techniques	Used / Identified	N/A
Guidance Notes	<ul style="list-style-type: none"> Carry out separate searches for each individual concept and then combine at a later stage 	<input type="checkbox"/>	<input type="checkbox"/>
<p>Most of these search techniques are for use with bibliographic databases, e.g. MEDLINE. If a particular search technique is not applicable, tick the box in the N/A column.</p>	<p><i>Example search</i></p> <ol style="list-style-type: none"> 1. diabetic OR diabetes 2. retina OR eye 3. 1 AND 2 		
<p>Truncation symbols vary depending on the service provider. The most common are:</p>	<ul style="list-style-type: none"> Use a combination of textwords (free text) and subject heading searches Use appropriate truncation for textword searches where applicable, e.g. nurs\$ to find <i>nurse, nurses, nursing</i> etc. 	<input type="checkbox"/>	<input type="checkbox"/>
<p>\$ (e.g. databases provided by Dialog DataStar such as MEDLINE, CINAHL etc.)</p>	<ul style="list-style-type: none"> 'Explode' (i.e. expand) database subject headings where appropriate to include narrower terms 	<input type="checkbox"/>	<input type="checkbox"/>
<p>* (e.g. Cochrane Library)</p>	<ul style="list-style-type: none"> Avoid restricting database subject heading searches using the '<i>major descriptors</i>' or '<i>subheading</i>' options in the first instance (to avoid missing relevant material) 	<input type="checkbox"/>	<input type="checkbox"/>
Combining search results	<ul style="list-style-type: none"> Use AND / OR appropriately to combine results of separate searches 	<input type="checkbox"/>	<input type="checkbox"/>
<p>Use AND to combine two <u>different</u> concepts, e.g. diabetes AND insulin</p>	<ul style="list-style-type: none"> Avoid limiting your search to English language (to help prevent bias) 	<input type="checkbox"/>	<input type="checkbox"/>
<p>(this will narrow your search – your results must include ALL your stated concepts)</p>	<ul style="list-style-type: none"> When searching websites or other electronic sources, use the 'Advanced' search option where available 	<input type="checkbox"/>	<input type="checkbox"/>
<p>Use OR to search for <u>similar</u> concepts, e.g. retina OR eye</p>	<ul style="list-style-type: none"> If appropriate, use search filters (pre-prepared search strategies) to identify particular types of research studies e.g. randomised controlled trials. Try PubMed's Clinical Queries or contact the Lincolnshire Knowledge and Resource Service for advice. 	<input type="checkbox"/>	<input type="checkbox"/>
<p>(OR will widen your search - your results will include a MINIMUM OF ONE of your named concepts)</p>	<ul style="list-style-type: none"> Use the PubMed 'related articles' function and lists of references in CINAHL 	<input type="checkbox"/>	<input type="checkbox"/>
<p>Updating searches: this process can have many pitfalls. If you have a pre-prepared search that you wish to update or re-run at a later date, please contact the Lincolnshire Knowledge and Resource Service.</p>	<ul style="list-style-type: none"> Check the references cited in any research / other relevant material retrieved 	<input type="checkbox"/>	<input type="checkbox"/>



Section 3: Search Documentation Checklist

Guidance Notes	Please ensure your research proposal includes:	Included
This checklist outlines the minimum required to document the search process carried out in support of any research proposal.	a) Clearly stated research question	<input type="checkbox"/>
All elements must be clearly documented for each resource searched.	b) Explanation of the scope of the research question	<input type="checkbox"/>
See the Guide to Sources of Information in the Appendices for details of each resource listed in the checklist.	c) For <u>database searches</u> , specification of the following:	
	• Title of database searched (e.g. MEDLINE)	<input type="checkbox"/>
	• Name of the database provider (e.g. Dialog DataStar)	<input type="checkbox"/>
	• Date search conducted	<input type="checkbox"/>
	• Complete search strategy used. <i>Attach print outs of search strategies for each database used</i>	<input type="checkbox"/>
	• Dates covered by the search (e.g. 1990-present)	<input type="checkbox"/>
	d) For specific <u>websites</u> (other than online databases above), specification of the following:	
	• Name of the resource, (e.g. metaRegister of Controlled Trials)	<input type="checkbox"/>
	• Publisher of the resource (e.g. US National Library of Medicine)	<input type="checkbox"/>
	• Web address (URL)	<input type="checkbox"/>
	• Search terms used	<input type="checkbox"/>
	• Date accessed	<input type="checkbox"/>
	e) For <u>search engine</u> searches, specification of the following:	
	• Search engines used (when searching across the Internet, e.g. Google, or searching within a website, e.g. National Library for Health)	<input type="checkbox"/>
	• Web address	<input type="checkbox"/>
	• Search terms used	<input type="checkbox"/>
	• Date searched	<input type="checkbox"/>



Bibliography

Alderson P, Green S, Higgins JPT, editors. *Cochrane Reviewers' Handbook 4.2.2*, Section 5 [updated March 2004]. In: The Cochrane Library, Issue 3, 2004. Chichester, UK: John Wiley & Sons, Ltd.

Bidwell, S. and Fabricius Jensen, M. (2000) *Etext on Health Technology Assessment (HTA) Information Resources*. Chapter 3: Using a Search Protocol to Identify Sources of Information: the COSI Model. [online]. United States National Library of Medicine. Available from <http://www.nlm.nih.gov/nichsr/ehta/> [Accessed: 15th April 2005].

Note: Although aimed at people conducting literature searches for Health Technology Assessments, the above contains a wealth of useful information about search strategies and specialist information resources.

Centre for Reviews and Dissemination (2001) *Undertaking Systematic Reviews of Research on Effectiveness*. CRD Report Number 4. (2nd Edition). [online]. Available from: <http://www.york.ac.uk/inst/crd/report4.htm> [Accessed: 13th July 2004].

Glover, J. and Gentry, M. (2002) *Literature searching guidelines checklist for researchers*. [online]. Yale University. Available from: http://info.med.yale.edu/library/education/hic/Literature_Searching_Guidelines1.pdf [Accessed: 7th May 2004].

Guyatt, G and Rennie, D. (eds) (2002) *Users' guides to the medical literature: a manual for evidence-based practice*. Chicago: AMA Press.

Johns Hopkins University, School of Medicine, Institutional Review Boards. (2002) *Guidelines for determining an adequate and comprehensive literature search of drug safety for use by investigator and institutional review boards* [online]. Available from: <http://irb.jhmi.edu/Guidelines/LiteratureSearch.doc> [Accessed: 7th May 2004].

McKibbon, A. (1999) *PDQ: evidence-based principles and practice*. Hamilton: B.C. Decker.

Richardson, W.S. et al. (1995) *The well-built clinical question: a key to evidence-based decisions*, ACP Journal Club, 123(3), A12-3.

Wildridge, V & Bell, L. (2002) *How CLIP became ECLIPSE: a mnemonic to assist in searching for health policy / management information*. Health Information & Libraries Journal, 19(2), 113-115.



Guide to sources of information

This glossary is intended to help users of the Literature Search Protocol decide which information resources to search, in addition to providing information about access to these resources and assisting in the compilation of the search documentation. All information given below is believed to be correct at the time of publication, however the Lincolnshire Knowledge and Resource Service does not take responsibility for the accuracy of the information and recommends that individuals take steps to verify the information given.

Healthcare staff may register for an Athens password at <https://www.athens.nhs.uk/region/>

AMED (Allied and Complementary Medicine)	
Subject coverage Complementary or alternative medicine: acupuncture, herbalism, reflexology, homeopathy, holistic treatment, iridology, hypnosis, traditional Chinese medicine, moxibustion, chiropractic, occupational therapy, meditation, osteopathy, physiotherapy, yoga, psychotherapy, rehabilitation, healing, research, diet therapy, ayurvedic medicine, Alexander technique	
Type of sources covered: Journal articles, newspapers and books	
Years covered: 1985 -	Frequency of updates: 29 days
Producer: The British Library	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

Bandolier	
Subject coverage An independent evidence-based health care journal covering a range of medical specialties	
Type of sources covered: Systematic reviews found through monthly searches of the Cochrane Library & PubMed. Systematic reviews performed by the Bandolier team. Other large scale studies may be included if they shed new light on a subject.	
Years covered: 1994 -	Frequency of updates: Monthly
Producer: Bandolier	Publisher / online host: Bandolier
Web address: www.ebandolier.com	Password details: No password required

BIOME	
Subject coverage Health and life sciences, split into 6 subject gateways: OMNI (health & medicine), NMAP (nursing, midwifery & allied health professions), VetGate (animal health), BioResearch (biological & biomedical science), Natural Selection (natural world), AgriFor (agriculture, food & forestry)	
Type of sources covered: Internet resources	
Years covered: N/A	Frequency of updates: Weekly
Producer: University of Nottingham	Publisher / online host: University of Nottingham
Web address: http://biome.ac.uk	Password details: No password required

BioMed Central	
Subject coverage BioMed Central's portfolio of over 100 journals ranges from the highly selective, general interest Journal of Biology, which publishes both on-line and in print, to a range of specialist on-line only journals across the biomedical spectrum.	
Type of sources covered: Open access on-line journals and review journals	
Years covered: 2000 -	Frequency of updates: Daily
Name of producer: BioMed Central: the open access publisher	Name of publisher / online host: As above
Web address: www.biomedcentral.com	Password details: Athens password required

BNI (British Nursing Index)	
Subject coverage Nursing and midwifery plus medical, health management and allied health fields relevant to UK nurses and midwives. Covers mostly UK nursing and midwifery journals although a representative number of non-UK specialist journals are also covered. Examples of subject areas covered: accident & emergency nursing, breast cancer, evidence based practice, learning disabilities, midwifery, nurse practitioner, orthopaedic nursing, perinatal & neonatal mortality, psychiatric nursing, reflective practice, student nurses, theatre nursing, wounds.	
Type of sources covered: Journal articles	
Years covered: 1994 -	Frequency of updates: 29 days
Producer: BNI Publications (UK)	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details : Athens password required

Campbell Collaboration's Social, Psychological, Education and Criminological Trials Register (C2-SPECTR)	
Subject coverage The international Campbell Collaboration (C2) is a non-profit organisation that aims to help people make well-informed decisions about the effects of interventions in the social, behavioural and educational arenas. C2s objectives are to prepare, maintain and disseminate systematic reviews of studies of interventions, and to build summaries and electronic brochures of reviews and reports of trials for policy makers, practitioners, researchers and the public.	
Types of sources covered: randomised trials, possible randomised trials, systematic reviews	
Years covered: c1950s -	Frequency of updates: Not specified
Producer: The Campbell Collaboration	Publisher / online host: The Campbell Collaboration
Web address: www.campbellcollaboration.org/Fralibrary.html	Password details: No password required

Centre for Reviews and Dissemination	
Subject coverage <i>Database of Abstracts of Reviews of Effects:</i> Critical appraisals of systematic reviews published elsewhere. <i>NHS Economic Evaluation Database:</i> Assessments of economic evaluations of health care interventions. <i>HTA Database</i> – Health Technology Assessment reports. These resources are also available from the Cochrane Library. The advantage of searching them from the CRD site is that they are updated monthly, while the Cochrane Library is updated quarterly.	
Type of sources covered: details of systematic reviews, evaluations of healthcare interventions	
Years covered: Not specified	Frequency of updates: Monthly
Producer: Centre for Reviews and Dissemination. The Department of Health funds the HTA database	Publisher / online host: Centre for Reviews and Dissemination.
Web address: www.york.ac.uk/inst/crd/crddatabases.htm	Password details: No password required

CINAHL (Cumulative Index to Nursing and Allied Health Literature)	
Subject coverage Cinahl covers all aspects of nursing and allied health disciplines. Seventeen allied health disciplines are covered: cardiopulmonary technology, dental hygiene, emergency services, medical/laboratory technology, medical assisting, athletic training, occupational therapy, optometry, physical therapy and rehabilitation, the physician's assistant, radiologic technology, respiratory therapy, social service in health care, speech-language pathology, nutrition and dietetics, audiology and surgical technology. Journals from biomedicine, alternative therapy, health sciences, librarianship, health promotion/education, and consumer health are also scanned for relevant articles.	
Type of sources covered, e.g. journals, dissertations : Journal articles, pamphlets, pamphlet chapters, books, book chapters, masters theses, dissertations, audiovisuals, software, practice acts, standards of practice, government publications, websites and critical paths. Original documents include drugs, accreditation, clinical innovation and legal cases records.	
Years covered: 1982 -	Frequency of updates: 6 days
Producer: CINAHL Information Systems (USA)	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

Clinical Evidence	
Subject coverage Blood and lymph disorders, cardiovascular disorders, child health, digestive system disorders, ear, nose and throat disorders, endocrine disorders, eye disorders, HIV and AIDS, infectious diseases, kidney disorders, men's health, mental health, musculoskeletal disorders, neurological disorders, oral health, preoperative care, poisoning, pregnancy and childbirth, respiratory disorders, sexual health, skin disorders, sleep disorders, women's health, wounds	
Type of sources covered: summaries of the current state of knowledge and prevention and treatment of clinical conditions	
Years covered: N/A	Frequency of updates: Monthly (online), Bi-annually (print)
Producer: BMJ Publishing	Publisher / online host: BMJ Publishing
Web address: Via National Library for Health at www.library.nhs.uk or direct at www.clinicalevidence.com Also available in print format.	Password details: No password required

ClinicalTrials.gov	
Subject coverage Up-to-date information for locating federally and privately supported clinical trials for a wide range of diseases and conditions in human volunteers	
Type of sources covered: Clinical trials	
Years covered: Not specified	Frequency of updates: Weekly
Producer: National Library of Medicine	Publisher / online host: U.S. National Institutes of Health (NIH) in collaboration with the Food and Drug Administration (FDA)
Web address: www.Clinicaltrials.gov	Password details: No password needed

Cochrane Library	
The Cochrane Library is considered to be the best single source of reliable evidence about the effects of health care. It is internationally respected as providing the gold standard in "what works and what doesn't". It includes the following databases: Cochrane Database of Systematic Reviews (CDSR): full text of evidence based systematic reviews of health care interventions, prepared by The Cochrane Collaboration. Database of Abstracts of Reviews of Effects:* critical appraisals of systematic reviews published elsewhere. Cochrane Central Register of Controlled Trials (CENTRAL): the largest register of reports of controlled trials in the world. CENTRAL includes information from thousands of journals, key bibliographic databases, conference proceedings and other published and unpublished sources. It also contains information on unpublished trials. Cochrane Database of Methodology Reviews: the most specific collection of records for reports and empirical studies relating to the methods of systematic reviews and the evaluation of health and social care more generally. Contains information for several thousand reports, and prospective entries for ongoing methodological research. NHS Economic Evaluation Database:* assessments of economic evaluations of health care interventions. Health Technology Assessment Database:* as well as systematic reviews, the database contains ongoing and completed research based on trials, questionnaires and economic evaluations.	
Type of sources covered: systematic reviews, critical appraisals of systematic reviews, reports of controlled trials etc.	
Producer: Cochrane Collaboration	Publisher / online host: Wiley Interscience
Years covered: 1880 (most reviews date from c1995 onwards)	Frequency of updates: Quarterly. <i>*more recent updates available from Centre for Reviews and Dissemination</i>
Web address: www.thecochranelibrary.com or via the National Library for Health – www.library.nhs.uk	Password details: No password required

DH-DATA Health Administration and Medical Toxicology	
Subject coverage Core subjects: health service and hospital administration, with an emphasis on the British National Health Service, including planning, design, construction and maintenance of health service buildings; medical equipment and supplies; public health, nursing and primary care; occupational diseases; social policy; and social services for children, families, people with disabilities and elderly people. Other topics: medical toxicology and environmental health including chemicals in food and other consumer products, and the environment; pesticides; industrial chemicals; health consequences of smoking, radiation and noise; air and water pollution; and radiation biology.	
Type of sources covered: Journal articles, books, reports, pamphlets, administrative circulars and other official publications. Full details, including sources of supply, of Department of Health publications.	
Years covered: 1983 -	Frequency of updates: 6 days
Producer: UK Department of Health Library and Information Service and Protection of Health Information Unit	Publisher / online Host: Dialog DataStar (for NHS users)
Web address: Via Athens – www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

Drug and Therapeutics Bulletin (DTB)	
Subject coverage Informed and unbiased assessments of drugs and other treatments (concentrating on their relative efficacy, safety, convenience and cost), comments on how they should be used and assesses their place in overall management. Comments on how treatments are marketed and promoted, on the quality of the information available to prescribers and patients, and on the indication(s) for which the treatment has been licensed. DTB is independent of Government, regulatory authorities, industry and advertising or any other form of commercial sponsorship.	
Type of sources covered: articles	
Years covered: 1993 -	Frequency of updates: Monthly
Producer: Which?	Publisher / online host: Which? / iDTB
Web address: via the National Library for Health www.library.nhs.uk	Password details: Athens password required

EMBASE	
Subject coverage EMBASE covers the whole world's biomedical literature whilst concentrating in particular on European sources. The emphasis of the database is on the pharmacological effects of drugs and chemicals. Over 40% of current data is drug-related. Other subjects: human medicine and biological sciences relevant to human medicine, health affairs (occupational and environmental health, health economics, policy and management), drug and alcohol dependence, psychiatry, forensic science, pollution control, biotechnology, medical devices and alternative medicine.	
Type of sources covered: Journal articles	
Years covered: 1974 -	Frequency of updates: 6 days
Producer: Excerpta Medica / Elsevier B.V.	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens – www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

Education Resources Information Center (ERIC)	
Subject coverage Education and training, education research, preschool to adult and higher education	
Type of sources covered: Journal articles, books, theses, curricula, conference papers, standards and guidelines	
Years covered: 1966 -	Frequency of updates: Monthly
Producer: Institute of Education Sciences USA	Publisher / online host: US Department of Education
Web address: www.eric.ed.gov/	Password details: No password required to search the database. Password required to access other ERIC services

Index to Theses	
Subject coverage The Index to Theses gives details of most doctoral and masters theses from a large number of British universities. Abstracts are provided for theses published in Great Britain and Ireland from 1970 onwards. Bibliographic details are given for non-doctoral theses. A further 400,000 records which cover all theses ever produced since 1716 are also included.	
Type of sources covered: Theses and dissertations	
Years covered: 1716 -	Frequency of updates: Continuous
Producer: Expert Information	Access: Searches can be performed on request by University of Lincoln library staff, following completion of a Search Request form. Contact LKRS for a form.

King's Fund database	
Subject coverage The database reflects the King's Fund's focus on improving health and health care, covering policy and management of health and social care services in the UK rather than clinical issues and treatments. Core subjects include NHS management, social care, health inequalities, urban health and regeneration, race and health, partnership working, primary care, mental health, public involvement, and workforce development in the NHS.	
Type of sources covered: Journal articles from English-language journals, books, reports, pamphlets, web publications, strategic planning documents and government circulars. Official UK health policy documents and 'grey' literature from health and social care organisations.	
Years covered: 1979 -	Frequency of updates: 29 days
Producer: King's Fund Information and Library Service	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

MEDLINE	
Subject coverage Medline covers the whole field of medicine including dentistry, veterinary medicine and medical psychology, clinical medicine, anatomy, pharmacology, toxicology, genetics, microbiology, pathology, environmental health, occupational medicine, psychology, biomedical technology, health planning and administration, space life science, and many other related subject areas.	
Type of sources: Journal articles	
Years covered: 1951 -	Frequency of updates: daily
Name of producer: National Library of Medicine (USA)	Name of publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

metaRegister of ControlledTrials	
Subject coverage International database of ongoing randomised controlled trials in all aspects of health care. Users can search, register and share information about RCTs.	
Type of sources covered: Ongoing randomised controlled trials	
Frequency of updates: Continuously updated	Years covered: The database was established in 1998
Producer: Current Controlled Trials Ltd	Publisher / online host: Current Controlled Trials Ltd
Web address: www.controlled-trials.com/mrct/	Password details: No password required

National electronic Library for Medicines	
Subject coverage : NeLM is a Medicines Information knowledge base designed for healthcare professionals in the UK NHS. It promotes safe, effective and efficient use of medicines within the NHS. The content is independent, unbiased and evidence based. This free service has been in operation since 1998 and is updated daily. Formerly DrugInfoZone.	
Type of sources covered: news, current awareness, drug reviews, product updates, facility for sharing practice, links to related websites	
Years covered: 1998 -	Frequency of updates: Daily
Producer: London and South East Medicines Information Service, Guy's Hospital, London (content also provided by London Medicines Information Centre (Northwick Park), Eastern Medicines Information Centre, Wessex Drug and Medicines Information Centre (Southampton))	
Publisher / online host: National electronic Library for Health	
Web address: www.druginfozone.org	Password details: Free registration to access all areas of the site

National Institute for Health & Clinical Excellence (NICE) - Clinical Guidelines	
Subject coverage Recommendations on the appropriate treatment and care of people with specific diseases and conditions within the NHS in England and Wales.	
Type of sources covered: Guidelines	Years covered: April 2001 –
Frequency of updates: NICE is expected to draw up and issue around 10-15 scientifically-based guidelines to doctors and other health professionals each year, setting out the best treatment options for their patients. In addition, NICE will appraise some 30-50 individual interventions, both new and existing, and will give guidance on their clinical and cost effectiveness.	
Producer: The National Institute for Health and Clinical Excellence is part of the National Health Service	
Publisher / online host: Department of Health	
Web address: www.nice.org.uk/page.aspx?o=cg	Password details: No password required

National Prescribing Centre	
Subject coverage: prescribing, medicines management, pharmaceutical care	
Type of sources covered: current awareness, MeReC Bulletins, new drug information, NPC publications	
Years covered: Not specified	Frequency of updates: Daily
Producer: National Prescribing Centre	Publisher / online host: National Prescribing Centre
Web address: www.npc.co.uk/	Password details: No password required

National Research Register	
Subject coverage Register of ongoing and recently completed research projects funded by, or of interest to, the United Kingdom's National Health Service. Information is held on over 80,000 research projects and is expected to grow further, as well as entries from the Medical Research Council's Clinical Trials Register, and details on reviews in progress collected by the NHS Centre for Reviews and Dissemination.	
Type of sources covered: Research projects	
Years covered: 2000 –	Frequency of updates: Every 3 months
Producer: National Health Service	Publisher / online host: Update Software
Web address: www.nrr.nhs.uk/	Password details: No password required

Networked Digital Library of Theses and Dissertations (NDLTD)	
Subject coverage The NDLTD provides access to international electronic theses and dissertations (ETDs) with a multidisciplinary subject coverage from a wide range of member institutions. NDLTD allows searching and browsing within individual member institutions: www.theses.org/ ; specific collections: http://www.ndltd.org/browse.en.html or across multiple institutions using the NDLTD Union Catalogue, “a repository of rich graduate educational material contributed by a number of member institutions worldwide.” www.vtls.com/ndltd	
Type of sources covered: Theses and dissertations; international coverage.	
Years covered: NDLTD was started as a pilot project in 1996. Specification of years covered not found. Content is as current as possible depending on conditions of access/publication within institutions.	
Frequency of updates: Not specified	
Producer: Networked Digital Library of Theses and Dissertations (NDLTD).	Publisher / online host: NDLTD Union Catalogue is a joint development by NDLTD and the online host, VTLS (Visionary Technology in Library Solutions) Inc.
Web address: www.ndltd.org	Password details: Free registration required to access site

PEDRO – Physiotherapy Evidence Database	
Subject coverage PEDro is the Physiotherapy Evidence Database. It has been developed to give rapid access to bibliographic details and abstracts of randomised controlled trials, systematic reviews and evidence-based clinical practice guidelines in physiotherapy. Most trials on the database have been rated for quality to help you quickly discriminate between trials which are likely to be valid and interpretable and those which are not.	
Type of sources covered: Trials, reviews, guidelines	Years covered: Any trial, review or guideline that satisfies the criteria for inclusion on the database will be included, regardless of how long ago it was published. At the time of writing the oldest record on the database (a clinical trial) was published in 1929.
Frequency of updates: Fortnightly	
Producer: Centre for Evidence-Based Physiotherapy at the School of Physiotherapy, University of Sydney.	
Publisher / online host: University of Sydney	
Web address: http://www.pedro.fhs.usyd.edu.au/index.html	Password details: No password required

PsycINFO (Psychological Abstracts)	
Subject coverage Psychology practice and research and psychological aspects of related clinical disciplines including medicine, psychiatry, nursing and pharmacology, drug and behavioural therapy, treatment of disease, drug addiction, developmental psychology, and educational psychology, as well as the psychological aspects of such areas as linguistics, social processes, pharmacology, physiology, nursing, education, anthropology, business and law.	
Type of sources covered: Journal articles, book chapters, dissertations	
Years covered: 1887 -	Frequency of updates: 6 days
Producer: American Psychological Association	Publisher / online host: Dialog DataStar (for NHS users)
Web address: Via Athens - www.athens.nhs.uk or National Library for Health - www.library.nhs.uk	Password details: Athens password required

PubMed	
Subject coverage Clinical medicine, biomedical sciences, nursing, dentistry, preclinical sciences, health care systems	
Type of sources covered: Journal articles. Citations are from MEDLINE and additional life science journals. PubMed also automatically searches Medline Non-Indexed Items, an interim database that provides access to basic citation information about the latest articles that have been published before they are made available on the commercially produced Medline systems.	
Years covered: 1966 – (Medline); 1951-1965 (old Medline)	Frequency of updates: daily
Producer: National Library of Medicine	Publisher / online host: National Library of Medicine
Web address: www.pubmed.gov	Password details: No password required

Research Findings electronic Register (ReFeR)	
Subject coverage Findings of research studies funded by the Department of Health. ReFeR provides access to research findings in the gap between research completion and publication, if indeed the research is formally published. Details of ongoing and recently completed research projects funded by, or of interest to, the NHS are held in the National Research Register. The National Research Register does not, however, include results or findings of research projects. ReFeR fills in that gap by publishing the findings of many projects listed in the National Research Register.	
Type of sources covered: Summaries of research findings with signposts for more information.	
Years covered: 1999 -	Frequency of updates: Not specified
Producer: Department of Health	Publisher / online host: Update Software
Web address: www.refer.nhs.uk/	Password details: No password required

Social Care Online	
Subject coverage Social Care Online is the UK's most extensive database of social care information. With everything from research briefings, to reports, government documents, journal articles, and websites and you find it all with the click of a button. Updated daily by SCIE's experienced information managers, Social Care Online offers unrivalled free access and ease of use.	
Types of sources covered: books, reports, research papers, journals, official publications and articles	
Years covered: Not specified	Frequency of updates: Not specified
Producer: Social Care Institute for Excellence	Online host: Social Care Institute for Excellence
Web address: http://www.scie-socialcareonline.org.uk/	Password details: No password required

TRIP Database Plus	
Subject coverage General coverage of medical literature considered to be evidence-based.	
Type of sources covered, e.g. journals, dissertations : Evidence-based sources, international clinical guidelines, medical images, eTextbooks, patient information leaflets, and peer-reviewed journals.	
Years covered: N/A	Frequency of updates: Monthly
Producer: TRIP Database Ltd	Publisher / online host: TRIP Database Ltd
Web address:: www.tripdatabase.com	Password details: Please contact the Lincolnshire Knowledge and Resource Service for a username and password.

UK Medicines Information (UKMi)	
Subject coverage Medicines management and pharmaceutical care	
Type of sources covered: guidelines, access to Pharm-Line (bibliographic database for which a subscription is required), UKMi policies, products and publications, new drugs information, summaries of complementary medicines	
Years covered: Not specified	Frequency of updates: Daily
Producer: UKMi	Publisher / online host: UKMi
Web address: www.ukmi.nhs.uk/	Password details: Password required to access some areas of the site. Registration for password available for NHS health care professionals.

WHO Regional databases	
Subject coverage WHO Regional health and medical databases give bibliographical information about medical and health material published locally in countries outside the major industrialised areas, much of which is not indexed in MEDLINE and other major databases. There are four WHO Regional databases: 1) African Index Medicus (AIM) 2) Index Medicus for the WHO Eastern Mediterranean Region (IMEMR) 3) Latin American and Caribbean Center on Health Sciences Information (LILACS) 4) Index Medicus for South-East Asia Region (IMSEAR) AIM and IMSEAR were unavailable at the time this document was produced.	
Type of sources covered: Journal articles, reports	
Years covered: (Unable to check this information for AIM and IMSEAR) EMR: 1984 - LILACS: depends on country (to view, select 'Country, year publication' field and click Index symbol)	
Frequency of updates: Not specified	Producer / online host: World Health Organisation (WHO)
Publisher / online host: Published under the auspices of WHO Regional Offices by/in association with the following: AIM: Association for Health Information and Libraries in Africa (AHILA). EMR: Eastern Mediterranean Region Library Network (EMLIBNET). LILACS: Pan American Health Organization (PAHO), WHO Regional Office for the Americas. IMSEAR: Health Literature, Library and Information Services (HELLIS) network.	
Web address: www.who.int/library/country/regional/aim/index.en.shtml	Password details: No password required



Literature Searching Protocol - Feedback Form

If you have any comments or suggestions as to how this checklist can be improved, please complete and return this brief feedback form.

Your feedback will be highly valuable in ensuring that this document evolves to meet your needs.

Thank you in advance.

1. How useful have the following sections of the checklist been in planning and carrying out your literature review? (Please select the most appropriate box in the scale)

not at all useful 1 2 3 4 very useful

Search Planning Form	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 1: Resource checklist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 2: Search Strategy checklist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 3: Search documentation checklist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guide to sources of information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. How effective was the checklist in helping you to: (Please select the most appropriate box in the scale)

not at all effective 1 2 3 4 very effective

Plan your literature search?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document your literature search?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Save time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you ticked 1 or 2 for any of the above, please indicate your reasons why:

3. How could the checklist could be made more effective for you?

4. Has a librarian given you any assistance in the use of the checklist? Yes No

5. If you have any further comments/suggestions, please note them in the space below:

Please return this form to: Alison Price, Librarian, Lincolnshire Knowledge and Resource Service, Beech House, Waterside South, Lincoln, LN5 7JH. Fax: 01522516723 Courier: 84 (via Cross O'Cliff)