Cooking up systematic reviews: tried and true recipes for success

Tomas Allen

Geneva Workshop 2016
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Databases by name:
EMBASE, Journal Citation Reports, CINAHL, FACTIVA and any other unlisted databases, please send your requests to LNK@who.int for a pricing option.

- Academic Search Premier
- BMJ Clinical Evidence
- Business Insights
- CABI - Global Health Database
- Cochrane
- EIU - Environmental Health Information Service
- EIU.com
- EIU - Country Data
- EIU - Global Forecasting Service
- EIU - Viewswire

WHO HQ databases by name:
- WHOLIS
- IRIS
- ICTRP - International Clinical Trials Registry Platform
- International Digest of Health Legislation & Recueil international de Législation sanitaire

WHO Regional databases by name:
- Africa
- Eastern Mediterranean
- Latin America and Caribbean
- PAHO Library (institutional memory)
Many countries have access

- The Cochrane Library is available to all HINARI-eligible countries, list found at:
  

- Many developed countries also provide their citizens with some form of open access:

  Norway, Finland, Denmark, Ireland to name just a few.
The Cochrane Library

- The single most reliable source for evidence on the effects of health care.
- Brings together in one place research on the effectiveness of healthcare treatments and interventions.
- The gold standard in evidence-based medicine.
- Provides access to the most objective information on the latest in health interventions.
The Cochrane Collaboration

http://www.cochrane.org

- **Structure** - established as an international organisation in 1993, registered as a charity in the United Kingdom.

- **Aim** - to help people make well-informed decisions about health care.

- **How** - by preparing and promoting access to systematic reviews of the effects of healthcare interventions.

- **Publishing Output** – The Cochrane Library.
What is in the Cochrane Library?

- Cochrane Database of Systematic Reviews (Cochrane reviews)
- Database of Abstracts of Reviews of Effects
- Central Register of Controlled Trials
- Cochrane Methodology Register
- Health Technology Assessment Database
- NHS Economic Evaluation Database
- Cochrane Collaboration and Cochrane Collaborative Review Groups.
Too much information?
What are systematic reviews?
Cochrane & Campbell Collaboration definitions

- The process of systematically locating, appraising and synthesising evidence from scientific studies in order to obtain a reliable overview.
  - [http://www.thecochranelibrary.com/view/0/AboutCochraneSystematicReviews.html](http://www.thecochranelibrary.com/view/0/AboutCochraneSystematicReviews.html)

- Aim to find all studies addressing the review’s question using an objective and transparent process.
  - [http://www.campbellcollaboration.org/what_is_a_systematic_review/](http://www.campbellcollaboration.org/what_is_a_systematic_review/)
Why are Cochrane reviews important?

- High methodological standards.
- Ensure efficient use of resources in low-resource settings.
- Increase power and precision in decision making.
- Limit bias and improve accuracy through a global perspective.
- Reduce vast amounts of information to manageable size.
Cochrane review numbers

1076 records identified through database searching

12 additional records identified through other sources

1088 records screened

925 records excluded

163 full-text articles assessed for eligibility

108 full-text articles excluded, with reasons

55 studies included in qualitative synthesis

3 studies excluded from quantitative analysis

52 records, corresponding to 65 comparisons, included in quantitative synthesis (meta-analysis)
What is in the Cochrane Library?

- Cochrane Database of Systematic Reviews (Cochrane reviews)
- Database of Abstracts of Reviews of Effects (other reviews)
- Central Register of Controlled Trials (clinical trials)
- Cochrane Methodology Register (methods studies)
- Health Technology Assessment Database (technology assessments)
- NHS Economic Evaluation Database (economic evaluations)
- Cochrane Collaboration and Cochrane Collaborative Review Groups.
Cochrane basic search

Cochrane Database of Systematic Reviews: Issue 1 of 12, January 2016

Issue updated daily throughout month

There are 14 results from 9243 records for your search on 'glove in Title, Abstract, Keywords in Cochrane Reviews'

Sort by: Relevance: high to low

Select all | Export all | Export selected

Gloves, extra gloves or special types of gloves for preventing percutaneous exposure injuries in healthcare personnel

Christina Mischke, Jos H Verbeek, Annika Saarto, Marie-Claude Lavoie, Manisha Pahwa and Sharea Ijaz

Online Publication Date: March 2014

Review
Cochrane reviews are full text
## Cochrane status flags

<table>
<thead>
<tr>
<th>Flag</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me</td>
<td>Methodology</td>
<td>Double gloving to reduce surgical cross-infection</td>
</tr>
<tr>
<td>Dx</td>
<td>Diagnostic</td>
<td>Gloves, gowns and masks for reducing the transmission of meticillin-resistant Staphylococcus aureus (MRSA) in the hospital setting</td>
</tr>
<tr>
<td>Ov</td>
<td>Overview</td>
<td>Blunt versus sharp suture needles for preventing percutaneous exposure incidents in surgical staff</td>
</tr>
<tr>
<td>Pg</td>
<td>Prognosis</td>
<td>Chinese herbal medicine for oesophageal cancer</td>
</tr>
<tr>
<td>Qu</td>
<td>Qualitative</td>
<td>Pancreatic amylase in drain fluid for the diagnosis of pancreatic leak in post pancreatic resection</td>
</tr>
<tr>
<td>Cc</td>
<td>Conclusions changed</td>
<td>Surgical haemostasis during cardiac surgery and babies at term</td>
</tr>
<tr>
<td>Ns</td>
<td>New search</td>
<td>Routine vaginal examination of female cervix</td>
</tr>
</tbody>
</table>
Researchers’ contact information

Cecily M Begley
Trinity College Dublin, School of Nursing and Midwifery, Dublin, Ireland
begley@tcd.ie

Gillian ML Gyte
...
Database of Abstracts of Reviews of Effects (DARE)

- Complements Cochrane Reviews by collecting reviews which have not been carried out by the Cochrane Collaboration.
- Each abstract includes a summary of the review together with a critical commentary about the review’s overall quality.
- Contains over 7854 reviews.

Ceased up-dates as of 31 March 2015
Long term efficacy of DOTS regimens for tuberculosis: systematic review (Structured abstract)

Centre for Reviews and Dissemination

Database of Abstracts of Reviews of Effects 2015 Issue 2
Copyright © 2015 University of York. Published by John Wiley & Sons, Ltd.

Original article: Cox H S, Morrow M, Deutschmann P W. Long term efficacy of DOTS regimens for tuberculosis: systematic review. BMJ 2008;336 484. Links

Funding
Australian National Health and Medical Research Council.

URL for original research
http://www.bmj.com/content/336/7642/484
Research

Long term efficacy of DOTS regimens for tuberculosis: systematic review

BMJ 2008;336 doi:10.1136/bmj.39463.640787.BE (Published 28 February 2008)

Cite this as: BMJ 2008;336:484

Helen S Cox, PhD scholar, Martha Morrow, research coordinator, Peter W Deutschmann, executive director

Author affiliations

Correspondence to: H S Cox, Macfarlane Burnet Institute for Medical Research and Public Health, Melbourne, VIC 3004. Australia hcox@burnet.edu.au
Cochrane Central Register of Controlled Trials

- Includes details of published articles taken from bibliographic databases and other published resources.
- Records include the title of the article, information on where it was published and, in many cases, the abstract.
**Grey literature and unique content**

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**The Cochrane Central Register of Controlled Trials (CENTRAL) 2011 Issue 10**  
Copyright © 2011 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

<table>
<thead>
<tr>
<th>Title</th>
<th>Reductions in HIV risk among runaway youths</th>
<th>Links</th>
<th>Export Central Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Rotheram-Borus MJ, Van Rossem R, Gwadz M, Koopman C, Lee M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of Publication</td>
<td>1997</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publisher Name</td>
<td>University of California, Department of Psychiatry, Division of Social and Community Psychiatry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Publication</td>
<td>Los Angeles, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correspondence Address</td>
<td>University of California, Department of Psychiatry, Division of Social and Community Psychiatry, Los Angeles, CA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cochrane Group Code</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>CN-00614346</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Method studies.

Bibliography of publications that report on methods used for executing systematic reviews.

Includes journals articles, books, conference proceedings and articles from hand searches.
# The Cochrane Methodology Register (CMR) 2011 Issue 2
Copyright © 2011 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

<table>
<thead>
<tr>
<th>Title</th>
<th>Effectiveness of different databases in identifying studies for systematic reviews: experience from the WHO systematic review and mortality.</th>
<th>Links</th>
<th>Export Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Betran AP, Say L, Gulmezoglu AM, Allen T, Hampson L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>BMC Medical Research Methodology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date of Publication</td>
<td>2005</td>
<td></td>
<td></td>
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<tr>
<td>Volume</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pages</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abstract</td>
<td>BACKGROUNDS: Failure to be comprehensive can distort the results of a systematic review. Conversely, extensive searches may yield unmanageable number of citations of which knowledge of usefulness of each source of information may help to tailor search strategies in systematic reviews. METHODS: We conducted a systematic review of prevalence/incidence and morbidity from 1997 to 2002. The search strategy included electronic databases, hand searching, screening of reference lists, congress abstract books, contacting experts active in the field and searching for specific sources. RESULTS: In total, 2933 citations were identified from databases, on which 2093 were included. Additionally 487 citations were included from other sources. MEDLINE had the highest yield identifying about 52% of the included citations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HIV infection detection quick test (Structured abstract)

G Oliva, M Almazan, M Guillen

Health Technology Assessment Database 2015 Issue 1
Copyright © 2016 Catalan Agency for Health Technology Assessment and Research (CAHTA). Published by John Wiley & Sons, Ltd.


Record status

This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Authors’ conclusions

No clinical practice guidelines or recommendations on the use of quick detection tests of HIV infections of good methodological quality were found. The results of this review suggest that the HIV quick detection test could be useful in direct access programs in populations with HIV infection risk that are not
# Cochrane review groups

<table>
<thead>
<tr>
<th>Cochrane Review Group</th>
<th>Co-ordinating Editor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Respiratory Infections</td>
<td>Prof. Chris Del Mar, Bond University, Australia</td>
</tr>
<tr>
<td>Airways</td>
<td>Dr. Chris Cates, St. George's, University of London, UK</td>
</tr>
</tbody>
</table>

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The Cochrane Library, © World Health Organization 2014
How to contact us

The main point of contact for the Pregnancy and Childbirth is the Managing Editor:

Frances Kellie  
Cochrane Pregnancy and Childbirth  
Department of Women’s and Children’s Health, Institute of Translational Medicine, University of Liverpool  
Centre for Women’s Health Research  
Liverpool Women’s NHS Foundation Trust  
Crown Street  
Liverpool  
L8 7SS  
UK

f.kellie@liverpool.ac.uk

Tel: +44 151 7959570  
Fax: +44 151 7959598
To access advanced search:

Click on Advanced Search
Advanced search features

Include:

- Boolean logic (AND, OR, NOT etc.)
- Proximity Operators (NEAR, NEXT)
- Searching using MeSH headings
- Using truncation
- Combining search sets.
Medical Subjects Heading (MeSH) search

**Search**

- HIV Infections

**Search Help**

**Definition**

HIV Infections - Includes the spectrum of human immunodeficiency virus infections that range from asymptomatic seropositivity, thru AIDS-related complex (ARC), to acquired immunodeficiency syndrome (AIDS).

**Thesaurus matches**

- **Exact Term Match**
  - HIV Infections
    - Synonyms: HIV infection.

- **Phrase Matches**
  - HIV Infections
    - Synonyms: HIV infection; Infection, HIV; Infections, HIV; HTLV-III-LAV Infections; HTLV III LAV Infections; HTLV-III-LAV Infection; Infection, HTLV-III-LAV; Infections, HTLV-III-LAV; T-Lymphotropic Virus Type III Infections; Human; T Lymphotropic Virus Type III Infections; Human; HTLV-III Infections; HTLV III Infections; HTLV-III Infection; Infection, HTLV-III; Infections, HTLV-III.

**MeSH trees**

- MeSH term - HIV Infections
  - Explore all trees
  - Single MeSH term (unexplored)
  - Explore selected trees

- Use the checkbox next to each tree to explode selected trees

- **Tree Number 1**
  - Virus Diseases [+20]
    - RNA Virus Infections [+17]
      - Retroviridae Infections [+7]
        - Lentivirus Infections [+6]
          - Equine Infectious Anemia
          - Pneumonia, Progressive Interstitial, of Sheep
          - HIV Infections [+10]

**Search results**

- There are 8390 results for your search on:
  - MeSH descriptor: [HIV Infections]
  - explode all trees

- Cochrane Reviews: 123
- Other Reviews: 470
- Trials: 7083
- Methods Studies: 0
- Technology Assessments: 86
- Economic Evaluations: 628
- Cochrane Groups: 0

**Save search**

- Add to Search Manager

**View Results**
Begin with a clear question - PICO

- **Patient, population, or problem**
- **Intervention**
- **Comparison**
- **Outcome desired or to be measured.**

Does evidence exist to support the use of Kangaroo mother care in Low birth weight infants as an alternative to conventional care after the initial period of stabilization with conventional care?
Mainstream literature

Non-English literature

Commercial studies

Grey literature

Study 1

Study 2

Study 3

Study 4

Combined results meta-analysis
Systematic review search steps

1. Determine if a systematic review has been done on the question.
2. If the review is old, contact authors about update collaboration.
3. If no reviews, check for protocols and collaboration opportunities.
4. If no reviews or protocols, look for researchers and contact for possible collaboration.
5. If steps 1-4 return nothing, mine Cochrane for search strategies and resources to search, electronic and otherwise.
6. Execute a comprehensive systematic search.
7. Through every step, document the search process.
Where to find search strategies

Search methods for identification of studies

Electronic searches were undertaken in CENTRAL/CCTR, PubMed (2001 onwards), EMBASE, AIDSLINE, LILACS, OR chlorhexidine OR "vaginal antisept"-creams-foams-oils OR labour OR labor OR birth OR intrapartum OR delivery OR Lefebvre 2000; Higgins 2005, as appropriate. The method of "controlled clinical trial" [pt] OR "randomized controlled trials" [pt] OR "blind method" [mh] OR "clinical trial" [pt] OR "clinical trials" [mh] OR tripl [tw]) AND (mask* [tw] OR blind* [tw]) OR (latin* volunteer* [tw] OR "research design" [mh:noexp]) NOT (OR RANDOMIZED-CONTROLLED-TRIAL (DE) OR trials versus OR MULTICENTER-STUDY (DE) OR assign* OR CLINICAL-Trial (DE) OR INTERMETHOD-COMPARISON articles" feature of PubMed was also used.

The above search strategy was supplemented by search for the 7th International Conference on AIDS, the Conference on Research for the Prevention of HIV Transmission From Mothers to Infants in whomever the conference proceedings or articles were also scrutinised for any additional papers search.

Appendix 1. Search strategies 2010

<table>
<thead>
<tr>
<th>Database</th>
<th>Period of search</th>
<th>Search strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMBASE</td>
<td>1974 to September 2010</td>
<td>#6 #5 AND [humans]/lim AND [embase]/lim</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#5 #3 AND #4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#4 [randomized controlled trial]/lim OR [controlled clinical trial]/lim OR random* OR 'double blind' OR 'single blind' OR (singl* OR doubl* OR trebl* OR tripl*) AND (blind* OR mask*)) OR 'single blind procedure'/exp OR 'double blind procedure'/exp OR 'triple blind procedure'/exp OR placebo OR 'controlled study'/exp OR 'cross sectional study'/exp OR 'crossover procedure'/exp OR 'latin square design'/exp OR 'follow up'/exp OR 'comparative study'/exp OR 'evaluation studies'/exp OR 'evaluation study' OR prospectiv* OR volunteer*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#3 #1 AND #2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#2 'health care personnel'/exp OR 'health care personnel' OR 'health care worker'/exp OR 'health care worker' OR 'health care workers' OR 'health care facilities and services'/exp OR 'medical profession'/exp OR 'nursing as a profession'/exp OR (virus transmission'/exp AND 'patient'/exp AND professional)</td>
</tr>
</tbody>
</table>
|            |                  | #1 'needlestick injury'/exp OR 'needlestick' OR 'needle stick'/exp OR 'sharp injury' OR 'sharp injuries' OR 'sharp medical' OR 'sharp instrument' OR 'sharp needle' OR 'sharp needles' OR sharps OR 'percutaneous exposure' OR 'percutaneous injury' OR 'percutaneous injuries' OR 'percutaneous trauma' OR 'stick injury' OR 'stick injuries' OR 'stab wound'/exp OR 'face injury'/de OR 'eye injury'/de OR 'arm injury'/de OR 'hand
Our question

What are policy guidelines for improving health worker access to prevention, treatment and care services for HIV and TB?
### Provisional abstract?

#### Database of Abstracts of Reviews of Effect: Issue 2 of 4, April 2015

There is 1 result from 36795 records for your search on 'tuberculosis AND HIV and health personnel in Title, Abstract, Keywords in Other Reviews

Select all | Export all | Export selected

- Workplace programmes for HIV and **tuberculosis**: a systematic review to support development of international guidelines for the health workforce (Provisional abstract)

Centre for Reviews and Dissemination
Original Authors: Yassi A, O'Hara LM, Lockhart K and Spiegel JM
AIDS Care, 2013, 25(5), 525-543
How to find systematic reviews in PubMed


Using PubMed
- PubMed Quick Start Guide
- Full Text Articles
- PubMed FAQs
- PubMed Tutorials
- New and Noteworthy

PubMed Tools
- PubMed Mobile
  - Single Citation Matcher
  - Batch Citation Matcher
- Clinical Queries
  - Topic-Specific Queries

More Resources
- MeSH Database
- Journals in NCBI Databases
- Clinical Trials
- E-Utilities (API)
- LinkOut
How to find systematic reviews in PubMed


PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, PubMed directly.

Clinical Study Categories

**Category:**
- Therapy

**Scope:**
- Broad

Sample Results of Clinical Study Category Query

Filter citations to a specific clinical study category and scope. These search filters were developed by Haynes RB et al.

Systematic Reviews

Sample Results of Systematic Reviews Query

Filter citations for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines. See related sources.

Medical Genetics

**Topic:** All

Sample Results of Medicinal Genetics Query

Filter citations to topics in medical genetics.
How to find systematic reviews in PubMed

PubMed Clinical Queries

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use PubMed directly.

male circumcision

Clinical Study Categories

Category: Therapy
Scope: Broad

Results: 5 of 1979

Psychosocial Results from a Phases I Trial of a Nonsurgical Circumcision Device for Adult Men in Zimbabwe
Kasparyk D, Montano DE, Hamilton DT, Down KL, Morret KD, Taimanga M, Xaba S, Mugurungi O.

Male circumcision to prevent syphilis in 1855 and HIV in 1986 is supported by the accumulated scientific evidence to 2015: Response to Darby.
Morris BJ, Wamal RG, Krieger JN, Banejee J, Kleusner JD.

Pediatric sutureless circumcision: an effective and cost efficient alternative.
Voznesensky M, Mutter C, Hayn M, Kinkead T, Jumper B.
Major concepts

- HIV infections
- Health care workers
- Tuberculosis
- Prevention and treatment
- Low-income countries
- Policy guidelines.
# First concept – HIV infections

## Table 1. Search Strategies for Electronic Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Years Searched</th>
<th>Strategy</th>
<th>Total Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDSLINE</td>
<td>1980-2007</td>
<td>1980-2005, Total Unique Records Retrieved: 1450 &lt;br&gt;#1 PT=RANDOMIZED CONTROLLED TRIAL &lt;br&gt;#2 PT=CONTROLLED CLINICAL TRIAL &lt;br&gt;#3 RANDOMIZED CONTROLLED TRIALS &lt;br&gt;#4 RANDOM ALLOCATION &lt;br&gt;#5 DOUBLE BLIND METHOD &lt;br&gt;#6 SINGLE BLIND METHOD &lt;br&gt;#7 PT=CLINICAL TRIAL &lt;br&gt;#8 CLINICAL TRIALS OR CLINICAL TRIALS, PHASE I OR CLINICAL TRIALS, PHASE II OR CLINICAL TRIALS, PHASE III OR CLINICAL TRIALS, PHASE IV OR</td>
<td>1455</td>
</tr>
</tbody>
</table>
Second concept – health personnel

Influenza vaccination for healthcare workers who care for people aged 60 or older living in long-term care institutions
Roger E Thomas, Tom Jefferson and Toby J Lasserson
Online Publication Date: July 2013

The psychological effects of the physical healthcare environment on healthcare personnel
Karlijn Tanja-Dijkstra and Marcel E Pietersse
Online Publication Date: January 2011
Health care workers (OVID interface)

14 exp Health Personnel/
15 (health personnel or healthcare personnel or health care personnel).mp.
16 (health worker$ or healthcare worker$ or health care worker$).mp.
17 (healthcare provider$ or health care provider$).mp.
18 (health practitioner$ or healthcare practitioner$ or health care practitioner$).mp.
19 health employee$.mp.
20 medical staff.mp.
21 (doctor$ or physician$).mp.
22 (allied health adj (staff or personnel)).mp.
23 paramedic$.mp.
24 nursing staff.mp.
25 nurse$.mp.
26 nursing auxiliar$.mp.
27 hospital personnel.mp.
28 hospital staff.mp.
29 hospital worker$.mp.
## OVID to PubMed translator

### PUBMED/OVID Advanced Search Techniques Comparison

<table>
<thead>
<tr>
<th>PubMed Technique</th>
<th>OVID Technique</th>
<th>OVID Comments</th>
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<tr>
<td>holistic [tw]</td>
<td>holistic.tw.</td>
<td><code>tw = textword; ti = title word; mp = title + abstract + chem fields</code></td>
</tr>
</tbody>
</table>
<pre><code>                       | holistic.ti.                        |                                                                                   |
                       | holistic.mp.                        |                                                                                   |
</code></pre>
<p>| work*                  | work:                               | Truncation symbols (&quot;<em>&quot; or &quot;$&quot;) allow numeric limiting for number of characters to following word. Without a number, they are open-ended. |
| work?                               |                                                                                   |
| work:1                              |                                                                                   |
| work</em>                  | work#r                             | Internal truncation single place, not available in PubMed.                      |
| liver [mh] OR bladder [mh] | Liver/ or Bladder/ or/1-2      | Boolean operators include AND, OR, NOT. May be applied within string, or may be used at head of string with forward slash followed by set numbers of prior search sets. Capitalization optional. |
| &quot;bone morphogenetic&quot; [tw] | &quot;bone morphogenetic&quot;.mp.        | Phrase searching in OVID is term order dependent. (NOTE: Pubmed lacks true phrase searching.) |
| (filled adj3 teeth).mp. | Adjacency operators can also use numbers to specify the range of adjacency. No adjacency operators available in PUBMED. Term ordering not valid with these. |</p>
Conversion of OVID to PubMed

Another concept – low-income countries

The impact of contracting out on health outcomes and use of health services in low and middle-income countries
Mylene Lagarde and Natasha Palmer
Online Publication Date: October 2009

The effect of pharmacist-provided non-dispensing services on patient outcomes, health service utilisation and costs in low- and middle-income countries
Sami Pande, Janet E Hiller, Nancy Nkansah and Lisa Bero
Online Publication Date: February 2013

Not all searches are equal.
Low-income countries

Filters – reusable recipes for success

- Filters are validated search blocks.

- They can be for various search aspects:
  - Publication specifics (Language, publication type, period)
  - Geographical areas (LMIC, WHO regions)
  - Diseases (HIV infections, diabetes)
  - Study designs (clinical queries, randomized controlled trials)
  - Broad topic subject topics (primary healthcare, patient safety).

- We use them to build on the work of others.
Cochrane Library not the only source

LMIC Filters

- Australasian satellite
- French satellite
- Italian satellite
- Norwegian satellite
- Scope of our work
- Funding and Support
- LMIC resources
- LMIC databases

Filters for MEDLINE (Ovid), EMBASE (Ovid), PubMed and CENTRAL (Web) to help identify studies relevant to LMIC.

Filters are based on the World Bank list of countries (2009), classified as low-income, lower-middle-income or upper-middle-income economies: http://data.worldbank.org/about/country-classifications.

As yet, none of the filters have been tested for sensitivity and precision.

View LMIC Filters 2012
Other filter sources

- InterTASC Information Specialists' Sub-Group Search Filter Resource
- Cindy Schmidt’s PubMed search strategies blog
- University of Pittsburgh Health Sciences Library System’s database called MedTerm Search Assist
- The Royal Dutch Society for Information Professional’s Department of Biomedical Information’s website
- Norway’s Helsebiblioteket.
Filters by study design
- Adverse events
- Economic evaluations
- Guidelines
- Health services research, etc.

Information about filter issues
- Filter critical appraisals
- Surveys of performance
- Blogs, etc.
Scottish Intercollegiate Guidelines Network (SIGN)

http://www.sign.ac.uk/methodology/filters.html#patient

SEARCH FILTERS

Search filters are pre-tested strategies that identify the higher quality evidence from the vast amounts of literature indexed in the major medical databases. Filters exist for most types of experimental design, and are comprised of index terms relating to study type and specific terms associated with the methodological description of good experimental design.

The search filters used by SIGN are developed in-house or are created by other research organisations and adapted to meet SIGN information needs. SIGN's filters may provide less sensitive searches than those used by other systematic reviewers such as The Cochrane Collaboration, but enable the retrieval of medical studies that are most likely to match SIGN's methodological criteria.

SIGN has devised suitable strategies for running each search filter in Ovid implementations of Medline, Embase and CINAHL along with other more specialised databases. The following is an explanation of some of the search devices commonly used in SIGN filters:

/ after an index term indicates that all subheadings were selected.
* before an index term indicates that that term was focussed - i.e. limited to records where the term was a major Mesh term.
"exp" before an index term indicates that the term was exploded.
.tw. indicates a search for a term in title/abstract.
.mp. indicates a free text search for a term
.pt. indicates a search for a publication type
.$ at the end of a term indicates that this term has been truncated.
.? in the middle of a term indicates the use of a wildcard.
.adj indicates a search for two terms where they appear adjacent to one another

- Systematic Reviews
- Randomised Controlled Trials
- Observational Studies
- Diagnostic Studies
- Economic Studies
- Patient Issues
Search strategies

- Try to find systematic reviews for your topic.
  - Do they match the topic perfectly?
  - Are they complete and up to date?
  - If not, can I collaborate with the authors?

- If no perfect matches, search for individual concept matches.
  - Use the Methods section for resources and search strategies.

- Check strategies for comprehensiveness (keywords and MeSH).

- Adapt strategies for your question, interface and database.
The Campbell Collaboration Library: the social side

- Comparable to Cochrane, but with an emphasis on the social sciences.
- Systematic reviews in education, crime and justice, and social welfare.
- Provides search process documentation similar to Cochrane’s.
- Open access.
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MeSH and keywords for child under 18

Bibliographic Fields:
Reference Type: Online Database
Author: PubMed
Title: Child - up to age 18

Optional Fields:

Name of Database: Medline
Database Provider: PubMed
Added to Library: 30 May 2012
Last Updated: 30 May 2012
Groups: [Unfiled]
To access search concepts

- Create a free, web-based EndNote account by visiting [http://www.myendnoteweb.com](http://www.myendnoteweb.com).

- Send an email to allent@who.int and indicate the email you used to create the EndNote BASIC account.

- I will then share the database with you.

- Note: All filters are offered as is. No guarantees.
Lessons learned

- Cochrane Library should be the first place to check for any question.

- Cochrane Library has systematic reviews and other resources.

- Cochrane methodology is a standard to replicate.

- Reuse search strategies - identify where to search and with which search terms (controlled and keywords).