# SUPPORT Tools for evidence-informed health Policymaking (STP)

# 5. Finding systematic reviews

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# Abstract

**Background:** This article is number 5 in a series of 21 articles on tools for evidence-informed health policymaking. Systematic reviews are increasingly seen as a key source of information to inform policymaking, particularly in terms of assisting with characterising the impacts of policy and programme options. They offer a number of advantages over single studies in characterising impacts and are also becoming a key source of information to assist with defining problems and providing complementary characterisations of options. Systematic reviews can be undertaken to place problems in comparative perspective, and to characterise the likely harms of an option. They also assist with understanding: the meanings that individuals or groups attach to a problem, how and why options work, and the views and experiences of stakeholders about particular options. A number of constraints have hindered wider use of systematic reviews in policymaking, including:

- 1. A lack of awareness of their value
- 2. Challenges in retrieving systematic reviews using search terms with which *policymakers* are familiar but which may not have been used in the original reviews, and
- 3. Challenges in understanding systematic reviews that are written in a way that does not adequately highlight (or make obvious) the types of information that policymakers are seeking

**Objectives:** In this article we suggest questions that can be used to guide those searching for systematic reviews about potential policy and programme options, and potential impacts in particular.

# Key messages:

- The following questions can guide how to find systematic reviews about potential policy and programme options, and potential impacts in particular:
  - 1. Is a systematic review really what is needed?
  - 2. What databases and search strategies can be used to find relevant systematic reviews?
  - 3. What alternatives are available when no relevant review can be found?
- The PPD/CCNC database is a good source for finding systematic reviews, as well as overviews of systematic reviews and policy briefs, that address a range of questions about health system arrangements
- The Cochrane Library (particularly the Cochrane Database of Systematic Reviews) and PubMed are good sources of systematic reviews that address questions about the impacts of programmes, services, and drugs
- When systematic reviews cannot be found, policymakers could commission a systematic review (if timelines and resources permit)

# Background

This article is number 5 in a series of 21 articles on tools for evidence-informed health policymaking. It is also the  $2^{nd}$  of 3 articles in this series about identifying potential policy and programme options and finding evidence about them. Its purpose is to suggest questions to guide those involved in finding systematic reviews about potential policy and programme options, particularly about their impacts.

Systematic reviews are increasingly seen as a key source of information to inform policymaking, particularly to assist with framing options and characterising their impacts [1]. Systematic reviews offer four key advantages over single studies in characterising the impacts of an option:

- 1. They reduce the likelihood that policymakers will be misled by research (by being more systematic and transparent in the identification, selection, appraisal and synthesis of studies)
- 2. They increase confidence among policymakers about what can be expected from an intervention (by increasing the number of units for study)
- 3. They allow policymakers to focus on *appraising* the applicability of systematic reviews to their own setting (instead of also having to find and synthesise the available research evidence on their own). They also allow policymakers to focus on collecting and synthesising other types of evidence, such as local evidence about technical feasibility, the fit with dominant values and the current provincial/national mood, and the acceptability of potential options in terms of budget workability and the likely degree of political support or opposition, and
- 4. They allow stakeholders, including public interest or civil society groups, to contest research evidence constructively because it is arranged for them in a more systematic and transparent way [1, 2]

The first two of the advantages listed above – namely, reduced bias and increased precision (to use the language of researchers) – apply only to systematic reviews of impacts, some of which will include the statistical synthesis of findings as a final step. In these instances, the reviews are referred to as *meta-analyses* [3]

Although not the principal focus of this article, systematic reviews are also increasingly used as key sources of information for assisting with defining problems and providing complementary characterisations of policy and programme options. Systematic reviews can also be conducted for:

- Administrative database studies and community surveys that help to place problems in comparative perspective
- Observational studies that help to characterise the likely harms of an option,
- Qualitative studies that help to understand the meanings that individuals or groups attach to a problem, how and why options work, and the views and experiences of stakeholders about particular options

These issues are discussed further in Article 3 in this series (which focuses on the process of defining a problem) and Article 4 (which focuses on framing options to address a problem) [4, 5]. Systematic reviews of qualitative research evidence (or systematic reviews of both qualitative and quantitative research evidence in the same review) go by many names, including: narrative

summary, thematic analysis, grounded theory, meta-ethnography, meta-study, realist synthesis, cross-case techniques, content analysis, case survey, qualitative comparative analysis, and Bayesian meta-analysis [6, 7].

Several constraints have hindered the use of systematic reviews in policymaking. The first key constraint relates to the limited awareness of their value. Policymakers require synthesised research evidence, and systematic reviews are able to provide this in a way that is both systematic and transparent. Historically, those policymakers and researchers with influence in health systems believed that systematic reviews could only include randomised controlled trials and required some form of statistical synthesis [8]. For them, the value of these reviews lay only in assessing the effectiveness of healthcare interventions. As explained earlier, these approaches were underpinned by misconceptions. A second key constraint relates to the retrievability of systematic reviews. Policymakers need timely access to high-quality, policy relevant systematic reviews that are retrievable using policymaker-friendly terminology. A systematic review of the factors that influence the use of research evidence in policymaking found that timing/timeliness increased the likelihood of research being used by policymakers [2, 9]. In the past, policymakers have not been able to search databases using terms familiar to them [10] but this, as we discuss below, has now changed.

A third key constraint relates to the degree to which systematic reviews can be easily understood and interpreted. Policymakers need access to user-friendly summaries of systematic reviews written in ways that highlight what they need to know to define a problem or characterise the costs and consequences of potential options to address the problem. In the past, even if searches were successful, they may have retrieved structured abstracts and full reviews that had been written in a way that failed to highlight the types of information that policymakers were seeking [10]. Again, as we explain below, this situation has also changed.

# **Questions to consider**

The following questions can guide policymakers in the process of finding systematic reviews to inform policymaking:

- 1. Is a systematic review really what is needed?
- 2. What databases and search strategies can be used to find a relevant systematic review?
- 3. What alternatives are available when no relevant review can be found?

# 1. Is a systematic review really what is needed?

Before conducting a search for systematic reviews it is first necessary to confirm whether a systematic review is really what is needed. Systematic reviews may be appropriate if, for example, a policy question that is posed addresses a specific health system arrangement, or a specific programme, service or drug. They may also be useful for specific implementation strategies that target consumers and healthcare providers (with or without some specification of the people, comparisons, and outcomes of interest). Article 4 in this series addresses how to structure/present questions related to the impacts of options [5].

But an overview of systematic reviews could provide helpful information if the question to hand relates to a broad category (or several broad categories) of health system arrangements, programmes, services or drugs or implementation strategies targeting consumers and healthcare providers. Many policymakers for example, found a particular overview of systematic reviews helpful because it examined the impacts of a full array of policy and programme options that could be used to improve the supply, distribution, efficient use and performance of healthcare providers [11]. A policy brief that draws on a range of systematic reviews could also prove to be helpful if the question posed addresses a spectrum of concerns ranging from problem definition, the framing options and the characterisation of their costs and consequences, through to key implementation considerations. Policy briefs are described in further detail in Article 17 in this series [12]. The Program in Policy Decision-Making/Canadian Cochrane Network and Centre (PPD/CCNC) database described below in this article could prove helpful in finding both overviews of systematic reviews and policy briefs, as well as systematic reviews. If a question pertains to local evidence, such as on-the-ground realities and constraints, the values and beliefs of citizens, interest group power dynamics, institutional constraints, and donor funding flows, systematic reviews are likely to be unhelpful. Article 6 in this series addresses considerations related to finding and using local evidence to inform policymaking processes [13].

### 2. What databases and search strategies can be used to find a relevant systematic review?

When it has been decided that a systematic review is needed, and when the question that the review needs to address relates to the impacts of (or more generally what is known about) health system arrangements, the PPD/CCNC database can be prioritised for searching. This is because it is accessible without charge, it has a particular focus on health system arrangements, and it provides links to user-friendly summaries (and, in their absence, scientific abstracts) (see Table 1 for a description of this and other databases). This database captures both systematic reviews that address questions about impacts *and* systematic reviews that address other types of questions.

However, if the question that a review should answer relates to the characterisation of the impacts of programmes, services or drugs, or of implementation strategies targeting consumers and healthcare providers, then policymakers can also access two databases used more commonly by healthcare providers. (Please refer to the 'Links to websites' within the 'Resources' section of this paper for links to the databases mentioned.) The Cochrane Library, and specifically the Cochrane Database of Systematic Reviews, captures only systematic reviews that address questions about impacts (see Table 1). PubMed captures systematic reviews that address many types of questions. *Hedges* (i.e. validated search strategies) are available to assist with finding systematic reviews in PubMed. Hedges are also used to find systematic reviews in three other databases: CINAHL, EMBASE, PsychInfo (see Appendix 1 of this article).

Two additional points are important to consider. Firstly, within any of the databases, policymakers who are interested in characterising impacts, and who are pressed for time, may want to give priority to reviews produced by the Cochrane Collaboration (otherwise known as Cochrane reviews). These reviews have been found to be of higher quality and are updated more frequently than reviews produced by other groups [14]. Secondly, while health technology assessments (or HTAs) *should* typically include a range of economic, social, ethical and legal

considerations, as well as a review of the research evidence about the effectiveness of a technology, some HTA reports contain a systematic review that can be applied in contexts other than the one for which the report was produced.

Box 1 in this article provides an example of how groups of policymakers and those who support them can work together to find reviews to address a high-priority issue.

# 3. What alternatives are available when no relevant review can be found?

Despite improvements in the ease with which policymakers can search and find systematic reviews in available databases, there will be occasional instances when no review can be found. If policymakers are able to wait 6-18 months (depending on the complexity of the question being asked) and have the necessary resources, one option could be to commission a systematic review from an experienced research group [10]. If, however, the available timeline is shorter than this, or resources are limited, policymakers can search for single studies instead. In doing so, they should be aware though that they are essentially conducting a review themselves, and they should do this as systematically as possible. They should, in such situations, take into consideration issues related to assessing the reliability of reviews and how to critically appraise the findings. These are discussed in further detail in Article 7 in this series [15].

Particular databases can also be prioritised when looking for single studies and PubMed, which includes over 20 million records, is often a good starting point. When searching PubMed, hedges can be used to restrict searches to the types of studies most relevant to a particular type of question. Hedges are also available for other databases. (Please refer to the 'Resources' section of this paper for a list of links to sample hedges.)

Some policymakers will only require this basic level of detail related to finding systematic reviews or single studies, if they have access to subscription databases and are able to rely on the expertise of librarians (Please see Appendix 1 for a list of subscription access databases), either within their own organisation or through colleagues in other universities and settings. We have summarised additional details about high-priority databases in which to search for systematic reviews, including their content, how they can be searched, and what information is returned from a search results (see Table 1). This is particularly useful for policymakers who want to gain access to additional information in order to establish clear expectations among those who support them, as well as for policymakers and librarians who will be conducting searches on their own,

Two additional points are worth noting. Firstly, there has been a steady growth in the number of groups and organisations providing user-friendly summaries that highlight the decision-relevant information contained in systematic reviews. Such summaries are usually/typically an excellent place for policymakers to start. Article 17 in this series provides additional detail about these summaries [12]. Secondly, terms have been identified for PubMed in order to help with the identification of systematic reviews focused on low- and middle-income countries. This is particularly useful for policymakers based in these countries. (Appendix 2 provides the terms used in a search for systematic reviews focused on low- and middle-income countries.)

While many of the databases prioritised above provide free online access, such access does not

often include full-text systematic reviews. In such cases, policymakers, those who support them, and librarians will need to make use of the mechanisms that have been created to allow for the full-text retrieval of the systematic reviews identified through their database searches and at little or no cost (see Table 2 for a list of mechanisms through which full-text systematic reviews can be accessed at little or no cost). Three key options are available:

- 1. The Health Inter Network Access to Research Initiative (HINARI) provides institutions in low-income countries with free access
- 2. The Cochrane Library which provides free access in low-income countries and in countries with a national subscription, and
- 3. Journals that make their content available free of charge either as soon as they are published or after a defined period of time (e.g. one year).

Three additional methods warrant mention. It may be worthwhile identifying the institution where the authors of a review are based in case they have made it available free of charge on their institution's website. It may also be possible to contact the authors directly by email. Finally, Google Scholar may be used to track down a full-text review if the review is in the public domain and the correct citation is known.

# Resources

### Useful documents and further reading

 McKibbon A, Wyer P, Jaeschke R, Hunt D. Finding the evidence. In Guyatt G, Rennie D, Meade MO, Cook DJ (Editors). Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice. Second Edition. New York: McGraw Hill Medical, 2008; pp. 29-58.

# Links to websites

- Program in Policy Decision-making/Canadian Cochrane Network and Centre (PPD/CCNC) database – Source of systematic reviews of studies about health system arrangements (benefits, harms, key features, and the views and experiences of stakeholders) www.researchtopolicy.ca/search/reviews.aspx
- Cochrane Library's Cochrane Database of Systematic Reviews (CDSR) and Database of Abstracts of Reviews of Effects (DARE) – Source of systematic reviews of programmes, services and drugs (including benefits and possibly harms) <u>http://thecochranelibrary.com</u>

http://www.york.ac.uk/inst/crd/signup\_form.htm (to sign up for electronic updates)

PubMed – Source of systematic reviews addressing a range of questions, as well as single studies

http://www.ncbi.nlm.nih.gov/pubmed/

http://www.ncbi.nlm.nih.gov/corehtml/query/static/clinical.shtml#reviews (to use the 'hedge' for reviews)

 Health Information Research Unit – Source of 'hedges' (i.e. validated search strategies) to find systematic reviews and a variety of types of studies <u>http://hiru.mcmaster.ca/hiru/hiru\_hedges\_home.aspx</u>

# Box 1: Finding reviews to support the widespread use of artemisinin-based combination therapy to treat malaria

Evidence-Informed Policy Network (EVIPNet) teams from seven African countries, consisting of both policymakers and researchers, wanted to come to grips quickly with several broad categories of health system arrangements that could support the widespread use of artemisinin-based combination therapy (ACT) to treat malaria. Their search identified three overviews of systematic reviews. The first overview was still in progress and focussed on the impacts of particular governance arrangements related to prescription drugs like ACT [16]. The second, completed overview focused on the impacts of alternative financial arrangements in health systems more generally [17]. And the third completed overview focused on the impacts of alternative human resources for health (HRH) configurations [11]. Their search also identified an overview of systematic reviews of the impacts of implementation strategies targeting healthcare providers [18].

Once they had read the overviews of systematic reviews, the policymaker/researcher teams searched for systematic reviews in domains not covered by the overviews. They found:

- 1. Two systematic reviews about governance arrangements. One addressed the impacts of consumer involvement in decision making and the second addressed governance arrangements related to the private sector (however, the latter review is not a review of impacts *per se*)
- 2. Six systematic reviews of the impacts of specific financial arrangements, including incentives for patients (i.e. conditional cash transfers), incentives for prescribers, physician-remuneration arrangements more generally, contracting with the for-profit sector to improve healthcare delivery, and reference pricing, other pricing and purchasing policies, as well as one systematic review about what is known about financial arrangements within the private sector (again, this latter study was not a review of impacts as such), and
- 3. Five systematic reviews of the impacts of specific HRH configurations, including homebased management, lay health workers, and the expansion of the role of outpatient pharmacists and *either* nurses or nurse practitioners instead of physicians. In addition, one systematic review was found about the activities of medicine sellers and how their practice can be improved (this, too, was not an actual review of impacts)

Given that the WHO malaria treatment guidelines published in 2006 were based on a comprehensive search for systematic reviews about the impacts of anti-malarial drugs, the teams were able therefore to restrict their additional searches to the time period that followed. Six systematic reviews were found about anti-malarial drugs published in 2006 or 2007 and one systematic review about unit-dose packaged anti-malarial drugs.

The searches undertaken by the teams also allowed them to supplement the overview of systematic reviews of the impacts of implementation strategies with seven additional systematic reviews of the impacts of different strategies for achieving desired outcomes. These outcomes included the dissemination and implementation of guidelines, the implementation of guidelines among allied health professionals specifically, influencing prescribing and dispensing, changing medication use, improving antibiotic prescribing in ambulatory care and in hospitals, and the enhancement of medication adherence. Seven systematic reviews were also found on of the impacts of specific strategies for bringing about change, including audit and feedback,

computerised drug-dosage support, continuing-education meetings, educational-outreach visits, local opinion leaders, mass media campaigns, and tailored efforts to identify identified barriers to change.

The teams found no systematic reviews of studies examining the feasibility and acceptability of ACT for the home-based management of malaria. They therefore conducted a search for single studies on this topic. One study was found which was conducted in four African sites, and which was published in *Malaria Journal*.

#### **Table 1: Databases to search for systematic reviews**

Database	Comments
PPD/CCNC database	<ul> <li>Features</li> <li>Accessible online at no co</li> <li>Focused exclusively on g within health systems</li> <li>Contains Cochrane review reviews that address other studies), as well as overvit</li> <li>Provides links to user-fries scientific abstracts</li> </ul>
	<ul> <li>What is in it?</li> <li>Systematic reviews that a financial and delivery arra</li> <li>Overviews that identify a address a specific health to be a specific health to</li></ul>
	<ul> <li>How can it be searched?</li> <li>Type of governance, finat the relevant category)</li> <li>Type of systematic review of impacts, and review ad</li> <li>Type of overview, namely policymakers and overview researchers</li> </ul>
	<ul> <li>What is available for search</li> <li>Link(s) to a user-friendly information (when they end of the search of the search</li></ul>

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#### cost

governance, financial and delivery arrangements

ws of impacts, other reviews of impacts, and er types of questions (e.g. reviews of qualitative iews of systematic reviews and policy briefs endly summaries (when they exist) and to

ddress any type of question about governance, rangements within health systems and synthesise the many systematic reviews that policy and systems issue or challenge

ncial and delivery arrangement (by clicking on

w, namely review of impacts, Cochrane review ddressing another type of question ly policy brief written primarily for ew of systematic reviews written primarily for

# ch results?

summary that highlights decision-relevant xist) Centre (ACC) Policy Liaison Initiative akers in Australia) of Reviews of Effects (DARE) (primarily for out no limitations per se) Research Programme Consortium (primarily rs and policymakers in low- and middle-income

rimarily for public health practitioners and

<u>library</u> (primarily for reproductive health ymakers) rily for policymakers interested in influencing

Database	Comments
	prescribing behaviour)
	– <u>SUPPORT</u> (primarily fo
	countries)
	• Link(s) to a scientific abstr
	• Link(s) to the full text (whi
	fee)

or policymakers in low- and middle-income

tract (when they exist) hich may require a subscription or an access

Database	Comments
Cochrane Library	Features
	• Online version (without full-
	Contains health-focused Coc
	Database of Systematic Revi
	(Database of Abstracts of Re
	Assessment Database     Cochrane Database of System
	abstracts and user-friendly su
	provides links to user-friend
	Assessment Database provid
	What is in it?
	• Systematic reviews that addr
	health service/system and pu
	as health technology assessn
	systematic review)
	How can it be searched?
	• Search the entire Cochrane I
	relevant constituent database
	- Cochrane Database of Sys
	according to defined stars
	- DARE (i.e. systematic rev
	produced them): Note that
	database can be searched
	summary prepared by the
	- Health Technology Assess
	assessments, which may c
	most up-to-date version of
	and that most reviews hav
	prepared by the Centre for
	the full text (which typica
	100)
	What is offered/provided for
	• A user-inendly summary that for all reviews in DAPE (wi
	workload)
	A lay summary for all Cochr
	• A scientific abstract for all C
	• Link(s) to the full text for al

ll-text reviews) accessible at no cost ochrane reviews of impacts (Cochrane views) and other reviews of impacts Reviews of Effects and Health Technology

ematic Reviews provides access to scientific summaries (targeted at lay people), DARE dly summaries, and the Health Technology ides access to structured scientific abstracts

dress questions about the impacts of clinical, public/population health interventions, as well sments (many of which will contain a

Library or (separately) one of its two most ses

ystematic Reviews (i.e. systematic reviews of mbers of the Cochrane Collaboration ndards)

eviews of impacts with no restriction on who hat the most up-to-date version of this d separately and that most reviews have a lay e Centre for Reviews and Dissemination <u>essment Database</u> (i.e. health technology v contain a systematic review): Note that the of this database can be searched separately ave a summary of the HTA's objective for Reviews and Dissemination and a link to cally does not require a subscription or access

# or search results?

hat highlights decision-relevant information with some time delay depending on staff

hrane reviews Cochrane reviews Il Cochrane reviews (which requires a

Database	Comments
PubMed/MEDLINE	<ul> <li>Features</li> <li>Accessible online at no cost</li> <li>Contains many types of hea reviews, however, a hedge i (including Cochrane reviewe</li> <li>Contains only peer-reviewe</li> </ul>
	<ul> <li>Provides links to scientific a</li> </ul>
	<ul> <li>What is in it?</li> <li>Both studies and systematic that may be addressed in the and public/population health</li> </ul>
	<ul> <li>How can it be searched?</li> <li>Combine content terms AN with the terms selected here specificity of a search (emp (Montori et al. 2005) <ul> <li>Cochrane Database Syst I meta-analysis[Publication (systematic[Title/Abstract</li> </ul> </li> <li>Possibly combine also with focused on particular jurisdian income countries) – See Approximation (Systematics) – See Approxim</li></ul>
	<ul> <li>What is offered/provided for</li> <li>A scientific abstract (when a</li> <li>Link(s) to the full text (which fee)</li> </ul>
	<ul> <li>Notes</li> <li>There is also a version of M (OVID/MEDLINE)</li> <li>PubMed contains many type</li> </ul>

- alth-focused studies, not just systematic is available to find systematic reviews /s)
- ed articles (i.e. no grey literature) abstracts only

c reviews that address any type of question e biomedical, clinical, health service/system th literature

ID terms that will yield systematic reviews, e designed to balance the sensitivity and phasising specificity over sensitivity)

Rev [TA] OR search[Title/Abstract] OR on Type] OR MEDLINE[Title/Abstract] OR act] AND review[Title/Abstract]) terms that will identify systematic reviews ictions or regions (e.g. low- and middleopendix 2

# r search results?

they exist) ich may require a subscription or an access

EDLINE that requires a subscription

• PubMed contains many types of health-focused studies, not just studies of impacts, and hedges are available for many types of studies

# Table 2: Mechanisms through which to retrieve at little to no cost full-text systematic reviews that have been identified through database searches

Mechanism	Comments
HINARI	<ul> <li>Who is eligible to use it?</li> <li>Institutions in select low- and mid or low-cost access – to check if an whether an institution is located in access, go to: <u>HINARI</u></li> </ul>
	<ul> <li>How can it be accessed?</li> <li>An institution must register and al</li> <li>Alternatively if a computer is recousers may access <u>Highwire Free A</u> includes HINARI and select other</li> </ul>
	<ul><li>What resources are provided for r</li><li>A scientific abstract and full-text a</li></ul>
Cochrane Library	<ul> <li>Who is eligible to use it?</li> <li>Institutions in select countries hav region) is covered by a programme subscription, go to: <u>Cochrane Libr</u></li> </ul>
	<ul><li>How can it be accessed?</li><li>Country-or region-specific access</li></ul>
	<ul> <li>What resources are provided for r</li> <li>A scientific abstract, lay summary reviews, as well a summary of sor constituent databases described in</li> </ul>

#### Note

• Cochrane Library can also be accessed through HINARI

Idle-income countries have either free access institution is already registered and, if not, n a country that is eligible for free or low-cost

ll staff are then given unlimited access ognised as being based in an eligible country, Access for Developing Countries (which resources)

research results? article for all included journals

ve free access – to check if your country (or he for low-income countries or by a <u>rary</u>

details are available at the same site

### research results?

, and full-text review for all Cochrane me form for the three most relevant Table 3

Mechanism	Comments
Journals	Who is eligible to use them?
	• Anyone
	How can they be accessed?
	• Websites of open-access journal p
	<ul> <li>– <u>BioMed Central</u> (journals begin</li> </ul>
	<ul> <li><u>OpenJournals Publishing</u> (many</li> </ul>
	select others)
	<ul> <li>– <u>Public Library of Sciences</u> (jour</li> </ul>
	<ul> <li>– <u>SciELO (Scientific Electronic L</u></li> </ul>
	America and the Caribbean)
	• Directories of open-access and/or
	<ul> <li><u>Director of Open Access Journa</u></li> </ul>
	<ul> <li>Free Medical Journals</li> </ul>
	– <u>Open J-Gate</u>
	Repositories through which journa
	after a defined time period)
	<ul> <li>– <u>PubMed Central</u></li> </ul>
	<ul> <li><u>Bioline International</u> (journals f</li> </ul>
	South Africa, Uganda, Zimbaby
	What resources are provided for r
	• A scientific abstract and full-text a

publishers nning with BMC and select others) y journals beginning with 'South African' and

rnals beginning with PLoS) Library Online) (many journals from Latin

free journals als

al publishers make available articles (often

from Brazil, Cuba, India, Indonesia, Kenya, we)

research results? article for all included journals

Database	Comments
CINAHL	What is in it?
	• Both studies and systematic reviews the
	(i.e. not just reviews of impacts) that n
	allied health literature
	How can it be searched?
	• Combine content terms AND terms that
	with the terms selected here designed t
	specificity of a search [19]
	<ul> <li>Confidence intervals.sh OR dt.fs OF</li> </ul>
	• Possibly combine also with terms that
	focused on particular jurisdictions or r
	income countries)
	What resources are provided for searc
	• A scientific abstract (when they exist)
<b>EMBASE</b>	What is in it?
	• Both studies and systematic reviews the
	may be addressed in the biomedical an
	How can it be searched?
	• Combine content terms AND terms that
	with the terms selected here designed t
	specificity of a search [20]
	<ul> <li>Meta-analys:.mp. OR search:.tw. Ol</li> </ul>
	• Possibly combine also with terms that
	focused on particular jurisdictions or r
	income countries)
	What resources are provided for searc
	• A scientific abstract (when they exist)

# Appendix 1: Databases that require subscription access and ideally the support of a librarian

eviews that address any type of question ts) that may be addressed in the nursing and

terms that will yield systematic reviews, lesigned to optimise the sensitivity and

dt.fs OR review.pt erms that will identify systematic reviews tions or regions (e.g. low- and middle-

for search results?

eviews that address any type of question that edical and clinical literature

terms that will yield systematic reviews, lesigned to optimise the sensitivity and

ch:.tw. OR review.pt. erms that will identify systematic reviews tions or regions (e.g. low- and middle-

for search results?

Database	Comments
PsycINFO	What is in it?
	• Both studies and systematic may be addressed in the psyc
	How can it be searched?
	<ul> <li>Combine content terms AND with the terms selected here a specificity of a search [21]         <ul> <li>Control:.tw. OR effectiver.</li> </ul> </li> <li>Possibly combine also with t focused on particular jurisdic income countries)</li> </ul>
	<ul> <li>What resources are provided</li> <li>A scientific abstract (when the second s</li></ul>
Other databases	<b>Bagion-specific interfaces to</b>
for which optimal methodology	<u>Virtual Health Library</u> (Latin
filters for	Regional databases
systematic reviews	African Index Medicus
have not yet been	African Journals Online
developed	• Index Medicus for the WHO
	• Index Medicus for South-East
	• LILACS (Latin America and
	<u>Western Pacific Region Inde</u>
	Global databases with specifi
	• <u>EconLit</u> (Economics)
	• International Bibliography of
	International Political Science
	• <u>ISI Web of Science</u> (Arts and
	citation indices)
	• PAIS (Public Attairs Information PAIS)
	Sociological Abstracts (Socio
	<u>Wilson Business Abstracts</u> (I     Worldwide Political Science
	• <u>worldwide Political Science</u>
	<b>Disease/condition databases</b> • <u>TropIKA</u> (Tropical diseases)

reviews that address any type of question that chology literature

D terms that will yield systematic reviews, designed to optimise the sensitivity and

ness.tw. OR risk:.tw. terms that will identify systematic reviews ctions or regions (e.g. low- and middle-

for search results? hey exist)

several of the above-mentioned databases n America and Caribbean Region)

Eastern Mediterranean Region ast Asian Region Caribbean Region) ex Medicus

# ic disciplinary areas of focus

of the Social Sciences (Social sciences) <u>ce Abstracts</u> (Political science) d humanities, sciences, and social sciences -

nation Service) International (Public affairs) iology) Management) <u>Abstracts</u> (Political science)

# Appendix 2: Terms that will identify in Ovid MEDLINE systematic reviews focused on lowand middle-income countries

1. Developing Countries/

2. Medically Underserved Area/

3. Africa/ or "Africa South of the Sahara"/ or Asia/ or South America/ or Latin America/ or Central Amedica/

4. (Africa or Asia or South America or Latin America or Central America).tw.

5. (American Samoa or Argentina or Belize or Botswana or Brazil or Bulgaria or Chile or Comoros or Costa Rica or Croatia or Dominica or Equatorial Guinea or Gabon or Grenada or Hungary or Kazakhstan or Latvia or Lebanon or Libya or Lithuania or Malaysia or Mauritius or Mexico or Micronesia or Montenegro or Oman or Palau or Panama or Poland or Romania or Russia or Seychelles or Slovakia or South Africa or "Saint Kitts and Nevis" or Saint Lucia or "Saint Vincent and the Grenadines" or Turkey or Uruguay or Venezuela or Yugoslavia).mp. or Guinea.tw. or Libia.tw. or libyan.tw. or Mayotte.tw. or Northern Mariana Islands.tw. or Russian Federation.tw. or Samoa.tw. or Serbia.tw. or Slovak Republic.tw. or "St Kitts and Nevis".tw. or St Lucia.tw. or "St Vincent and the Grenadines".tw. [UMIC]

6. (Albania or Algeria or Angola or Armenia or Azerbaijan or Belarus or Bhutan or Bolivia or "Bosnia and Herzegovina" or Cameroon or China or Colombia or Congo or Cuba or Djibouti or Dominican Republic or Ecuador or Egypt or El Salvador or Fiji or "Georgia (Republic)" or Guam or Guatemala or Guyana or Honduras or Indian Ocean Islands or Indonesia or Iran or Iraq or Jamaica or Jordan or Lesotho or "Macedonia (Republic)" or Marshall Islands or Micronesia or Middle East or Moldova or Morocco or Namibia or Nicaragua or Paraguay or Peru or Philippines or Samoa or Sri Lanka or Suriname or Swaziland or Syria or Thailand or Tonga or Tunisia or Turkmenistan or Ukraine or Vanuatu).mp. or Bosnia.tw. or Cape Verde.tw. or Gaza.tw. or Georgia.tw. or Kiribati.tw. or Macedonia.tw. or Maldives.tw. or Marshall Islands.tw. or Palestine.tw. or Syrian Arab Republic.tw. or West Bank.tw. [LMIC]

7. (Afghanistan or Bangladesh or Benin or Burkina Faso or Burundi or Cambodia or Central African Republic or Chad or Comoros or "Democratic Republic of the Congo" or Cote d'Ivoire or Eritrea or Ethiopia or Gambia or Ghana or Guinea or Guinea-Bissau or Haiti or India or Kenya or Korea or Kyrgyzstan or Laos or Liberia or Madagascar or Malawi or Mali or Mauritania or Melanesia or Mongolia or Mozambique or Myanmar or Nepal or Niger or Nigeria or Pakistan or Papua New Guinea or Rwanda or Senegal or Sierra Leone or Somalia or Sudan or Tajikistan or Tanzania or East Timor or Togo or Uganda or Uzbekistan or Vietnam or Yemen or Zambia or Zimbabwe).mp. or Burma.tw. or Congo.tw. or Kyrgyz.tw. or Lao.tw. or North Korea.tw. or Salomon Islands.tw. or Sao Tome.tw. or Timor.tw. or Viet Nam.tw. [LIC]

8. ((rural or remote or nonmetropolitan or underserved or under served or deprived or shortage) adj (communit\$ or count\$ or area? or region? or province? or district?)).tw.

9. ((developing or less\$ developed or third world or under developed or poor\$) adj (communit\$ or count\$ or district? or state? or province? or jurisdiction? or nation? or region? or area? or territor\$)).tw.

10. ((middle income or low income or underserved or shortage) adj (communit\$ or count\$ or district? or state? or province? or jurisdiction? or nation? or region? or area? or territor\$)).tw. 11. (lmic or lmics).tw.

12. or/1-11

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Notes:

1. The filter is based on the World Bank country list of upper-middle-income economies (UMIC), lower-middle-income economies (LMIC), and low-income economies (LIC), which is available at the following URL:

http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:204214 02~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html.

2. The filter has not yet been tested and we will need to replace it with the tested PubMed filter before publication

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