SuRe Info:
Keeping up-to-date with information retrieval research

Health Technology Assessment international
An International Society for the Promotion of Health Technology Assessment

David Kaunelis, CADTH
Sari Susanna Ormstad, NOKC
Content of the session

• Project background
• Objective of the project
• Project team
• Structure and content of SuRe Info
• Development process
• Plans for the upcoming year
Challenge

To stay up-to-date on the latest developments within information retrieval for systematic reviews, health technology assessments and other evidence syntheses.
HTAi Interest Sub-Group on Information Resources (IRG)

Information Resources

HTAi Interest Sub-Group on Information Resources (IRG)

The Information Resources Group (IRG) of HTAi is an Interest Sub-Group for individuals who provide the information resources, conduct research, and develop information management issues that support HTA decision making. Members of the IRG are staff members of HTA organizations, government departments and agencies, for profit and not for profit firms, consultants and experts, and all those who use, provide, or otherwise support HTA information needs.

The IRG was established in 1997 as a Special Interest Group of ISTAHIC, and has continued as an Interest Sub-Group of HTAi since the launch of HTAi in 2003. The IRG has around 150 members working in a wide variety of capacities to support informed decision HTA decision making.

- **Access ISG files and resources**

**Group activities**

The IRG is active in developing, collaborating on, and promoting information retrieval methods and technologies appropriate to HTA

- developing and maintaining the HTAi Vortal, a web based source of HTA information available to anyone;
- leading full-day workshops, panel sessions and educational courses at HTAi’s Annual Meetings; and,
- exchanging information and sharing expertise for advancing processes, methodology and tools.

**Membership**

All members of HTAi are welcome to join the IRG, requests to join can be sent via the IRG e-mail listserv. Please note that non-HTAi members may join the IRG; however requests to join by non-members must be sent to the HTAi Secretariat for confirmation and approval by the IRG chair.

**IRG Chairmanship and Executive Committee:**

Catherine Voutier, Chair (Australia) 2011-2013
David Kauneis, Chair Elect (Canada) 2011-2013
Sue Golder, Executive Committee member (UK) 2011-2013
Liz Dennett, Executive Committee member (Canada) 2011-2013

Past Chairs
San Ormstad, Chair (Norway) 2009-2011
Nalene Fabricius Jensen (Denmark). 2007-2009
Objective

To develop a web resource providing research-based information relating to the information retrieval aspects of producing systematic reviews and health technology assessments.
Project team

- Sari Ormstad, NOKC, Norway
- Jaana Isojärvi, Finohta, Finland
- Patrice Chalon, KCE, Belgium
- Sigrid Droste, IQWiG, Germany
- Steven Duffy, CRD, UK
- Julie Glanville, YHEC, UK
- Su Golder, CRD, UK
- David Kaunelis, CADTH, Canada
- Carol Lefebvre, Lefebvre Associates Ltd, UK
SuRe Info

Summarized Research in Information Retrieval for HTA
SuRe Info is:

- An open access website
- A selection of up-to-date methods papers presented through summarized overviews

SuRe Info is not:

- A methods handbook
- A comprehensive bibliography containing all published research evidence
Main target group

Information specialists and others who work with information retrieval for systematic reviews and health technology assessments
Published as part of the HTAi Vortal

HTA producers and networks
- All
- Africa
- America, North
- America, South
- Asia
- Europe
- Oceania
- International Organisations
- Search Websites of agencies

Selected resources
- Read me first
- Basics of HTA
- Data and statistics
- Emerging technologies
- HTA Guidelines & Resources
- Health Economics
- Measuring Health Outcomes
- Pharmacoeconomics
- Policy forum
- Reference tools
- Searching the HTA Literature

SuRe Info
- Introduction
- Health problem and current use
- Description and technical characteristics
- Safety
- Diagnostic accuracy
- Clinical effectiveness
- Costs and economic evaluation
- Appraisals catalogue

Career development
- Training
- Scholar-intern-fellow-ships
- Conferences
- Jobs

Summarized Research in Information Retrieval for HTA
Author(s):
Jaana Isacjivi
Sari Susanna Ormstad

Welcome to the Summarized Research in Information Retrieval for HTA (SuRe Info), a web resource that summarizes and maps the current research evidence within information retrieval for HTA. SuRe Info is currently under development and will be launched in June 2013.

http://vortal.htai.org/
SuRe Info consists of two sections

1. Information on general search methods common across all HTAs

2. Methods to use when searching for specific aspects of HTA
1. General search methods

- Sources to search
  - How many sources to search?
  - Value of searching different sources
  - Value of searching for different publication types/formats
  - Service providers and search interfaces
1. General search methods - continued

- Designing search strategies
  - Strategy development
  - Search filters
  - Other limits: language, date

- Peer reviewing of search strategies

- Documenting and reporting the search process
2. Searching for specific aspects of HTA

The HTA Core Model® developed by the EUnetHTA (www.eunethta.eu):

- Health problem and current use of technology
- Description and technical characteristics of technology
- Safety
- Diagnostic accuracy
- Clinical effectiveness
- Costs and economic evaluation
- Ethical analysis
- Organizational aspects
- Social aspects
- Legal aspects
Main menu

General search methods

- Sources to search
- Designing search strategies
- Peer reviewing search strategies
- Documenting and reporting search process

Searching for specific aspects of HTA

- Health problem and current use of technology
- Description and technical characteristics of technology
- Safety
- Diagnostic accuracy
- Clinical effectiveness
- Costs and economic evaluation
- Ethical analysis
- Organizational aspects
- Social aspects
- Legal aspects
Chapter

Safety

Author(s):
Carol Lefebvre
David Kaulesis
Jaana Isojärvi
Sari Susanna Ormstad

Introduction

The definition for and the terminology associated with safety in the context of HTA have not been standardized (1). Terms used include: adverse effects, adverse events, complications, harms, hazards, risks, safety, side-effects, tolerability and toxicity. This chapter uses the term adverse effects to be consistent with the literature discussing information-seeking issues within this field.

There are many different types of adverse effects issues and there can be legitimate differences in the way an assessment may be undertaken (2). Searching for information about adverse effects can be problematic due to inadequate reporting and inconsistent terminology and indexing (1).

Sources to search

Relying solely on MEDLINE is not recommended, as it is unlikely to be a comprehensive source on adverse effects information (3).

A wide range of sources needs to be used for the search to be thorough and in order to provide the best results (4). In a systematic review (3) and a case study of a single drug (4) Golder and Loke identified a combination of sources and techniques that might be expected to provide comprehensive information on adverse effects (in alphabetical order):

- AHFS First (American Hospital Formulary Service)
- BIOSIS Previews
- British Library Direct
- Conference Papers Index
- Derwent Drug File
- Embase
- Handsearching and reference checking
- MEDLINE
- Medscape DrugInfo
- Science Citation Index
- Thomson Reuters Integrity
- Websites and registers of pharmaceutical companies

Golder et al. found that unpublished data such as company clinical trials reports and drug approval information could be valuable sources of adverse effects information (5).

The HTA Core Model® recommends recommends the following additional sources: product data sheets, national and international safety monitoring systems, disease and technology registers, routinely collected statistics from health care institutions and Internet discussion forums (1, 2).

Designing search strategies

In a study conducted in 2012, Golder and Loke found that adverse effects terms were increasingly prevalent in the title, abstract and indexing of adverse effects papers in MEDLINE and Embase (6). They concluded, therefore, that reviewers could, with some caution, choose to use
Reference list

(1) EUnetHTAWork Package 4. HTA Core Model® for Diagnostic Technologies v. 1.0r; 2008. [Further reference details] [Publication appraisal] [Free Full text]
(2) EUnetHTA Work Package 4. HTA Core Model® for Medical and Surgical Interventions v. 1.0r; 2008. [Further reference details] [Publication appraisal] [Free Full text]
(3) Golder S, Loke YK. Sources of information on adverse effects. Health Info Libr J 2010;27(3):176-190. [Further reference details] [Publication appraisal] [Free Full text]
(5) Golder S, Loke YK, Bland M. Unpublished data can be of value in systematic reviews of adverse effects: methodological overview. J Clin Epidemiol 2010;63(10):1071-1081. [Further reference details] [Publication appraisal] [Free full text]
(6) Golder S, Loke YK. Failure or success of electronic search strategies to identify adverse effects data. J Med Libr Assoc 2012;100(2):130-134. [Further reference details] [Publication appraisal] [Free Full text]

Reviewer(s):
Carol Lefebvre
Sari Susanna Ormstad

Full Reference:
Sensitivity and precision of adverse effects search filters in MEDLINE and EMBASE: a case study of fractures with thiazolidinediones.

Short description:
A systematic review of fracture-related adverse effects associated with the use of thiazolidinediones was used as a case study to calculate the sensitivity, precision and Number Needed to Read (NNR) of published adverse effects search filters in MEDLINE and Embase. 12 MEDLINE filters and 3 Embase filters were tested.
The results showed that 4 search filters in MEDLINE achieved high levels of sensitivity (95 or 100%) with improved levels of precision compared with searches without any adverse effects filters. The highest level of precision in MEDLINE (55%) was achieved with search filters that relied only on subject headings (MeSH). No search filter in Embase achieved sensitivity higher than 83% and precision remained low using any of the filters (all under 5%).

Limitations stated by the author(s):
The main limitation to this study is that because only one systematic review was used as a case study, the generalisability of the study results is limited. In addition, this case study is of a particular named adverse effect (fractures), while a case study of a safety profile systematic review, in which all adverse effects are searched for, might have given different results.
Another limitation is the adaptations made to some of the tested search filters. These filters were originally created for use in searches where the adverse effects are not known in advance of searching, while in this case study, these filters were used in addition to search terms for a named adverse effect (fracture terms).

Limitations stated by the reviewer(s):
In addition to the limitation noted above by the authors, it should be noted that the number of included studies on which the search filters were tested was relatively small (19 records in MEDLINE and 24 records in Embase).
It should also be noted that the filters were tested as published. Testing of individual terms within the filters might have resulted in higher precision and better trade-off between sensitivity and precision than the full filters.

Study Type:
Single study

Related Chapters:
Safety

Tags: Safety
Publication appraisal template

Appraisal of:

- Reviewer(s)
- Full reference
- Short description
- Limitations stated by the study author(s)
- Limitations stated by the reviewer(s)
- Tags
- Study type
- Related chapter(s)
- Supplemental publications to the study
Controlled vocabulary to tag articles

A. The value of a publication type to SR/HTA; how to identify publication types
B. Designing strategies where the general principles are described
C. Designing strategies: specific
D. Other issues related to information retrieval research for HTA
E. Categories reflecting the elements which may be addressed within an HTA
F. Study design (using MeSH headings)
G. Topic area (using MeSH headings)
How do we identify studies?

• Create an initial collection of research papers:
  – Our own reference databases
  – Cochrane Handbook’s Searching for studies chapters
  – HTA Core Model handbooks
  – Search in the Cochrane Methodology Register
How do we identify studies? - continued

- Run chapter specific search strategies in selected relevant databases
- Set up alerts for prospective identification of evidence
- Get feedback from users
Inclusion criteria

1. Is the research question relevant to information retrieval for HTA?
2. Does the paper provide most up-to-date evidence on a specific methodological issue?
3. Does the paper include research findings of a completed scientific study or work?
4. Are the methods described sufficiently?
5. If search strategies are presented: are they documented transparent and reproducible?
Inclusion criteria - continued

6. Are the research findings still valid?

7. Are the conclusions verified by the presented results resp. is the research question answered sufficiently?

8. Are the results of the study or the project generalizable or usable to other HTA information specialists or transferable to other projects or studies?
How do we create the content?

- Two authors per chapter
- Chapter authors can not write appraisals for their own publications
- Texts prepared by non-English speakers are checked by an English speaker
- We try to avoid duplication of work and re-inventing the wheel
Workspace on the net for sharing and documenting

![Box Workspace](image-url)
<table>
<thead>
<tr>
<th>Current status of the SuRe chapters</th>
<th>Completed</th>
<th>In-process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on general search methods common across all HTAs</td>
<td>Peer reviewing search strategies</td>
<td>Documenting and reporting the search process</td>
</tr>
<tr>
<td>Methods to use when searching for specific aspects of HTA</td>
<td>Health problem and current use of technology Description and technical characteristics of technology Safety Diagnostic accuracy Costs and economic evaluation Legal aspects</td>
<td>Clinical effectiveness Ethical analysis</td>
</tr>
</tbody>
</table>
Plans for the upcoming year

- Maintain and keep the completed SuRe Info chapters up-to-date
- Provide further content to the website
- Invite additional IRG members to the project group
- Carry out targeted marketing
- Plan future evaluation of SuRe Info
SuRe Info aims to...

Contribute to an evidence-based information retrieval practice

Serve as a common platform for HTA information specialists in different countries
What can SuRe Info be used for?

- To keep up-to-date with information retrieval research
- To provide an overview of current evidence to those new to the field of information retrieval for systematic reviews and health technology assessments
- To find current evidence when updating search guidance of methods handbooks
Reference

Please visit:

http://vortal.htai.org/?q=sure-info
Thank you!
감사합니다

David Kaunelis
DavidK@cadth.ca

Sari Susanna Ormstad
sor@nokc.no