Information retrieval for HTA and Clinical Practice Guideline – Issue and Challenges faced

LianThye Sin, MaHTAs – slt@moh.gov.my
MaHTAs office in Putrajaya
MaHTAs and its products
MaHTAs

• Establish in 1995 - Health Technology Assessment unit was establish at MOH

• Since 2001 – Evidence based Clinical Practice Guidelines come under purview of the MaHTAS

• As of today 24 staff
Products

HTA reports

Rapid Review report

Clinical Practice Guidelines

Brief Information Report

Early Warnings
HTA/Rapid Review: Involvement of an information specialist

- Information specialist play a integral role
- Is deeply involved during priority setting through scoping searches
- Developing search protocol & discusses search strategy in collaboration with the project groups (reviewers/ the author) and issues at project kick off meeting
- Conducting the literature search
- IS are listed as HTA /Rapid Review authors
IS Involved at this stage for scoping search.

IS, reviewer:
Work together to develop the Search strategy. The IS is responsible for literature searching and report to the reviewer.
Defining the review question, inclusion criteria and product type

• The MaHTAS produces different types of reports depending on:
  – purpose of the product
  – the time frame for the work
• It is important to avoid duplication of work—we look for good systematic reviews before we start a new one.
• If there are relevant reviews it makes sense to build on the work others have done, rather than to start the process all over again
Defining the review question, inclusion criteria and product type

• Objectives and structuring the question(s) are discussed within the reviewers and content expert by using PICO
Databases

• Information specialists conduct searches in bibliographic databases
  – Cochrane Library (CDSR)
  – CRD Databases (HTA, DARE)
  – NHS Evidence
  – FDA
  – PUBMed and Ovid Medline
  – Embase
Databases

• Project teams conduct searches in other sources
  – Reference lists of included studies
  – Contact with pharmaceutical companies
Issues among IS & Reviewers

• Should we search both Medline and Pubmed?

• Should we put more effort into finding grey literature in general?
How to design Search Strategy

• **Finding relevant search terms**

• It is important to find relevant subject headings, text words and phrases that capture as many as possible of all relevant references, while avoiding unnecessary words that give many irrelevant references
How to design Search Strategy

• **Finding relevant search terms:**

• Information specialists
  – Check all selected bibliographic databases for relevant subject headings and text words
  – Test combinations of search terms
  – Send search terms for approval to the Reviewer BEFORE running the searches
Issues

• Search filters:
  – agree on standard search filters?
  – Difficult to understand search filters

• Peer-reviewing of search strategies
  – How to incorporate the PRESS checklist in daily practice?
  – Should the PRESS checklist be used to quality check search strategies in existing HTA reports and systematic reviews?
Reference Management

• The best way to handle large amounts of references, is to use a reference management program.

• The MaHTAS has access to Reference Manager (EndNOTE).
Reference Manager

• Information specialists download all fields from each database, import the references to EndNote and delete duplicates

• Separate databases are created for each project

• Project managers order articles through IS
Reporting Search

• Documenting the search process:

**Search Strategy Table**

**REVIEW QUESTION:** Is Biologics (Alefacept, Infliximab, Adalimumab, Etanercept, Golimumab, Ustekinumab)) safe and effective in treatment of plaque psoriasis?

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<tr>
<th>Date</th>
<th>Database</th>
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<th>Other Limit</th>
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Reporting searches

Methods section
- List of all databases searched
  – Date of search
  – Information of other sources searched
  – Limits applied
  – Cross-reference to the search strategies in the appendix

• The complete search strategies for each database in the appendix
CPG WORK PROCESS

- Literature search
- Selection of literature
- Critical appraisal
- Multidisciplinary committee
- Critical appraisal
- Analysis & synthesis of evidence
- Formulation of recommendations
- Draft guidelines
- Clinical audit indicators
- Review (external)
- HTA & CPG Council Endorsement
- TAC CPG Approval
- Refine draft guidelines
- Implementation strategies, research on utilisation
- Need for a CPG
- Protocol
- Clinical questions/CQ

Based on a CBO model
CPG – Involvement of an information specialist

• IS are usually involved early in the process and invited to attend the first meeting of project groups

• The coordinator develop the search strategies in collaboration with the development group members

• IS involved in retrieved the full text article requested by the group member

• IS are not listed as contributing authors
Challenges face

• Non librarian – lack of skill
• Databases
  – Electronic databases accessibility to ensure comprehensive search
  – Should search both Pubmed and Ovid Medline
• Update search
  – Ovid MEDLINE (ed, ep, dp, yr, up): which one to choose/how?