

# Swimming against the tide

Marie Anne Slaney  
Therapeutic Goods  
Administration  
January 2007



# Focus on:

- Why search strategy is so important
- Why federated search interfaces don't lend themselves to strategic searching

# Hierarchy of evidence

LEVEL	DESCRIPTION
1	Randomised controlled trials, systematic reviews, meta-analyses
2	Cohort studies
3	Case controlled studies, retrospective analyses
4	Case reports, case series, surveys
5	Expert opinion, clinical guidelines

# Reality check

Questions like:

- does treatment with x improve quality of life?
- might y be used to treat type 1 diabetes as well as type 2 ?
- should z be used in a patient with a history of heart problems?

are unlikely to have much high level evidence.

# Expert opinion is based on expert searching

Any analysis based on the literature is underpinned by the quality of literature searching which informs it.

# Searching is strategic

**A literature search is:**

*one or a series of structured enquiries*

to

*one or a series of information resources*

to match

*an original concept*

to

*the concepts embodied in the resources  
interrogated.*

# Searching is strategic

The search strategy should be transparent and as subject to scrutiny as the evidence retrieved by it.

# The case of the CAS number

	<b>aspirin</b>	<b>50-78-2</b>
PubMed	39,036	29,252
Medline on Ovid Jan week 2, 07	37,632	25 28,824 (with field code)
Scirus	38,361	27

# Today's riddle

- Question: when is an antibiotic not an antibiotic?
- Answer: When you compare the thesauri on Medline and Embase.

# Single search interface

Examples:

Dialog, DataStar, STN, Ovid,  
SilverPlatter

Multiple discrete databases  
formatted to search with a single  
interface

# Single search interface

- Single methodology for structuring items in databases
- Single powerful syntax for interrogation
- Multiple thesauri but each accessible to independent enquiry

# Federated search interface

Single syntax for interrogation

But underneath are

- Multiple document structures
- Multiple inaccessible syntaxes
- Multiple inaccessible concept structures

# Federated search interface

- Relatively limited syntax
- Unseen translator algorithms
- Restricted access to subject indexes, field searching, document structures.

# Searching is strategic

The search strategy should be methodical, transparent and as subject to scrutiny as the evidence retrieved by it.

# Finders not searchers?

- “For many searchers, the quality of the results matters less than the process—they just expect the process to be quick and easy.”
- “Users may not know what databases they are using or what fields are being searched....but do our users care?”

# Finders not searchers?

“Meta-searching, then, is a step backward, a way of avoiding the learning process”

# Searchers not finders

It is better to be a diligent searcher  
than a dubious finder

# Questions?

---

Marie Anne Slaney

marie.slaney@health.gov.au

# Swimming against the tide

Marie Anne Slaney  
Therapeutic Goods  
Administration  
January 2007

