Finding the Best Evidence

Owen Coxall
University of Oxford
Bodleian Health Care Libraries
Session objectives

- Formulate a focused question
- Turn a focused question into a search strategy
- Search TRIP & PubMed
Formulate a focussed question

Patient / Problem / Population
Intervention
Comparison
Outcome
**Scenario**

Gerry, has had a bad throat for a few days and it’s making him feel miserable. He goes to his friendly GP wanting some antibiotics. However, his doctor isn’t sure whether there’s any benefit in prescribing them. What’s the evidence?
Focused question

**P:** sore throat
**I:** antibiotics
**C:** no antibiotics
**O:** symptom relief

Are antibiotics effective in relieving symptoms of sore throat?
Quick search Demonstration

www.tripdatabase.com
Hands-on

- Formulate a focused question
  - Use your own question or one of the examples in your workbook
  - Record the search terms you’re using

- Run a quick search on TRIP
  www.tripdatabase.com
Run a full search strategy
Why bother?

- Too few results
- Too many results
- Irrelevant results
- Submitting a funding proposal
- Writing a guideline
- Conducting a systematic review
Develop a search strategy

Using **OR** then **AND** to **broaden** then **focus** the search

- **P**
  - Sore throat*
  - or
  - tonsillitis
  - or
  - pharyngitis

- **I**
  - Antibiotic*
  - or
  - antibacterial*
  - or
  - penicilllin

- **O**
  - Symptom relief
  - or
  - Symptom alleviation
Combine terms with OR

Pharyngitis OR sore throat – either term can be present
Combine terms with 
AND

Antibiotics AND sore throat – both terms must be present

antibiotics

sore throat
PubMed demonstration
www.pubmed.gov
Searching tips: PubMed

Subject searching - use MeSH
- Subject headings added to articles on Medline
- Search the MeSH Database

Finding similar articles – use the ‘Related articles’ link
Hands-on

- Take your focused question:
  - Run further searches on PubMed
    http://www.pubmed.gov
The Cochrane Library

- Specialist database including articles on clinical and cost effectiveness of interventions:
  - Systematic reviews – Cochrane Database of Systematic Reviews & DARE
  - RCTs – Central
  - Economic evaluations - NHSEED

- Free access in the UK at http://www.thecochranelibrary.com
- Other countries check “access options” at http://www.cochrane.org
The Cochrane Library:
www.thecochranelibrary.com
Hands-on

- Take your focused question:
  - Run a search on the Cochrane Library
    http://www.thecochranelibrary.com
Help

○ PubMed
  ● Short online tutorials
  ● Quick guides to PubMed – basics, MeSH search and MyNCBI

○ The Cochrane Library
  ● Online tutorial – several languages
    http://www3.interscience.wiley.com/aboutus/demo/
  ● User guides – several languages
    http://www3.interscience.wiley.com/cgi-bin/mrwhome/106568753/HELP_Cochrane.html
Resources

- Cochrane Library
  www.thecochranelibrary.com
- PubMed
  www.pubmed.gov
- TRIP
  www.tripdatabase.com
- Other sources – CEBM web-site – EBM tools
  www.cebm.net