Searching Systematically

Methods for finding 'all' evidence on a topic

iSkills workshops

The class will start soon

We also offer sessions on reference management, systematic reviews, designing a conference poster, communicating your research, and more!

www.bodleian.ox.ac.uk/ask/workshops

Oxford University Hospitals NHS Foundation Trust

BODLEIAN LIBRARIES

Searching Systematically

Methods for finding ‘all’ evidence on a topic

Suzannah Bridge, Matthew Henry, Carolyn Smith & Kat Steiner

Outreach Librarians, Bodleian Health Care Libraries

NHS
Oxford University Hospitals
NHS Foundation Trust

BODLEIAN
LIBRARIES

After this session you will be able to…

- Explain what subject headings are, and how to use them
- Search for words that appear near to other words
- Take a search from one database into another
- Save a search and document it

Search ‘basics’

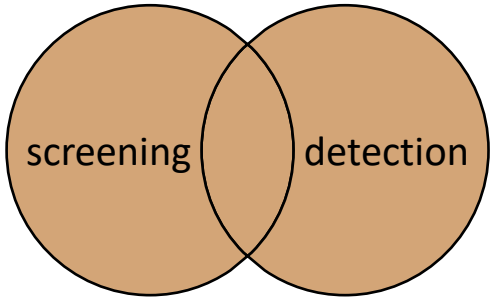
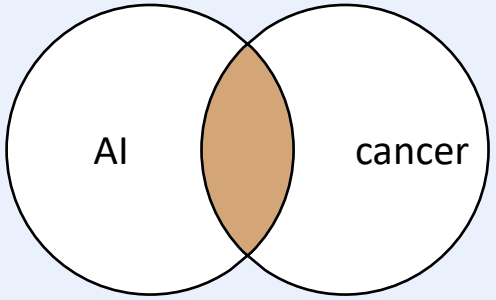
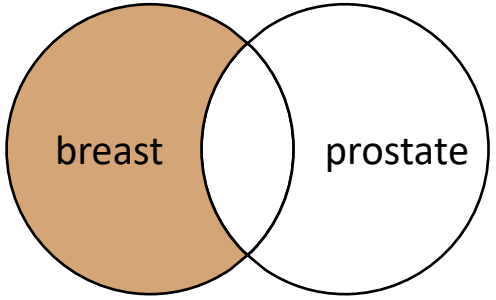
- **PICO** – structure your question and search strategy
- Boolean logic for combining terms: where to use **OR** and **AND**
- Use **syntax** to search for phrases, variant word endings and spellings

Search ‘basics’: PICO

How effective is AI at detecting breast cancer?

P	patient / population / problem	→	breast cancer
I(E)	intervention / exposure	→	artificial intelligence screening
C	comparison, control	→	n/a
O	outcome	→	efficacy of AI screening

Search ‘basics’: combining terms

OR	Broadens your search		screening OR detection
AND	Narrows your search		AI AND cancer
NOT	Narrows your search		breast NOT prostate

Search ‘basics’: putting it all together

("breast cancer*")
AND
(ai **OR** "artificial intelligence" **OR** "machine learning")
AND
(detect* **OR** screen*)

* = truncation
" " = phrase searching

Structured search: subject headings

- Articles are tagged with keywords from a structured vocabulary
- A search for these keywords retrieves articles on the topic
- Most famous is MeSH (Medical Subject Headings) found in PubMed, MEDLINE and Cochrane databases
- Other databases (Embase, CINAHL and more) have their own equivalent
- Look for buttons for **MeSH**, **Subject Headings**, or **Thesaurus**
- Not all databases use subject headings (Web of Science, Scopus).

Searching in more than one database (1)

Known as ‘translation’ – you can adapt a search from one database and run it in another:

- Different databases have different subject/journal coverage
- Systematic reviews require you to find all evidence – it won’t all be in one place
- Even if you don’t find new papers you can demonstrate that you tried

Searching in more than one database (2)

Which medical databases have you used or heard of?

- PubMed website searches MEDLINE (plus some extra sources)
- MEDLINE, Embase, PsycINFO can be searched in Ovid
- Other ‘platforms’ such as EBSCOhost provide CINAHL
- Web of Science and Scopus have coverage beyond medical sciences

Demo time!

Let’s run our search in Embase…

Search process: note taking

At some point, you'll write up your review. To report the search accurately keep records of:

- Search terms used – full search strategy for each database
- Including any limits applied or filters used
- Record the date on which you searched
- If you did any citation tracking, describe how
- Also record any general web searches

Summing up

In today's session we have:

- Recapped searching 'basics'
- Taken a basic PubMed search into Embase (Ovid)
- Applied subject headings and proximity operators
- Translated it for MEDLINE (Ovid) and CINAHL (EBSCOhost)
- Saved and exported our searches for our records and future reporting

Managing and organising references

Reference management software

- EndNote and RefWorks (OU subscription)
- Zotero (Free)

Learn more in another workshop

- iSkills sessions

Search process: questions

- Contact us
  - hcl-enquiries@bodleian.ox.ac.uk

- LibGuides
  - Literature Searching
  - Medical Researchers: Research Resources