Improving Your Research

MHI Orientation @ the Library
Fall 2015

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What we’ll cover:

- Library Services and Homepage
- Research Steps
- Research Question
- Searching Databases
- Activity
- Web Sources (incl. Grey lit)
- Managing your References
  - Refworks
gerstein.library.utoronto.ca

Find Books and Journals

eJournals (online only)

All Books and Journals (print and online)
Research Steps in a Nutshell

1. Understand assignment
2. Determine information need
3. Create/identify search question
4. Find relevant sources
5. Search sources
6. Compile results of research
Background vs. Foreground Information

**Background Information**
- Facts, overviews
- Lecture notes, (text)books, review articles

**Foreground Information**
- Research
- Journal articles, case studies

Formulate a Research Question

- focus
- where to look
- concepts and terms
What we’ll cover:

- Library Services and Homepage
- Research Steps
- **Research Question**
- Searching Databases
- Activity
- Web Sources (incl. Grey lit)
- Plagiarism
  - Refworks

Sample research question:

Is the availability of bedside, real-time access to medical information through mobile devices perceived as useful for patient care and academic activities by medical residents?

from: Evidence-based medicine among internal medicine residents in a community hospital program using smart phones
http://www.biomedcentral.com/1472-6947/7/5/
Search Strategy

P atient or P opulation

I ntervention

C omparison

O utcome

Search Strategy

P medical residents

I real-time access to medical info through smartphones

C no bedside or real-time access to info

O perceived usefulness
Search Question

Do mobile devices enhance patient care and/or academic activities when utilized by medical residents?

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>medical resident(s)</td>
<td>mobile device*</td>
<td>n/a</td>
<td>perception*</td>
</tr>
</tbody>
</table>
What is considered a mobile device?

Sources of background info:

- Textbooks & eBooks in the Library catalogue
- Wikipedia*

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<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>medical resident(s) OR resident physician(s) OR residency OR Graduate medical education</td>
<td>mobile device* OR Mobile phone* OR Smart phone* OR smartphone* OR Cell phone* OR cellular phone*</td>
<td>n/a</td>
<td>perception* OR effective* OR useful* OR Program evaluation* OR Enhanced patient care OR patient outcome* OR Academic success</td>
</tr>
</tbody>
</table>
Start Your Research

Why look for systematic reviews?

→ Make sure your topic has not already been done
→ Develop your search strategy
→ Discover relevant subject headings

Find Systematic Reviews

PubMed:
Find Systematic Reviews

Cochrane:

Medical/Health Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Subject/content type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medline</td>
<td>medical/health</td>
</tr>
<tr>
<td>PubMed</td>
<td>medical/health</td>
</tr>
<tr>
<td>CINAHL</td>
<td>nursing</td>
</tr>
<tr>
<td>HealthStar</td>
<td>health administration</td>
</tr>
<tr>
<td>Cochrane</td>
<td>Systematic reviews &amp; clinical trials</td>
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</tbody>
</table>
### Search Tips

<table>
<thead>
<tr>
<th>AND/OR</th>
<th>AND different concepts</th>
<th>e.g. doctors AND communication AND (cell phone OR mobile phone OR smart phone)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR synonyms</td>
<td></td>
</tr>
<tr>
<td>&quot; &quot;</td>
<td>Group words together as a phrase</td>
<td>e.g. (doctors OR hospitals) AND &quot;decision support systems&quot;</td>
</tr>
<tr>
<td>*</td>
<td>Different endings to a word</td>
<td>e.g. doctor* will find doctor, doctors, doctorate</td>
</tr>
</tbody>
</table>

### Find Journal Articles:

**PubMed:**

![PubMed search interface](image)
Searching Pubmed

Best Practices

- Look for the ‘details’
- Simple search and MeSH database
- Search history / Advanced search
- Clinical Queries & Filter Table
- Journals database (abbreviations)

Find Journal Articles:

Medline:
Searching Ovid DBs

Best Practices:

- One concept at a time
- Map terms to subject headings
- Scope notes
- Tree
  - Focus and Explode
- Use Keywords when no good MeSH terms
- Combine terms with Booleans
- Limit/Filter results

<table>
<thead>
<tr>
<th>Business/News Databases</th>
<th>Computer Science Databases</th>
<th>Multidisciplinary Databases</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABI/Inform Global</td>
<td>ACM Digital Library</td>
<td>Web of Science</td>
</tr>
<tr>
<td>Business Source Premier</td>
<td>Computer and Information System Abstracts</td>
<td>Scopus</td>
</tr>
<tr>
<td>CBCA Complete</td>
<td>INSPEC</td>
<td></td>
</tr>
<tr>
<td>CPI.Q</td>
<td>ProQuest Computing</td>
<td></td>
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</table>
My.access (Off-campus Access)

Free Sources

- PubMed (*via U of T Library/Gerstein homepage)
- Google Scholar
- Wikipedia
Finding Full Text Articles

Look for:

- bbk.ac.uk [PDF]
  Get it! U of Toronto

So…what is Grey Literature?

Information produced on all levels of government, academics, business and industry in electronic and print formats not controlled by commercial publishing.

i.e. where publishing is not the primary activity of the producing body.

Definition from: (GreyNet; Luxembourg, 1997 - Expanded in New York, 2004)
Grey Lit – What is it?

• Theses & dissertations
• Annual Reports
• Technical Reports
• Conference Proceedings/Abstracts/Papers
• Government information

Grey Lit - Where?

Some types of material findable online:

- Government/Ministry websites
- Newspaper and Magazine articles
- Google and Google Scholar
- Master of Health Informatics Research Guide

In Print:

- Government documents in print
  - Robarts Library, 4th Floor Reference area
Critical Appraisal of Grey Lit.

Books/Reports:
- Date published
- Bias
- Peer Reviewed

Online:
- Date/Last modified
- Bias
- Statement of Responsibility
- Malicious intent
- Personal or group interests/beliefs

U of Alberta Dean of Medicine case

“We were embarrassed and disappointed to find that Dean Baker had given a wonderful speech at our graduation banquet without attributing it to the original author…”

National Post, July 13, 2011
Sarah Boesveld, University of Alberta dean of medicine in midst of plagiarism scandal
How not to plagiarize

- Whenever you draw a thought from someone, **cite it!**
  - Distinguishes your **original ideas**
  - Respect **intellectual property**
  - Give your **arguments** more weight

- Applies to **all media**
  - Papers, wikis, you name it.

Citation Management Software - **RefWorks**

Logging in from off-campus? Enter U of T groupcode: **RWToronto**
http://guides.library.utoronto.ca/healthinformatics

Need Help?

- Schedule a consult: ask.gerstein@utoronto.ca
- Contact the Library: http://gerstein.library.utoronto.ca/research/ask-gerstein
- In person
questions?

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