Literature Search Worksheet

Step 1: Translate your research question(s) into search question(s)

- State your research topic as a question
- From your question, extract key concepts/conditions (usually 2-4) you want to be present in your search results
- Define search limits - publication date, language, document type (eg. RCT, cohort study, review)

<table>
<thead>
<tr>
<th>Concept/Condition</th>
<th>Population</th>
<th>Search Terms: Synonyms, Sub-concepts (textwords, subject headings)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>________________ OR ________________ OR __________________</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Concept/Condition</th>
<th>Intervention</th>
<th>Search Terms: Synonyms, Sub-concepts (textwords, subject headings)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>________________ OR ________________ OR __________________</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Concept/Condition</th>
<th>Comparison Intervention</th>
<th>Search Terms: Synonyms, Sub-concepts (textwords, subject headings)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>________________ OR ________________ OR __________________</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
<th>Concept/Condition</th>
<th>Outcome(s)</th>
<th>Search Terms: Synonyms, Sub-concepts (textwords, subject headings)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>________________ OR ________________ OR __________________</td>
</tr>
</tbody>
</table>

If PICO does not work for your question, try using Other Question Frameworks at:

Step 2: Develop Search Terms

For each key concept in your search question, identify search terms. You may need to add or delete some terms after conducting your scoping search. Include:

- Synonyms
- Sub-concepts of broad terms eg. disease prevention OR vaccines OR quarantine OR antimicrobials
- Subject headings, if the database has these
- Spelling variants for British vs American spelling (eg. anaemia or anemia)
- Cultural, geographic variants (eg. feedlots vs CAFO concentrated animal feeding operation)
- Brand and generic drug names (eg. Aricept vs donepezil)
- Acronyms (eg. BSE, bovine spongiform encephalopathy)
**Step 3: Select and Prioritize Databases to Search**

https://library.ucalgary.ca/az.php

Consider subject areas, types of documents (journal articles, grey literature), publication date and geographic coverage, special functions (eg. cited reference tracking) when selecting databases

**Step 4: Use Effective Search Strategies**

Conduct a **preliminary scoping search** in a one or two core databases to refine your search question(s), your search terms and search strategy and to confirm which databases are best for your topic

Your end-product determines whether you need to do a focused search (eg. brief assignment) or broad search (eg. systematic review, PhD dissertation), or something in between

**Strategies to Broaden Your Search** *(increase sensitivity)*

- Remove the least important concept from your search
- Add synonyms, sub-concepts within each search concept (using the Boolean OR)
  - Eg. disease prevention OR vaccines OR antimicrobials
- In textword searches:
  - Use the truncation symbol * at the end of word stems to retrieve word variations
    - Eg: therap* retrieves therapy, therapies, therapist, therapeutic
  - Search database fields in addition to title and abstract eg. author keywords field
- Use both subject heading and title/abstract textwords
- Use broader, more general subject headings and textwords
- Apply fewer/no limits to your search results eg. publication date, language
- Reframe your question to make it broader, more general

If available in a database:

- Use **Explode** feature
- Select more or **All Subheadings**
- Do **not** select **Focus** (OVID databases) or **Restrict to MeSH Major Topic** (PubMed)
- Click on **Similar Articles** (PubMed), or **Find Similar** (OVID)

**Strategies to Narrow Your Search** *(increase specificity)*

- Add another concept to your search (using the Boolean AND)
- Use less/no synonyms, sub-concepts within each search concept
- In textword searches:
  - Use fewer/no truncation symbols * at the end of word stems
  - Search only in title and abstract database fields
- Use subject headings or textwords, but not both
- Use more specific subject headings and textwords
- Use adjacency operators or quotes to search for exact phrases eg. pain ADJ management, “pain management”
- Apply more limits to your search results eg. publication date, language
- Reframe your question to make it more specific

If available in a database:

- Do **not** use **Explode** feature
- Select fewer **Subheadings**
- Select **Focus** (OVID) or **Restrict to MeSH Major Topic** (PubMed)