Strategies to create better searches in PubMed

1. **After you perform your search, look at the Details** (box on the right-hand side of your results – click See more to expand it). Here you can see what MeSH was used, if any. If you see [All Fields] instead of [MeSH] for a particular term, then PubMed didn’t map correctly or there’s no MeSH available for that term. Remove All Fields phrases for a more precise search.

2. **In Details, change [MeSH] to [MAJR]**. This focuses on the literature where the relevant search terms are the major topic of the article.

3. **Display in Abstract view, then click the Publications Types, MeSH Terms drop-down menu** to see the MeSH used to describe that article. This can give you ideas on what terms to use and improve your search.

4. **Use Clinical Queries – Systematic Reviews**. Available under PubMed Tools – Clinical Queries on the PubMed home page. Applies a special filter that looks for systematic reviews, meta-analyses, reviews of clinical trials, evidence-based medicine, consensus development conferences, and guidelines. More inclusive than the publication type limits “review” and “meta-analysis”. Also available as a Subset in Limits.

5. **Use Clinical Queries – Clinical Study Categories and specific/sensitive filters**. Looks for the citations that correspond to specific clinical study categories such as therapy, diagnosis, etiology, and prognosis.

6. **Apply Filters**, particularly date and publication type.
   a. The literature in PubMed goes back to the 1940s and a **date limit** is the single most useful way to cut your retrieval.
   b. About 15-20% of the articles in PubMed are in a foreign language, so use the **English language limit** if you don't want to read the non-English research.
   c. **Core clinical journals** will restrict your search to about 120 top tier clinical journals. Available under Show Additional Filters – Journal Categories
   d. **Systematic Reviews** is also available in Show Additional Filters – Subjects (does the same as (4) above.)

7. **Perform a MeSH search** to get at the more advanced features – precise terminology, subheadings, restrict search to major topics only, do not explode, and the MeSH Tree. Remember, a MeSH-only search will just find articles that have already been indexed, so you will miss the articles that have been most recently entered (about 2-4 weeks’ worth, depending on the journal). Try your search on the main PubMed page as well to catch this latest literature.

**Useful MeSH and keywords to focus on particular study types**

Not all the study designs you need can be found in the PubMed limits. Use MeSH and keywords to focus your search. **And don’t forget Clinical Queries!**

- **RCT**: Filters – Article Types – *Randomized Control Trial.*
• **Meta-analysis**: Filters – Article Types – *Meta-analysis*.
• **Case-control study**: Use MeSH term *Case-Control Studies*. Includes Retrospective Studies.
• **Cohort Study**: Use MeSH term *Cohort Studies*. Includes Follow-up, Longitudinal, and Prospective Studies.
• **Cross-sectional study**: Use MeSH term *Cross-Sectional Studies*.
• **Practice guideline**: Filters – Article Types – *Practice Guideline*.
• **Therapy article**: Filters – Article Types – *Meta-analysis* or *RCT*.
• **Diagnosis article**: Add the term *sensitivity* to your search.
• **Prognosis article**: Add the term *Cohort Studies* to your search.
• **Etiology/Harm article**: Add the term *risk* to your search.

**More Shortcuts and Tips**

**Find a journal**: just type the journal title in to the search box. Type the full title unless you're pretty confident of official journal title abbreviations, e.g. Use *New England Journal of Medicine* or *N Engl J Med*, not *NEJM*. Combine the journal title with your search to get articles from that journal. Limit to Reviews to get review articles from NEJM.

**Truncation**: use the * symbol after the word root, e.g. diabet* will pick up diabetes, diabetic, etc. *Note*: Truncation turns off the mapping, so that if your search term is also a MeSH term, you won't pick up any of the narrower terms.

**2-letter shortcuts**: [ti] at the end of a word will find all instances of the word in the title. Find more shortcuts in the PubMed Help section.

**Combining sets**: Use the Advanced Search link to get back to previous searches and combine them.

**Related Articles**: Click the Related Articles link to retrieve a pre-calculated set of PubMed citations that are closely related to the selected article.

**Clipboard**: Use the Clipboard to store citations while you run additional searches, allowing you to print, save, email or move to a Collection your citations from multiple searches in one batch.

**Create a PubMed Account (called My NCBI account)**

You’ve got enough accounts, why create another one?

1. **Save search strategies** and run them again later. If your search strategy is complex, why spend time trying to recreate it?
2. **Schedule your search strategies to run automatically** and email new results to you on a daily, weekly, or monthly basis.
3. **Save individual citations to Collections** so you can refer back to them later when you have more time. Share Collections with others.
4. **Create filter tabs** so that your results will be easily divided into reviews, NU subscriptions, randomized controlled trials, English, etc.
5. **Turn on the highlighting tool** and see where your search terms appear in the titles, abstracts, and subject headings.