Searching Exercise 3: Searching PubMed

Purpose:

PubMed has millions of citations to articles and it can be easy to be overwhelmed or frustrated by off-topic results. The Boolean operators OR and AND allow you to group and combine the keywords and MeSH terms that describe the concepts in your search question. You will retrieve more relevant results if you use this technique to build your searches in PubMed.

Learning Objective:

Students will be able to perform a search in PubMed that combines sets of keywords and MeSH terms to retrieve articles important to all the concepts in their question.

Estimated Time:

25 minutes

How-To:

For this activity, you'll be working with the more answerable question you developed in Searching Exercise 1, and the keywords and subject terms you developed in Searching Exercise 2.

Step 1: Go to PubMed

Step 2: Create a search for each concept in the more answerable question you developed in Searching Exercise 1. Use the Boolean operator **OR** to combine relevant MeSH terms and keywords.

As you learned in the session with OHSU librarians on April 16, searches using **OR** yield results that include any of the keywords or terms.



Step 3: Create a search in PubMed that uses the Boolean operator **AND** to combine the concept searchers you created in step 2.

As you learned in our virtual session on April 16, searches using **AND** yield results that include all of the keywords, terms, or concepts. In this case, you are telling PubMed that you want to search for all of the concepts in your question.



Step 4: Briefly review the results of your search from Step 3. Consider if the articles it retrieved are on-topic, too narrow, or too broad. Experiment with adjusting your search and using filters to improve the results. Even the most experienced searchers spend time refining their searches.

Step 5: We highly recommend <u>saving your final search with the Create Alert tool</u>, as you'll be reusing it in Exercise 4.

Step 7: From the PubMed Advanced search builder, <u>download your search history</u> and **upload the file to LabSpot.**

Resources: NLM MeSH Training Resources

PubMed Basics of Searching

How We Will Assess Your Learning:

- We will evaluate if you are demonstrating the knowledge to create concept searches in PubMed combining keywords and subject terms. (5 points)
- We will evaluate if you are illustrating the knowledge to combine concept searches in PubMed to return results relevant to your searchable question. (5 points)