Researching PICO Questions

Welcome to part two of Marymount Library’s tutorial on Researching PICO Questions. In the first tutorial you crafted your PICO question, our example was *In hospitalized adults does hourly rounding compared with no rounding affect fall rates?* And now we will need to conduct research in multiple databases to successfully complete your assignment. As a reminder some of the types of evidence needed for your assignments include:

- systematic reviews
- meta-analysis
- randomized controlled trials
- practice guidelines
- cohort studies

This tutorial provides you with tips, tricks and best practices for searching for different levels of evidence in three databases: CINAHL, Medline-Academic, and PubMed.

You should always access Marymount’s databases via the library’s website or the Library Research guide embedded in your Canvas course to ensure you have no cost access to the full text of the articles. We are going to start by looking at how to find some resources in CINAHL.

This is the CINAHL search screen and it is helpful to use the limiters or filters right from the start of your research. You can choose specific publication types that we mentioned earlier using the ‘Publication Type’ limiter. There are many publication types to choose from and you can select multiple publication types by holding down the control button on a PC or the command button on a MAC, and clicking on each desired option.

For this search we are going to keep it simple and search only for Randomized Controlled Trials by using the Randomized Controlled Trial limiter on the bottom right under publication types. Next we have to enter our keywords or search terms that come directly from our PICO question: hospitalized patients AND fall rates.

When we conduct our search there are only 3 results, you should review these 3 results and I recommend looking at your search terms - perhaps the term hospitalized patients is too specific, if we change our search to hospital AND fall rates with the RCT limiter you can see I get 18 results. As nurses you always have to be conscious of the date of publication of the resources you are including. On the left hand side, you can limit to the last five years. Now I have 11 resources that are Randomized Controlled Trials that discuss both fall rates and hospitals, and were published in the last 5 years. If I return my search screen and expand my search to include Meta-analyses, Practice Guidelines, RCTs, and Systematic Reviews, and I include my new search terms I have 30 results, when I limit to the last 5 years I have 17 very relevant results to work with.
Medline Academic functions in the same manner as CINAHL - here is what the Medline search screen looks like and you can see here instead of Publication Limiter it is called Document type but you can still select all types of evidence that you need, and enter your keywords and search. PubMed functions slightly differently than CINAHL and Medline Academic, to learn more about searching in PubMed click the PubMed button or click continue to learn how to contact a librarian for help.

In PubMed start by entering your search terms in the search box; for this example, we will use hospital fall rates. You do not need to use quotation marks or Boolean Operators i.e. the words AND or OR, because PubMed will set up the search strategy for you.

There are over 2,000 results and the search strategy set up by PubMed is visible on the right.

Next go to “article types” in the top left hand corner, and click on “customize.” Choose “systematic reviews” and click on “Show.”

Now that systematic reviews are in the Article type section we can click on it to limit our results to “only” systematic reviews that are related to hospital fall rates.

There are now 80 plus results, when you apply your limiter to the last 5 years we are down to 47 results.

Always keep in mind that research is a process that takes time. As you conduct your research you may need to change your keywords, like changing your search from fall rates and hospitalized patients to fall rates and hourly roundings and/or you may want to use multiple publication limiters to increase the number of results. In addition, remember you have many databases at your disposal so after you conduct your search in CINAHL you may need to go to PubMed and/or Medline Academic for additional sources.

You have now completed Video 2 Researching PICO Questions. If you need help conducting your research please feel free to contact a librarian via email, live chat, or in person at the reference desk.