Developing Your Research Question Using PICO

PICO is an acronym for

- Patient
- Intervention
- Comparison
- Outcome

PICO is used to create a researchable question based on a clinical situation you have encountered. Based on your PICO question, you will identify keywords and/or subject terms to use in database searches.

Boolean Operators (Using AND, OR, NOT)

Boolean logic is a building block of many computer applications and is an important concept in database searching. Using the correct Boolean operator can make all the difference in a successful search.

AND, OR, NOT

There are three basic Boolean search commands: AND, OR and NOT.

- **AND** searches find all of the search terms.
  For example, searching on dengue AND malaria AND zika returns only results that contain all three search terms. Very limited results.

- **OR** searches find one term or the other.
  Searching on dengue OR malaria OR zika returns all items that contain any of the three search terms. Returns a large number of results.

- **NOT** eliminates items that contain the specified term.
  Searching on malaria NOT zika returns items that are about malaria, but will specifically NOT return items that contain the word zika. This is a way to fine-tune results. Note: sometimes AND NOT is used; serves the same function as NOT.

Using Boolean Search with Exact Phrases

If you're searching for a phrase rather than just a single word, you can group the words together with quotation marks. Searching on "dengue fever" will return only items with that exact phrase.

When to use parentheses?

Think of your search in concepts, then put those concepts inside parentheses. Different databases have different rules about combining searches. To make sure you get the search you want, use parentheses - every database follows those rules.