

# Planning a search using PICO

Here is a search scenario:

*Are antibiotics more effective than watchful waiting in children under 5 with otitis media?*

To identify the keywords to use in your search, use the PICO grid:

- P is Population, Participants, Patients or Problem
- I is Intervention
- C is Comparison
- O is Outcome

You may not have all four elements, but you will need at least two.

In this example:

<b>P (be specific)</b>	Children under 5 with otitis media
<b>I</b>	Antibiotics
<b>C</b>	Watchful waiting
<b>O</b>	(no specific outcome)

You can build on the PICO grid to help you identify synonyms, and to identify limits:

	Keyword	Synonyms
<b>P</b>	Otitis media	Ear infections, Earache, Mastoiditis
<b>I</b>	Antibiotics	Antibacterial agents, Antimicrobial agents, and names of specific agents.
<b>C</b>	Watchful waiting	
<b>O</b>		
<b>Limits</b>		
<b>Age</b>	Children under 5	Age
<b>Gender</b>	(either)	Gender
<b>Human</b>	(yes)	Human
<b>Language</b>	(your choice)	Language

Variants of PICO include PICOT (T is Time within which the outcome will be observed) and PICOS (S is Study type).

Other grids are available but the idea is the same. Some are listed [here](#) and the Library has one, PIMO, for statistical studies.

For more help with systematic reviews, please email [librarians@leicester.ac.uk](mailto:librarians@leicester.ac.uk).