

Search Techniques: Healthcare Databases

1. Operators

To search for information on a topic, e.g. asthma in children, you may combine the different subjects that make up your topic using specific terms (e.g. AND, OR) which the database 'understands' as a command. These terms are known as Boolean Operators. The table below lists the available operators in the NICE Evidence Healthcare Databases. NB: operators must be typed in capital letters.

Operator	Example text	Database will retrieve:	Information retrieved will cover:
AND (NB: Most databases automatically combine multiple search terms with AND)	asthma AND children or asthma children	Your search words in any position in any order.	Articles about asthma in children
OR	aspirin OR paracetamol	Any one or more of your search words.	Articles referring to either aspirin, or paracetamol, or both together.
NOT	surgery NOT GP	Search word before the operator but not the one after it.	Articles about surgery (operations). Articles referring to GP surgeries and articles referring to GPs doing surgery will not be listed.
ADJ	heart ADJ attack	Search words next to each other, in the same order.	Articles referring to heart attacks, but not other heart problems or other types of attack.
ADJn e.g. ADJ5	school ADJ5 nurse	Your search words within the specified number of words (n) of each other, in any order.	Articles referring to: "school nurse," "nurse at Anytown school," "nurse working in a school" etc.

2. Phrase Searching

Phrase searching (similar to using the operator ADJ) is a handy technique which can help narrow your search. It is best used when the order of your search words is particularly important. For example, if you were to search for **accident and emergency department** the database will retrieve articles which contain all three of your search terms (**and** will be ignored as it is too common a word to search on) anywhere in the title and abstract (presuming you are searching in the title and abstract fields). However, if you search using quotation marks e.g. **"accident and emergency department"** the database will only return articles which contain all your search terms (including the and) in that specific order.

3. Truncation/Wildcard Searching

The databases can also search for alternative endings of words. For example, you might want to expand your search by searching for different forms of the same word at the same time, e.g. **nurse**, **nurses** and **nursing**. To do this, simply enter the letters that feature in all the alternative spellings, in this case **nurs**. Then enter the wildcard symbol *. You may sometimes get unwanted results. For example, **nurs*** will find results containing any of the words **nurse**, **nurses**, **nursing**, **nurse-led**. It will also find less helpful results, e.g. articles containing the word **nursery**.

Normal wildcard/ Unlimited truncation: Can represent any number of characters	*	e.g. pregnan* will find pregnant, pregnancy, pregnancies
Limited truncation: number (n) specifies the maximum characters after wildcard symbol	*n	e.g. child*3 will find child, child's, children but not childhood