EBVM Toolkit 1

Asking an answerable clinical question

There are five key steps to follow in Evidence-based Veterinary Medicine (EBVM). This handout offers advice on how to carry out the first step.

1. **Asking an answerable clinical question**
2. Finding the best available evidence to answer the question
3. Critically appraising the evidence for validity
4. Applying the results to clinical practice
5. Evaluating performance

The first step in searching for literature is to define your question, phrasing it in a way that it will help you find all relevant articles and reduce the chance of you leaving anything important out.

A well formed answerable question will also make it relatively straightforward to identify appropriate search terms and to combine them in the search strategy.

One way of identifying the key concepts is to use **The PICO Method**

Patient or **P**opulation	Who is the relevant patient or population? Be as specific as possible e.g. puppies, geriatric patients, pregnant bitches, spaniels?
Intervention	How? What intervention are you interested in? What is the management strategy, diagnostic test or type of food, drug or surgical procedure that you are testing?
Comparison/**C**ontrol	What is the main alternative? Is there a control or alternative management strategy or intervention that you are particularly interested to compare? Sometimes, when you want to know if the intervention above is better than doing nothing, the comparator will be "no intervention".
Outcome	What are you trying to achieve, measure, improve, effect? What are the patient-relevant consequences of the intervention? Be as clear as you can here.

Note you may not need to use all of PICO - it depends on what you want to find out.

How does PICO work?

You can see how this works in the following example[1]:

Scenario: A client says they have heard that neutering bitches reduces the risk of mammary tumours and asks you if there is any evidence to back up this claim.

Turning that into an answerable question could look like this:

In **adult bitches** does **neutering** versus **non neutering** reduce the risk of **mammary tumours**?

Taking the key concepts from the question and transforming the question into PICO format would look like this:

Patient or **P**opulation	adult bitches
Intervention	neutering
Comparison/**C**ontrol	"no intervention"
Outcome	mammary tumours

See EBVM Toolkit 2: *Finding the best available evidence* for information on how to search for literature.

[1] Adapted from Beauvais, W., Cardwell, J.M. and Brodbelt, D.C. (2012) The effect of neutering on the risk of mammary tumours in dogs – a systematic review. *Journal of Small Animal Practice,* 53 (6), pp. 314-322. DOI: https://doi.org/10.1111/j.1748-5827.2011.01220.x