

EBVM Toolkit 7

Cross sectional study checklist

There are five key steps to follow in Evidence-based Veterinary Medicine (EBVM).

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

This handout is designed to help you appraise the report of a cross sectional study. Answering the questions will help you to reflect on how valid the results might be, how well reported they are and whether they are applicable to your local circumstances.

Evaluating performance

	Yes	No	Not sure	Reason
Did the study address a clearly focused issue? Is there a clear question, can the PICO be identified?				
Was an appropriate method used to answer the question? Is the use of a cross sectional study method appropriate?				
Were the subjects recruited in an appropriate way? Did the subjects represent a defined population? Was there a reliable system for selecting the subjects? Was the sample representative of a defined population?				

Were outcomes accurately measured to reduce bias? Were the measures objective or subjective? Does it matter? Were the measures appropriate and validated?				
Was the data collected in a way that addresses the research issue? Can you tell how the data were collected e.g use of interviews, questionnaire, and professional diagnosis? Were the methods explicit?				
Was the study large enough to be sure of a reliable result? Look for confidence intervals, very wide confidence intervals should raise concern. Was a power calculation carried out to estimate how many subjects would be needed?				
How are the results presented and what are the main results? Are results presented as a proportion or relative risk or are they mean or median differences? How large is it? What is the bottom line result?				
Was the data analysis rigorous? Is there a description of what was done? Is there enough data to support the bottom line?				

Is there a clear statement of findings? Is there a discussion on the meaning and credibility of the findings? Are the findings put into the context of the original research question?				
Can the results be applied to your local population? Are the subjects similar to your population? Does your setting differ significantly? Can you gauge benefit and harm for your local situation?				
Do the results fit with other available evidence? Consider evidence from other study designs for consistency.				

Want to try it out?

You could use the following paper to try out the questions:

Wylie, C.E. et al (2013) Demographics and management practices of horses and ponies in Great Britain: a cross-sectional study. *Research in Veterinary Science*, 95 (2), pp 410-417. DOI: <https://doi.org/10.1016/j.rvsc.2013.05.004>

EBVM Toolkit 7: Cross sectional study checklist by [RCVS Knowledge](#) is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](#).

We welcome comments and suggestions for improvement to this guide.

Please email ebvm@rcvsknowledge.org